



## 5.6 BIOLOGICAL RESOURCES

The purpose of this Section is to identify existing biological resources on-site and in the local area, analyze potential Project-related impacts to these resources (including sensitive species) and recommend mitigation measures to avoid or reduce the significance of impacts that are identified. Information in this Section is based on analysis conducted by Foothill Associates. Appendix 15.6, *Biological Technical Report* includes technical information from Foothill Associates and Live Oak Associates Inc. This Section describes the biological character of the site in terms of vegetation, flora, wildlife, and wildlife habitats and analyzes the biological significance of the site in view of Federal, State and local laws and policies.

### REGULATORY FRAMEWORK

The following describes federal, state, and local environmental laws and policies that are relevant to the CEQA review process.

#### **Federal Endangered Species Act and California Endangered Species Act**

The United States Congress passed the Federal Endangered Species Act (FESA) in 1973 to protect those species that are endangered or threatened with extinction. The State of California enacted a similar law, the California Endangered Species Act (CESA) in 1984.

The Federal and State Endangered Species Acts are intended to operate in conjunction with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend. The United States Fish and Wildlife Service (USFWS) is responsible for implementation of the FESA, while the California Department of Fish and Game (CDFG) implements the CESA.

Section 7 of the FESA and its implementing regulations outline procedures for Federal interagency cooperation to conserve Federally listed species and designated critical habitats. Pursuant to Section 7, a Federal agency must, in consultation with the USFWS or National Marine Fisheries Service (NMFS), insure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of a federally listed species or result in adverse modification of critical habitat. Consultation between the federal agency and USFWS or NMFS often begins with an informal consultation phase. Informal consultation is an optional process between the USFWS or NMFS and the federal agency or designated non-federal representative to determine whether a proposed federal action may affect a listed species or critical habitat. This includes all discussions and correspondence prior to formal consultation. Formal consultation is the process between the USFWS or NMFS and the federal agency or designated non-federal representative that commences with the federal agency's or designated non-federal representative's written request for consultation under Section 7 of the FESA, and concludes with the USFWS or NMFS issuing a biological opinion and incidental take statement.



## **Other Statutes, Codes, and Policies Affording Limited Species Protection**

### ***California Department of Fish and Game – Species of Special Concern***

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

### **California Native Plant Society – Native Plant Species List**

The California Native Plant Society (CNPS) maintains a list of plant species native to California that have low numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Vascular Plants of California. Potential impacts to populations of CNPS-listed plants receive consideration under CEQA review. The following identifies the definitions of the CNPS listings:

- List 1A: Plants Believed Extinct;
- List 1B: Plants Rare, Threatened, or Endangered in California and elsewhere;
- List 2: Plants Rare, Threatened, or Endangered in California, but more numerous elsewhere;
- List 3: Plants About Which We Need More Information – A Review List; and
- List 4: Plants of Limited Distribution – A Watch List.

### **Raptors and Migratory Bird Regulations**

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

### **Waters of the United States**

The U.S. Army Corps of Engineers (Corps) regulates discharge of dredged or fill material into Waters of the United States under Section 404 of the Clean Water Act (CWA). “Discharges of fill material” is defined as the addition of fill material into waters of the U.S., including, but not limited to the following: placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; fill for intake and outfall pipes and subaqueous utility lines [33 C.F.R. §328.2(f)]. In addition, Section 401 of the CWA (33 U.S.C. 1341) requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a



pollutant into waters of the United States to obtain a certification that the discharge would comply with the applicable effluent limitations and water quality standards.

Waters of the U.S. include a range of wet environments such as lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, and wet meadows. Boundaries between jurisdictional waters and uplands are determined in a variety of ways, depending on the type of waters present. Methods for delineating wetlands and non-tidal waters are described below.

- Wetlands are defined as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” [33 C.F.R. §328.3(b)]. Presently, to be a wetland, a site must exhibit three wetland criteria: hydrophytic vegetation, hydric soils, and wetland hydrology existing under the “normal circumstances” for the site.
- The lateral extent of non-tidal waters is determined by delineating the ordinary high water mark (OHWM) [33 C.F.R. §328.4(c)(1)]. The OHWM is defined by the Corps as “that line on shore established by the fluctuations of water and indicated by physical character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas” [33 C.F.R. §328.3(e)].

### **Fish and Game Code Section 1600 et seq.**

The CDFG has jurisdiction under Section 1600 *et seq.* of the California Fish and Game Code over fish and wildlife resources of the state. Under Section 1602, a private party must notify the CDFG if a proposed project would “substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds...except when the department has been notified pursuant to Section 1601.” If an existing fish or wildlife resource may be substantially adversely affected by the activity, the CDFG may propose reasonable measures that would allow protection of those resources. If these measures are agreeable to the party, they may enter into an agreement with the CDFG identifying the approved activities and associated mitigation measures.

### **Madera County General Plan – Policy Document**

In addition to federal and state regulations, the Madera County General Plan - Policy Document defines certain goals, objectives, and policies protecting natural resources. The General Plan addresses the following areas that relate to biological resources: wetland and riparian areas, fish and wildlife habitat and vegetation. The goals and policies applicable to this biological resources analysis are as follows:

#### Wetland and Riparian Areas

Goal 5.D: To protect wetland communities and related riparian areas throughout Madera County as valuable resources.



*Policies*

- 5.D.1. The County shall comply with the wetlands policies of the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, and the California Department of Fish and Game. 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.
- 5.D.2. The County shall require new development to mitigate wetland loss in both regulated and non-regulated wetlands through any combination of avoidance, minimization, or compensation. The County shall support mitigation banking programs that can provide the opportunity to mitigate impacts to rare, threatened, and endangered species and/or the habitat which supports these species in wetland and riparian areas.
- 5.D.3. Development should be designed in such a manner that pollutants and siltation will not significantly adversely affect the value or function of wetlands.
- 5.D.4. The County shall require riparian protection zones around natural watercourses. Riparian protection zones shall include the bed and bank of both low and high flow channels and associated riparian vegetation, the band of riparian vegetation outside the high flow channel, and buffers of 100 feet in width as measured from the top of bank of unvegetated channels and 50 feet in width as measured from the outer edge for the canopy of riparian vegetation. Exceptions may be made in existing developed areas where existing development and lots are located within the setback areas.
- 5.D.5. The County shall strive to identify and conserve remaining upland habitat areas adjacent to wetlands and riparian areas that are critical to the feeding or nesting of wildlife species associated with these wetland and riparian areas.
- 5.D.6. The County shall require new private or public developments to preserve and enhance existing native riparian habitat unless public safety concerns require removal of habitat for flood control or other public purposes. In cases where new private or public development results in modification or destruction of riparian habitat for purposes of flood control, the developers shall be responsible for creating new riparian habitats within or near the project area at a ratio of three acres of new habitat for every acre destroyed.
- 5.D.7. The County shall support the management of wetland and riparian plant communities for passive recreation, groundwater recharge, nutrient catchment, and wildlife habitats. Such communities shall be restored, where possible.



- 5.D.8. The County shall support the goals and policies of the San Joaquin River Parkway Plan to preserve existing habitat and maintain, enhance, or restore native vegetation to provide essentially continuous riparian and upland habitat for wildlife along the river between Friant dam and the Highway 145 crossing.

#### Fish and Wildlife Habitat

Goal 5.E: To protect, restore, and enhance habitats that support fish and wildlife species so as to maintain populations at viable levels.

#### *Policies*

- 5.E.1. The County shall identify and protect critical nesting and foraging areas, important spawning grounds, migratory routes, waterfowl resting areas, oak woodlands, wildlife movement corridors, and other unique wildlife habitats critical to protecting and sustaining wildlife populations.
- 5.E.2. The County shall require development in areas known to have particular value for wildlife to be carefully planned and, where possible, located so that the reasonable value of the habitat for wildlife is maintained.
- 5.E.3. The County shall encourage private landowners to adopt sound wildlife habitat management practices, as recommended by the California Department of Fish and Game officials and the U.S. Fish and Wildlife Service.
- 5.E.4. The County shall support preservation of the habitats of rare, threatened, endangered, and/or other special status species. The County shall consider developing a formal habitat conservation plan in consultation with federal and state agencies, as well as other resource conservation organizations. Such a plan would provide a mechanism for the acquisition and management of lands supported by threatened and endangered species.
- 5.E.5. The County shall support the maintenance of suitable habitats for all indigenous species of wildlife through maintenance of habitat diversity.
- 5.E.6. The County shall ensure the conservation of sufficiently large, continuous expanses of native vegetation to provide suitable habitat for maintaining abundant and diverse wildlife, if this preservation does not threaten the economic well-being of the county.
- 5.E.7. The County shall support the preservation or reestablishment of fisheries in the rivers and streams within the county, whenever possible.
- 5.E.8. The County shall ensure close monitoring of pesticide use in areas adjacent to habitats of special status plants and animals.



- 5.E.9. The County shall promote effective methods of ground squirrel control on croplands bordering sensitive habitat that do not place kit foxes and other special-status species at risk.
- 5.E.10. Prior to approval of discretionary development permits involving parcels within a significant ecological resource area, the County shall require, as part of the environmental review process, a biotic resources evaluation of the sites by a qualified biologist. The evaluation shall be based upon field reconnaissance performed at the appropriate time of year to determine the presence or absence of rare, threatened, or endangered species of plants or animals. Such evaluation will consider the potential for significant impact on these resources and will either identify feasible measures to mitigate such impacts or indicate why mitigation is not feasible.
- 5.E.11. The County shall provide for a minimum 200 foot wildlife corridor along the San Joaquin River between Friant Dam and the Highway 145 crossing, consistent with the San Joaquin River Parkway Plan. The County shall require a buffer with a minimum width of 150 feet between existing or planned urban or suburban uses. Exceptions may be necessary where the minimum width is infeasible due to topography or other physical constraints. In these instances, an offsetting expansion on the opposite side of the river should be provided.

#### Vegetation

Goal 5.F: To preserve and protect the valuable vegetation resources of Madera County.

#### *Policies*

- 5.F.1. The County shall encourage landowners and developers to preserve the integrity of existing terrain and natural vegetation in visually-sensitive areas such as hillsides, ridges, and along important transportation corridors.
- 5.F.2. The County shall require developers to use native and compatible non-native species, especially drought-resistant species, to the extent possible in fulfilling landscaping requirements imposed as conditions of discretionary permit approval or for project mitigation.
- 5.F.3. The County shall support the preservation of outstanding areas of natural vegetation, including, but not limited to, oak woodlands, riparian areas, and vernal pools.
- 5.F.4. The County shall ensure that landmark trees are preserved and protected.
- 5.F.5. The County shall establish procedures for identifying and preserving rare, threatened, and endangered plant species that may be adversely affected



by public or private development projects. The County shall consider developing a formal habitat conservation plan in consultation with federal and state agencies, as well as other resources conservation organizations. Such a plan would provide a mechanism for the acquisition and management of land supporting threatened and endangered species.

- 5.F.6. The County shall require that new development preserve natural woodlands to the maximum extent possible.
- 5.F.7. The County shall require that development on hillsides be limited to maintain valuable natural vegetation, especially forests and open grasslands, and to control erosion.
- 5.F.8. The County shall support the continued use of prescribed burning to mimic the effects of natural fires to reduce fuel volumes and associated fire hazard to human residents and to enhance the health of biotic communities.

### **Ahwahnee/Nipinnawasee Area Plan**

The Ahwahnee/Nipinnawasee Area Plan is intended to refine the goals and policies of the 1995 Madera County General Plan and provide more detailed guidance for future growth and development in eastern Madera County. The Area Plan identifies goals, objectives and policies that protect natural resources. Objective No. 1 of the Area Plan regards promoting of Ahwahnee's environmental quality, retaining the agricultural and open space character of the planning area, providing rural residential opportunities, and encouraging controlled growth in selected areas. To better achieve Objective No. 1, the Area Plan identifies the following open space policies:

#### Open Space: Agriculture and Natural Resource proposals

- OS-1: Establish areas for "urban reserve" to be served by existing and potential urban services, and areas for "rural reserve" committed to or appropriate for rural residential development without full urban services.
- OS-2: Retain agricultural and open space land uses, to the maximum extent feasible, around and between designated urban and rural residential reserves to maintain and strengthen the separate community identity of Ahwahnee.
- OS-3: Ensure that vegetation removal and grading or construction of structures on open space/agricultural properties (particularly on slopes in excess of 30 percent or prominently visible from the State Highway or designated portions of County Roads) are consistent with agricultural and timberland management practices, the "Voluntary Water Quality, Grazing Land, and Oak Woodland Conservation Management Guidelines," fire protection, wildlife protection, as well as County General Plan/environmental protection policies.



- OS-4: Avoid sensitive environmental habitats (as intended by CEQA) such as riparian corridors and scattered meadow wetlands. “Sensitive” habitats shall be reviewed in any new subdivision or parcel map review process consistent with CEQA and County policies. These habitats include, but are not limited to, riparian corridors and areas of natural vegetation/wildlife that have threatened, rare, or endangered species.
- OS-5: Encourage tree management and conservation of other natural vegetation within agricultural and open space areas, consistent with agricultural and timberland management practices and the “Voluntary Water Quality, Grazing Land, and Oak Woodland Conservation Management Guidelines.” Enforce grading regulations and best Management Practices to control and minimize impact of large scale vegetation removal, terrain alterations, and resultant erosion/sedimentation; this includes CEQA review of development projects.

## EXISTING CONDITIONS

Habitat types occurring on the Sierra Meadows project site are discussed below. Vegetation and wildlife species observed, or expected to occur, in these habitat types and special-status species and sensitive plant habitats expected, or known to occur, in these habitat types are also addressed below. A list of plant and wildlife species observed, or known to occur, in the habitat types found on the Project site are presented in Appendix 15.6.

## RESEARCH METHODOLOGY

Available information and reference materials utilized for this analysis include the following sources:

- *Ahwahnee/Nipinnawasee Area Plan*;
- California Natural Diversity Data Base (CNDDB);
- Eastern Madera County Coarsegold resource conservation district voluntary oak-woodland management guidelines;
- U.S. Fish and Wildlife Service list of special-status species for the Ahwahnee, Bass Lake, Fish Camp, Horsecamp Mountain, O’Neals quadrangles (USFWS 2003);
- *Madera County General Plan – Final Environmental Impact Report (Volume 1)*;
- *Madera County General Plan – Policy Document*; and
- *Environmental Setting, Impact Assessment, and Recommended Mitigation for Biological Resources of the Proposed Shadow Ridge Development Near Oakhurst, California*.





Nomenclature for vegetation communities was based on *A Guide to Wildlife Habitats of California* with additional information provided by *A Manual of California Vegetation*, *Preliminary Descriptions of the Terrestrial Natural Communities of California*, and *Terrestrial Vegetation of California*.

Live Oak Associates, Inc. (LOA), also conducted a biological assessment of the Project site in support of a Section 7 consultation, which has been referenced in this report. The LOA literature search included the following resources:

- California Native Plant Society's *Botanical Survey Guidelines*
- CDFG's *Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened and Endangered Plants and Natural Communities*
- *The Jepson Manual*

## **SURVEY METHODOLOGY**

Foothill Associates' biologists conducted a reconnaissance level field survey for the project area on June 13, 2003 and a subsequent site visit on January 12, 2004 to assess the proposed location of the proposed reservoir. The field surveys consisted of general plant and wildlife surveys, including a habitat assessment within the Project site boundary. Special attention was focused on those areas on the Project site that have the potential to support special-status species and sensitive habitats. Recent aerial photography was examined to identify biological resources and map habitat types in conjunction with the field survey.

Habitats and features associated with the golf course are noted and discussed where relevant to this analysis, but are not included in acreage totals or impact acreages.

Live Oak Associates, Inc. conducted comprehensive special-status plant surveys for the federally threatened Mariposa pussypaws (*Calyptidium pulchellum*) and two species listed as endangered by CNPS, the orange lupine (*Lupinus citrinus* ssp. *citrinus*) and the Madera linanthus (*Linanthus serrulatus*) in early May 2004, at a time when the target species generally bloom. Baseline surveys were conducted on the Project site during the spring, summer and fall of 2003. The comprehensive survey focused on the exposed granite outcrops and decomposed granite around them that constitute the favored habitat of the Mariposa pussypaws and the orange lupine. Grassland habitats were also examined for the Madera linanthus.

LOA also delineated Waters of the United States and surveyed the site for mature elderberry bushes that could serve as habitat for the federally threatened valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) (VELB). This survey involved a meander walk throughout the Project site designed to provide sufficient coverage to observe all elderberry bushes. Each bush was flagged and numbered. The number of stems in each size category was recorded, as well as the presence/absence of potential VELB exit holes. All elderberry shrub locations were determined using GPS and were mapped onto a contour map.



CDFG also conducted an assessment of the aquatic resources of that portion of Miami Creek flowing through the project site. This assessment included electroshocking portions of the creek to determine whether fish were present and, if so, what species.

### **HABITAT TYPES**

Habitat types occurring on the Project site include foothill woodland, open water/impoundment, riverine watercourses (ephemeral and perennial drainages), seasonal wetlands and valley foothill riparian, with open ponds associated with the golf course. For purposes of this analysis, the golf course and associated features are not considered natural habitats. Table 5.6-1, *Approximate Acreage of Habitat Types on the Project Site*, and Exhibit, 5.6-1, *Habitat Types*, illustrate the habitat types on the project site.

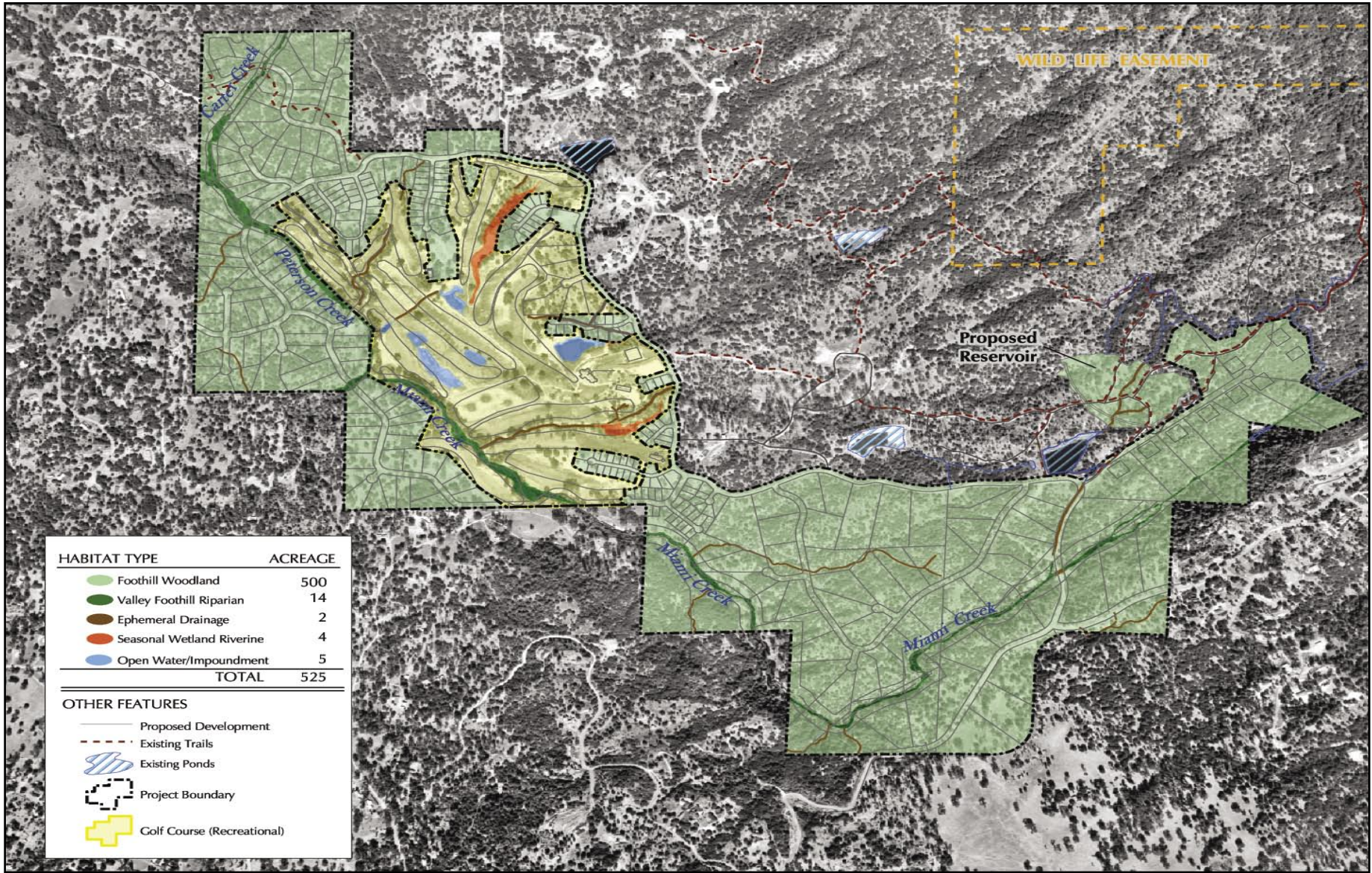
**Table 5.6-1  
Approximate Acreage of Habitat Types on the Project Site**

Habitat Types	Acreage Present
Foothill woodland	500.00
Riverine watercourses (unnamed ephemeral drainage)	1.30
Seasonal wetlands	7.46
Culverts connecting natural drainages	0.09
Open water (man-made impoundments)	6.36
Valley foothill riparian (portions of Carter Creek and Miami Creek)	10.26
TOTAL	525.47

### **Foothill Woodland**

Foothill woodlands cover several million acres in and around the Central Valley of California. This habitat is highly variable with canopy coverage ranging from semi-chaparral to dense, forest-like, and is comprised of several species associations with a variety of oaks dominating the vegetation. Species associations of foothill woodland are typically subdivided into valley oak (*Quercus lobata*), blue oak (*Quercus douglasii*), and interior live oak (*Quercus wislizenii*) phases. These phases are primarily influenced by soil attributes such as depth, exposure, and moisture. Because of considerable overlap occurring between the phases of foothill woodland on the Project site, this habitat was not subdivided for this analysis.





Source: Foothill Associates, September 2004.



Not to Scale



PLANNING ■ DESIGN ■ CONSTRUCTION

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Foothill woodland is the predominant habitat occurring on the Project site, occurring on approximately 500 acres. Blue oak, interior live oak, and valley oak comprise the majority of the woodland canopy; however, California black oak (*Quercus kelloggii*), Foothill pine (*Pinus sabiniana*), and Ponderosa pine (*Pinus ponderosa*) trees were also observed in this habitat on the Project site. The understory supports numerous herbaceous and woody species commonly occurring in foothill woodlands including California buckeye (*Aesculus californica*), California coffeeberry (*Rhamnus californica*), flannel bush (*Fremontodendron californica*), manzanita (*Arctostaphylos viscida*), and poison-oak (*Toxicodendron diversilobum*). Additional species observed in the understory include blue wildrye (*Elymus glaucus*), mule ears (*Wyethia mollis*), riggut brome (*Bromus diandrus*), rose clover (*Trifolium hirtum*), and wild oat (*Avena fatua*). Several elderberry (*Sambucus* sp.) shrubs were found throughout the foothill woodland habitat on the Project site.

Foothill woodland habitat has long been considered important to common wildlife as a food resource (i.e., acorns and browse). In addition, this habitat provides breeding and cover habitat for a variety of wildlife. Wildlife expected to occur in this habitat include birds such as American crow (*Corvus brachyrhynchos*), American kestrel (*Falco sparverius*), California quail (*Callipepla californicus*), and plain titmouse (*Baeolophus inornatus*); and mammals such as black-tailed jackrabbit (*Lepus californicus*), bobcat (*Lynx rufus*), mule deer (*Odocoileus hemionus*), and western gray squirrel (*Sciurus griseus*). Wildlife observed in this habitat on the Project site includes the acorn woodpecker (*Melanerpes formicivorus*) and turkey vulture (*Cathartes aura*). Additionally, signs (scat and/or tracks) of California horned lizard (*Phrynosoma coronatum*), a species of concern to federal and state resource agencies, and coyote (*Canis latrans*) were observed in this habitat on the Project site.

### **Open Water/Impoundment**

Open water habitats include permanently flooded lakes and reservoirs, intermittent lakes, and ponds, and occur in association with all other habitat types throughout California. Vegetation typically occurring in the deeper water of this habitat includes suspended photoplankton such as diatoms, desmids, and filamentous green algae. Depending upon the fluctuation of water levels throughout the year, submergent vegetation such as algae and pondweed may occur near the shoreline of open water habitats. On the Project site, open water habitat occurs in the golf course and between the golf course and the residential lots surrounding the golf course. In general, the ponds were created by impoundment of waters of the riverine habitats to provide livestock that were previously grazing on the Project site with a water source. Vegetation occurring in the open water habitat on the Project site is poorly developed due to the summertime drops of the water level; however, emergent vegetation comprised of rushes (*Juncus* sp.), sedges (*Carex* sp.), and cattails (*Typha* sp.) were observed along portions of the shorelines.

Open water habitats are used by a variety of wildlife for breeding, foraging, and cover. Wildlife expected to occur in this habitat includes fish such as bluegill (*Lepomis macrochirus*), catfish (*Ictalurus* sp.), large mouth bass (*Micropterus salmoides*), and trout (*Salmo* sp.); amphibians such as bullfrog (*Rana catesbeiana*) and western toad (*Bufo boreas*); reptiles such as western pond turtle (*Clemmys*





*marmorata*); birds such as black phoebe (*Sayornis nigricans*), great blue heron (*Ardea herodias*), great egret (*Casmerodius albus*), and mallard (*Anas platyrhynchos*); and mammals such as coyote, opossum (*Didelphis marsupialis*), and raccoon (*Procyon lotor*).

### **Riverine Watercourses**

Riverine habitats can be intermittent or continually running water and include rivers, perennial and seasonal creeks/streams, and ephemeral drainages. Similar to open water habitats, this habitat occurs in association with all other habitat types throughout California. Vegetation occurring in riverine habitats is typically limited. However, emergent and riparian vegetation typically occurs along the shoreline of and adjacent to riverine habitats, respectively.

There are several perennial creeks and ephemeral drainages that occur on the Project site, which are within the upper Fresno River watershed. The riverine habitat on the Project site includes Carter Creek, Miami Creek, and Peterson Creek, which are all tributary to the Fresno River. Carter Creek enters the Project site from the northwest and Peterson Creek enters the Project site from the west. These two creeks converge on the Project site northwest of the golf course. Miami Creek enters the Project site from the east and, eventually, converges with Peterson Creek. Miami Creek flows into the Fresno River approximately three miles southwest of the Project site. In addition to the creeks discussed above, there are several ephemeral drainages that enter the Project site from the north and east, and either flow into Miami Creek or open water habitats on the Project site. All the ephemeral drainages appear to have flowed into Miami Creek historically and have been impounded or captured in stock ponds or golf course water features. Valley foothill riparian habitat occurs adjacent to the majority of the riverine habitat on the Project site.

Riverine habitats provide escape cover, and foraging and resting habitat for wildlife. Riverine habitats are also very important as movement corridors for wildlife. Wildlife expected to occur in this habitat are similar those species observed, or expected to occur, in the open water habitat. Wildlife observed in this habitat on the Project site includes black phoebe, mallard, and red-winged blackbird (*Agelaius phoeniceus*). Additionally, several bullfrog tadpoles were observed within pooled areas in Miami Creek and cliff swallow (*Petrochelidon pyrrhonota*) nests were observed within a large culvert that Miami Creek flows through adjacent to the golf course in the western portion of the Project site.

### **Seasonal Wetlands**

Wetland habitats are areas of land that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Seasonal wetland habitats pond water long enough to support hydric soils and wetland vegetation; however, surface water drains from these habitats seasonally and plants occurring in these habitats follow an annual cycle. Vegetation typically associated with seasonal wetlands includes curly dock (*Rumex crispus*), Mediterranean barley (*Hordeum marinum* ssp.), perennial ryegrass



(*Lolium perenne*), and toad rush (*Juncus bufonius*). Seasonal wetland habitat occurs in the northern portion of the Project site.

Vegetation observed in the seasonal wetland habitat on the Project site includes common monkey flower (*Mimulus guttatus*), curly dock, little quaking grass (*Briza minor*), and rabbitsfoot grass (*Polypogon monspeliensis*). Vegetation observed in the seasonal marsh habitat on the Project site was similar to those species observed along the shorelines of the open water habitat.

Seasonal wetland habitat provides foraging habitat and a temporary water source for a wide variety of wildlife. Wildlife expected to occur in these habitats include invertebrates such as backswimmers, copepods, seed shrimp, and water flies; amphibians such as bullfrogs; and birds such as great blue heron, great egret, and red-winged blackbird.

### **Recreational (Developed Golf Course)**

Developed areas occur in and adjacent to most natural habitats throughout California, with the highest densities in the lower elevations. These areas are characterized by human modification to natural habitats, and include all ranges of development such as golf courses and residential development. Vegetation occurring in urban habitats is highly variable ranging from areas with an abundance of non-native plant species to areas dominated primarily by native plant species.

The Sierra Meadows Golf Course is located adjacent to the northern portion of the Project area. The Sierra Meadows Golf Course is an 18-hole golf course, which includes of a clubhouse, pool, restaurant, and other associated facilities, encompassing approximately 142 acres. The residential area surrounding the golf course includes approximately 58 lots that have recently been developed or are currently being developed. Vegetation occurring in these urban habitats on the Project site includes a mixture of both native and non-native plant species. In addition to urban habitat, open water and seasonal marsh habitat occurs within the golf course boundaries. Species observed outside of the playing surfaces on the golf course include species similar to those observed, or expected to occur, in the adjacent foothill woodland and valley foothill riparian habitats. Due to the recent development of the residential lots, limited vegetation was observed on the lots.

The wildlife value of urban habitats varies from very low in dense, highly developed areas to relatively high in areas with less development, in close proximity to other natural habitat types. Because this urban habitat is surrounded by other natural habitats, the wildlife value of this habitat is expected to be relatively high. Wildlife expected to occur on the golf course and residential lots are similar to those observed, or expected to occur, in the adjacent foothill woodland and valley foothill riparian habitats.

### **Valley Foothill Riparian**

Valley foothill riparian habitats occur in association with open water and riverine habitats in elevations ranging from sea level to approximately 3,000 feet above MSL throughout California. This habitat is typically comprised of three vegetation layers



including tree, shrub, and herb. Vegetation expected to occur within valley foothill riparian habitat include trees such as arroyo willow (*Salix lasiolepis*), California sycamore (*Platanus racemosa*), Fremont's cottonwood (*Populus fremontii*), and red willow (*Salix laevigata*); shrubs such as California blackberry (*Rubus ursinus*), California rose (*Rosa californica*), California wild grape (*Vitis californica*), and poison-oak; and herbs such as miner's lettuce (*Montia perfoliata*), mugwort (*Artemisia douglasiana*), and stinging nettle (*Urtica dioica*).

On the Project site, valley foothill riparian habitat occurs adjacent to the majority of the riverine habitats. Vegetation observed in this habitat includes arroyo willow, blackberry (*Rosa* sp.), common mullein (*Verbascum thapsus*), elderberry, Fremont's cottonwood, Oregon ash (*Fraxinus latifolia*), mugwort, and white alder (*Alnus rhombifolia*).

Valley foothill riparian habitat provides substantial breeding, cover, and foraging habitat for a wide variety of wildlife. Additionally, this habitat provides a sheltered corridor for wildlife movement. Wildlife expected to occur in this habitat include birds such as Anna's hummingbird (*Calypte anna*), belted kingfisher (*Ceryle alcyon*), lesser goldfinch (*Carduelis psaltria*), scrub jay (*Aphelocoma californica*), song sparrow (*Melospiza melodia*), spotted towhee (*Pipilo maculatus*); and mammals such as mule deer, raccoon, and striped skunk (*Mephitis mephitis*). Wildlife observed in this habitat on the Project site is similar to those observed in the open water and riverine habitats. Additionally, a red-tailed hawk (*Buteo jamaicensis*) was heard calling in the valley foothill riparian habitat adjacent to Miami Creek in the western portion of the Project site.

## **LISTED AND SPECIAL-STATUS PLANTS AND WILDLIFE**

Table 5.6-2, *Listed and Special Status Species Potentially Occurring on the Project Site or in the Project Site Vicinity*, identifies plants and wildlife listed on the USFWS species list for the Ahwahnee, Bass Lake, Fish Camp, Horsecamp Mountain, and O'Neal's 7.5-minute USGS quadrangles, all of which have once occurred in the Project vicinity. Species recorded in the CNDDDB as occurring within five miles of the Project site are also included in Table 5.6-2. Definitions of species potential for occurrence on the Project site are as follows:

- High – Species listed as having a “high” potential for occurrence on the Project site are those species for which:
  - There are known occurrences on or near the Project site (within 8 kilometers or 5 miles); and
  - There is suitable habitat on the Project site.

These species are further discussed in this analysis.



**Table 5.6-2  
Listed and Special Status Species Potentially Occurring  
on the Project Site or in the Project Site Vicinity**

Species	Regulatory Status	Habitat	Potential for Occurrence
<b>Plants</b>			
Bolander's clover <i>Trifolium bolanderi</i>	FSC; --; --; 1B	Mesic lower montane coniferous forest, and upper montane coniferous forest, and meadows and seeps ranging in elevation from approximately 6,810 to 8,530 feet above MSL.	<b>No</b> ; no potential habitat for this species occurs in the Project area. Additionally, the Project area is outside of the elevational range of this species.
Ewan's larkspur <i>Delphinium hansenii</i> ssp. <i>Ewanianum</i>	FSC; --; --; 4	Rocky cismontane woodland and valley and foothill grassland ranging in elevation from approximately 200 to 1,970 feet above MSL.	<b>Low</b> ; although marginal habitat for this species occurs on the project site, there are no CNDDDB records of this species within five miles of the Project site and this species was not found during the field survey.
Madera linanthus <i>Linanthus serrulatus</i>	FSC; --; 1B	Cismontane woodland and lower coniferous forest ranging in elevation from approximately 990 to 4,270 feet above MSL.	<b>No</b> ; although potential habitat for this species occurs on the Project site and there are CNDDDB records of this species within five miles of the Project site, this species was not found during focused botanical surveys conducted in the spring of 2004.
Mariposa pussy-paws <i>Calyptidium pulchellum</i>	FT; --; --; 1B	Sandy or gravelly, granitic chaparral and cismontane woodland ranging in elevation from approximately 1,310 to 4,000 feet above MSL.	<b>No</b> ; although habitat suitable for this species was identified on the site, this species was not detected during focused surveys in the spring of 2004 when the species would have been detectable if present.
Orange lupine <i>Lupinus citrinus</i> var. <i>citrinus</i>	FSC; --; --; 1B	Granitic chaparral, cismontane woodland and lower coniferous forest ranging in elevation from approximately 980 to 5,580 feet above MSL.	<b>No</b> ; although habitat suitable for this species was identified on the site, this species was not detected during focused surveys in the spring of 2004, when the species would have been detectable if present.





**Table 5.6-2 [continued]  
Listed and Special Status Species Potentially Occurring  
on the Project Site or in the Project Site Vicinity**

Species	Regulatory Status	Habitat	Potential for Occurrence
Rawson's flaming-trumpet <i>Collomia rawsoniana</i>	FSC; --; --; 1B	Mesic lower montane coniferous forest, meadows and seeps, and riparian scrub ranging in elevation from approximately 2,560 to 7,220 feet above MSL.	<b>Low</b> ; although potential habitat for this species occurs in the riparian corridor of Miami Creek on the Project site and there are CNDDDB records of this species within five miles of the Project site, this species is typically found at elevations 1,000 feet higher than the Project site. Additionally, its presence was not observed during field surveys.
Small's southern clarkia <i>Clarkia australis</i>	FSC; --; --; 1B	Cismontane woodland and lower montane coniferous forest ranging in elevation from approximately 2,620 to 6,810 feet above MSL.	<b>High</b> ; potential habitat for this species occurs on the Project site. Additionally, there is a CNDDDB record of this species within five miles of the Project site.
<b>Wildlife</b>			
<b>Invertebrates</b>			
Bohart's blue butterfly <i>Philotiella speciosa bohartorum</i>	FSC; --; --; --	Arid habitats and stream edges found in association with its food plant, pink spineflower ( <i>Chorizanthe membranacea</i> ).	<b>Low</b> ; although potential habitat for this species occurs on the project site, there are no CNDDDB records of this species within 5 miles of the project site and this species' food plant was not found during the field survey.
Merced Canyon shoulderband snail <i>Helminthoglypta allynsmithi</i>	FSC; --; --; --	Stable rock slides with tree or shrub cover in Merced Canyon.	<b>No</b> ; the Project site is outside the known range of this species.
Sierra pygmy grasshopper <i>Tetrix sierrana</i>	FSC; --; --; --	Riparian habitats ranging in elevations from approximately 4,300 to 5,000 feet above MSL.	<b>No</b> ; although there is a CNDDDB record of this species within five miles of the Project site, the Project site is outside of the known elevational range of this species.
Valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	FT; --; --; --	Associated with its host plant, the elderberry ( <i>Sambucus</i> spp.).	<b>High</b> ; elderberry shrubs were found throughout the Project area, and several exit holes were observed in mature stems during focused studies. Additionally, there are CNDDDB records of this species within five miles of the Project area.



**Table 5.6-2 [continued]  
Listed and Special Status Species Potentially Occurring  
on the Project Site or in the Project Site Vicinity**

Species	Regulatory Status	Habitat	Potential for Occurrence
Wawona riffle beetle <i>Atractelmis wawona</i>	FSC; --; --; --	Rapid rivers and streams in elevations ranging from 2,000 to 5,000 feet above MSL.	<b>Low</b> ; although there is riverine habitat on the Project site, this habitat lacks the elements required (i.e., high water velocities) for this species to occur on the Project site. Additionally, there are no CNDDDB records of this species within five miles of the Project site.
Yosemite mariposa sideband snail <i>Monadenia hillebrandi yosemitensis</i>	FSC; --; --; --	Stable rockslides with a cover of trees or shrubs.	<b>No</b> ; the Project site is outside of the known range of this species.
<b>Amphibians and Reptiles</b>			
California horned lizard <i>Phrynosoma coronatum frontale</i>	FSC; CSC; --; --	Requires friable soils; occurs in a wide variety of habitats.	<b>High</b> ; although there are no CNDDDB records of this species within five miles of the Project site and potential habitat occurs on the Project site.
California red-legged frog <i>Rana aurora draytonii</i>	FT; CSC; --; --	Requires slow-moving streams, ponds, or marsh habitats with emergent vegetation.	<b>Low</b> ; although there are no CNDDDB records within five miles of the Project site (CNDDDB 2003), potential habitat occurs in Miami Creek. However, this species has not been observed on the Project site since the late 60s/early 70s, despite surveys conducted in 1989 and 2003 by the CDFG.
California tiger salamander <i>Ambystoma californiense</i>	FE (Sonoma County, California, and Santa Barbara County, California); CSC ; --; --	Restricted to grasslands and low (under 1,500 feet above MSL) foothill regions with long-lasting rain pools.	<b>No</b> ; although there is a CNDDDB record of this species within five miles of the Project site, no potential habitat for this species occurs on the Project site. Additionally, the Project site is at the upper limits of the elevational range of this species by the CDFG.



**Table 5.6-2 [continued]  
Listed and Special Status Species Potentially Occurring  
on the Project Site or in the Project Site Vicinity**

Species	Regulatory Status	Habitat	Potential for Occurrence
Foothill yellow-legged frog <i>Rana boyii</i>	FSC; CSC; --; --	Permanent freshwater rocky streams and rivers in a variety of habitats including valley-foothill hardwood and conifer, chaparral, and wet meadows.	<b>Low</b> ; potential habitat for this species occurs in the riverine habitat on the Project site. Additionally, there are CNDDDB records of this species within five miles of the Project area. However, this species has not been observed on the Project site since the late 60s/early 70s, despite surveys conducted in 1989 and 2003.
Northwestern / Southwestern pond Turtle <i>Clemmys marmorata</i>	FSC; CSC; --; --	Permanent ponds or streams.	<b>High</b> ; potential habitat occurs in the riverine and open water habitats on the Project site. Additionally, there are CNDDDB records of this species within five miles of the Project site, and CDFG documented the species' presence in Miami Creek in the late spring of 2003.
<b>Fish</b>			
Central Valley steelhead <i>Oncorhynchus mykiss</i>	FT; --; --; --	Rivers and streams tributary to the Sacramento-San Joaquin Rivers and Delta ecosystems.	<b>No</b> ; the riverine habitat on the Project is outside of the known range of this species.
Delta smelt <i>Hypomesus transpacificus</i>	FT; CT; --; --	Rivers and streams tributary to the Sacramento-San Joaquin Rivers and Delta ecosystems.	<b>No</b> ; the riverine habitat on the Project is outside of the known range of this species.
Green sturgeon <i>Acipenser medirostris</i>	FSC; CSC; --; --	Rivers and streams tributary to the Sacramento-San Joaquin Rivers and Delta ecosystems.	<b>No</b> ; the riverine habitat on the Project is outside of the known range of this species.
Longfin smelt <i>Spirinchus thaleichthys</i>	FSC; CSC; --; --	Rivers and streams tributary to the Sacramento-San Joaquin Rivers and Delta ecosystems.	<b>No</b> ; the riverine habitat on the Project is outside of the known range of this species.
Sacramento splittail <i>Pogonichthys macrolepidotus</i>	FT; CSC; --; --	Rivers and streams tributary to the Sacramento-San Joaquin Rivers and Delta ecosystems.	<b>No</b> ; the riverine habitat on the Project is outside of the known range of this species.



**Table 5.6-2 [continued]  
Listed and Special Status Species Potentially Occurring  
on the Project Site or in the Project Site Vicinity**

Species	Regulatory Status	Habitat	Potential for Occurrence
<b>Birds</b>			
American dipper <i>Cinclus mexicanus</i>	--; --; SLC; -- (WINTERING)	Restricted to clear, fast-flowing streams and rivers with rock bottoms in montane regions throughout California.	<b>No</b> ; although there is riverine habitat on the Project site, this habitat lacks the elements required (i.e., high gradient and high water velocities) for this species to occur on the Project site. Additionally, there are no CNDDDB records of this species within five miles of the Project site.
American peregrine falcon <i>Falco peregrinus anatum</i>	FD (FSC); --; --; -- (NESTING)	Nests on high cliffs, banks, dunes, or mounds in woodland forest and coastal habitats near permanent water sources.	<b>No</b> ; no potential nesting habitat for this species occurs on the Project site.
Bald eagle <i>Haliaeetus leucocephalus</i>	FT; CE; --; -- (NESTING AND WINTERING)	Nesting restricted to the mountainous habitats near permanent water sources. Winters throughout most of California at lakes, reservoirs, river systems, and coastal wetlands.	<b>No</b> ; although this species may migrate through the Project site during winter, this species is not expected to regularly winter on the Project site, or use the site as nesting habitat.
Black swift <i>Cypseloides niger</i>	FSC; CSC; --; -- (NESTING)	Nests in moist crevice or cave on sea cliffs above the surf, or on cliffs behind, or adjacent to, waterfalls in deep canyons.	<b>No</b> ; the Project site is outside the known breeding range of this species. Additionally, no potential habitat for this species occurs on the Project site.
California spotted owl <i>Strix occidentalis occidentalis</i>	FSC; CSC; --; --	Nests in dense, multi-layered coniferous forest habitats.	<b>No</b> ; no potential habitat for this species occurs on the Project site.
California thrasher <i>Toxostoma redivivum</i>	FSC; --; --; --	Resident of lowlands and foothills in cismontane habitats including chaparral, and young or open valley foothill riparian habitats	<b>High</b> ; although there are no CNDDDB records of this species within five miles of the Project site, potential habitat for this species occurs on the Project site.
Costa's hummingbird <i>Calypte costae</i>	FSC; --; --; -- (WINTERING)	Restricted to the southern coast and southern deserts in the winter.	<b>No</b> ; the Project site is outside of the known wintering range of this species.



**Table 5.6-2 [continued]  
Listed and Special Status Species Potentially Occurring  
on the Project Site or in the Project Site Vicinity**

Species	Regulatory Status	Habitat	Potential for Occurrence
Flammulated owl <i>Otus flammeolus</i>	FSC; --; --; --	Resident of a variety of coniferous habitats from ponderosa pine to red fir forest in elevations ranging from approximately 6,000 to 10,000 feet above MSL. Favors small openings, and edges and clearings with snags for nesting and roosting.	<b>No</b> ; no potential habitat for this species occurs on the Project site. Additionally, the Project site is outside the known elevational range of this species.
Lawrence's goldfinch <i>Carduelis lawrencei</i>	FSC; --; --; -- (NESTING)	Nests in open oak or other arid woodland and chaparral habitats near water.	<b>High</b> ; although there are no CNDDDB records of this species within five miles of the Project site, potential habitat for this species occurs on the Project site.
Lewis' Woodpecker <i>Melanerpes lewis</i>	FSC; --; --; -- (NESTING)	Open, deciduous and conifer habitats with brushy understory and scattered snags and live trees for nesting and perching.	<b>High</b> ; the Project area is within the known range of this species and potential habitat occurs on the Project site for this species.
Little willow flycatcher <i>Empidonax traillii brewsteri</i>	FSC; CE; --; -- (NESTING)	Nests in shrubby riparian vegetation with some surface water or saturated soil conditions.	<b>Low</b> ; there are no CNDDDB records of this species within five miles of the Project site, only marginal nesting habitat for this species occurs on the Project site.
Loggerhead shrike <i>Lanius ludovicianus</i>	FSC; CSC; --; -- (NESTING)	Open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches.	<b>High</b> ; although there are no CNDDDB records of this species within five miles of the Project site, potential nesting habitat for this species occurs on the Project site.
Northern goshawk <i>Accipiter gentillis</i>	FSC; CSC; --; -- (NESTING)	Prefers middle and higher elevation dense, mature coniferous and deciduous forest interspersed with meadows, other openings, and riparian areas on north-facing slopes near water.	<b>No</b> ; although this species may occur throughout the foothill region during the winter, no potential nesting habitat for this species occurs on the Project site.
Nuttall's woodpecker <i>Picoides nuttallii</i>	--; --; SLC; --	Permanent resident of low-elevation riparian deciduous and oak habitats.	<b>High</b> ; although there are no CNDDDB records of this species within five miles of the Project site, potential habitat for this species occurs on the Project site.



**Table 5.6-2 [continued]  
Listed and Special Status Species Potentially Occurring  
on the Project Site or in the Project Site Vicinity**

Species	Regulatory Status	Habitat	Potential for Occurrence
Oak titmouse <i>Baeolophus inornatus</i>	--; --; SLC; --	Oak and pine-oak woodland, chaparral, and oak-riparian habitats.	<b>High</b> ; although there are no CNDDDB records of this species within five miles of the Project site, potential habitat for this species occurs on the Project site.
Rufous Hummingbird <i>Selasphorus rufus</i>	FSC; --; --; -- (NESTING)	Nests within berry tangles, shrubs, and conifers in areas north of California and in the Trinity Mountains of Trinity and Humboldt counties.	<b>No</b> ; although this species may migrate through the Project site during the spring, the Project site is outside of the known breeding range of this species.
Vaux's Swift <i>Chaetura vauxi</i>	FSC; CSC; --; -- (NESTING)	Nests within large hollow trees and snags in redwood and Douglas-fir habitats.	<b>No</b> ; no potential nesting habitat for this species occurs on the Project site.
Western burrowing owl <i>Athene cunicularia hypugea</i>	FSC; CSC; --; -- (BURROWING SITES)	Nests within burrows in the ground, often in old ground squirrel or badger burrows, within open, dry grassland and desert habitats.	<b>No</b> ; the Project site is outside the nesting range of this species.
White-headed woodpecker <i>Picoides albolarvatus</i>	FSC; --; --; --	Resident of montane coniferous forests up to lodgepole pine and red fir habitats near edges of roads, natural openings, or on edges of small clearings.	<b>No</b> ; no potential habitat for this species occurs on the Project site.
Raptors (Birds of Prey: falcons, hawks, owls, etc.)	MBTA; §3503.5 DFG Code; --; --	Nests in large trees and riparian woodland habitat.	<b>High</b> ; potential nesting and foraging habitat for raptors occurs on the Project site. A turkey vulture was observed soaring above the Project site and a red-tailed hawk was heard calling on the Project site. Additionally, American kestrel, Copper's hawk, and great-horned owl were observed during field surveys conducted in December 1979.
<b>Mammals</b>			
American marten <i>Martes Americana</i>	FSC; CSC; --; --	Optimal habitats are various mixed evergreen forests that have more than 40% crown closure with large trees and snags.	<b>No</b> ; no potential habitat for this species occurs on the Project site.



**Table 5.6-2 [continued]  
Listed and Special Status Species Potentially Occurring  
on the Project Site or in the Project Site Vicinity**

Species	Regulatory Status	Habitat	Potential for Occurrence
Fisher <i>Martes pennanti</i>	FSC; CSC; --; --	Large areas of mature, dense coniferous forests and deciduous-riparian habitats with snags and greater than 50% canopy closure.	<b>No</b> ; although there is a CNDDDB record of this species within five miles of the Project site, no potential habitat for this species occurs on the Project site.
Fringed myotis bat <i>Myotis thysanodes</i>	FSC; --; --; --	Wide variety of habitats; optimal habitats include pinyon-juniper, valley foothill hardwood, and hardwood-conifer generally ranging in elevations from approximately 4,000 to 7,000 feet above MSL. Roosts in caves, mines, buildings, or crevices.	<b>High</b> ; although there are no CNDDDB records of this species within five miles of the Project site, potential habitat for this species occurs on the Project site.
Greater western mastiff bat <i>Eumops perotis californicus</i>	FSC; CSC; --; --	Wide variety of open semi-arid to arid habitats including conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, palm oases, chaparral, and desert scrub. Roosts in crevices in rock outcrops and buildings.	<b>High</b> ; although there are no CNDDDB records of this species within five miles of the Project site, potential habitat for this species occurs on the Project site.
Long-eared myotis bat <i>Myotis evotis</i>	FSC; --; --; --	Brush, woodland, and forest habitats ranging from sea level to at least 9,000 feet above MSL; optimal habitats are coniferous woodlands and forests. Roosts in buildings, crevices, spaces under bark, and snags.	<b>High</b> ; although there are no CNDDDB records of this species within five miles of the Project site, potential habitat for this species occurs on the Project site.
Long-legged myotis bat <i>Myotis volans</i>	FSC; --; --; --	Woodland and forest habitats above approximately 4,000 feet above MSL. Roosts in rock crevices, buildings, under tree bark, in snags, mines, and caves.	<b>No</b> ; the Project site is outside of the elevational range of this species.
Pacific western big-eared bat <i>Corynorhinus townsendii townsendii</i>	FSC; CSC; --; --	Wide variety of habitats including coastal coniferous and broad-leaf forests, oak and coniferous woodlands, arid grasslands and deserts, and high elevation forests and meadows; most common in mesic habitats. Roosts in limestone caves, lava tubes, mines, buildings, and other man-made structures.	<b>High</b> ; although there are no CNDDDB records of this species within five miles of the Project site, potential habitat for this species occurs on the Project site.



**Table 5.6-2 [continued]  
Listed and Special Status Species Potentially Occurring  
on the Project Site or in the Project Site Vicinity**

Species	Regulatory Status	Habitat	Potential for Occurrence
Sierra Nevada red fox <i>Vulpes vulpes necator</i>	FSC; CT; --; --	A variety of forested habitats interspersed with meadows or alpine fell-fields within the Sierra Nevada ranging in elevations from approximately 3,900 to 11,900 feet above MSL. However, the majority of sightings and records are from above 7,000 feet MSL.	<b>No</b> ; the Project site is outside of the elevational range of this species. Additionally, no potential habitat for this species occurs on the Project site.
Small-footed myotis bat <i>Myotis ciliolabrum</i>	FSC; --; --; --	Wide variety of habitats, primarily arid wooded and brushy uplands near water. Roosts in caves, buildings, mines, and occasionally under bridges and bark.	<b>High</b> ; although there are no CNDDDB records of this species within five miles of the Project site, potential habitat for this species occurs on the Project site.
Southern grasshopper mouse <i>Onychomys torridus Ramona</i>	FSC; CSC; --; --	Alkali desert scrub and desert scrub habitats are preferred but, also occurs in other desert habitats including succulent shrub, wash, and riparian habitats.	<b>No</b> ; the Project site is outside of the known range of this species. Additionally, no potential habitat for this species occurs on the Project site.
Spotted bat <i>Euderma maculatum</i>	FSC; CSC; --; --	Arid deserts, grasslands, and mixed coniferous forest. Roosts in rock crevices and occasionally roosts in caves and buildings. Optimal roosting sites are cliffs.	<b>High</b> ; although there are no CNDDDB records of this species within five miles of the Project site, potential habitat for this species occurs on the Project site.
<p>FE = Federal Endangered FT = Federal Threatened FSC = Federal Species of Concern FD = Delisted FPX = Critical Habitat FC = Candidate for Listing FPT = Proposed Threatened</p> <p>CE = State Endangered CT = State Threatened CR = State Rare CSC = California Species of Special Concern C = Candidate for Listing</p> <p>1A = CNPS list plants presumed extinct in California 1B = CNPS list plants rare, threatened, or endangered in California or elsewhere 2 = CNPS list plants rare, threatened, or endangered in California, but more numerous elsewhere 3 = CNPS list plants about which we need more information 4 = CNPS list plants of limited distribution</p> <p>SLC= species of local or regional concern or conservation significance.</p> <p>Source: Foothill Associates.</p>			





- Low – Species listed as having a “low” potential for occurrence on the Project site are those species for which:
  - There are no known occurrences or no occurrences near the Project site (within 8 kilometers or 5 miles); and
  - There is only marginal habitat on the Project site.

These species will not be further discussed in this analysis.

- No – Species listed as having “no” potential for occurrence on the Project site are those species for which:
  - There are no known occurrences near the Project site (within 8 kilometers or 5 miles) or suitable habitat for on the Project site; or
  - Marginal habitats for the species on the project site were surveyed during the appropriate season with negative results for the species.

These species will not be further discussed in this analysis.

### **Listed and Special-Status Plants**

Based on review of the USFWS species lists for the Ahwahnee, Bass Lake, Fish Camp, Horsecamp Mountain, and O’Neal’s quadrangles, records search of the CNDDDB, CNPS literature, and documents pertaining to the natural resources of the Project site, potential habitat for the following plant species occurs on the Project site: Madera linanthus (*Linanthus serrulatus*), Mariposa pussy-paws (*Calyptidium pulchellum*), Rawson’s flaming-trumpet (*Collomia rawsoniana*), and Small’s southern clarkia (*Clarkia australis*).

Madera Linanthus. Madera linanthus (SLC, CNPS list 1B) occurs in cismontane woodland and lower coniferous forest habitats ranging in elevations from approximately 990 to 4,270 feet above MSL in Fresno, Kern, Madera, Mariposa, and Tulare counties. This species is an annual herb with a blooming period that extends from April through May. There are CNDDDB records of Madera linanthus within five miles of the Project site (CNDDDB 2003). The foothill woodland habitat on the Project site is considered potential habitat for this species. Although, based on habitat conditions, there is the potential for the Madera linanthus to occur, the species was not detected during focused surveys in the spring of 2004, when the species would have been detectable and, therefore, is unlikely to occur onsite.

Mariposa Pussy-Paws. Mariposa pussy-paws (FT, CNPS list 1B) occurs in sandy or gravelly, granitic chaparral and cismontane woodland habitats ranging in elevations from approximately 1,310 to 4,000 feet above MSL in Fresno, Madera, and Mariposa counties. This species is an annual herb with a blooming period that extends from April through August. There are CNDDDB records of Mariposa pussy-paw within five miles of the Project site (CNDDDB 2003). The foothill woodland habitat on the Project site is considered potential habitat for Mariposa pussy-paw. Although, based on habitat conditions, there is the potential for Mariposa pussy-paws to occur, the species was not detected during focused surveys in the spring of 2004, when the species would have been detectable and, therefore, is unlikely to occur onsite.



Rawson's Flaming-Trumpet. Rawson's flaming-trumpet (FSC, CNPS list 1B) occurs in mesic lower montane coniferous forest, meadows and seeps, and riparian scrub habitats ranging in elevations from approximately 2,560 to 7,220 feet above MSL in Madera and Mariposa counties. This species is a rhizomatous perennial herb with a blooming period that extends from July through August. There are CNDDDB records of Rawson's flaming-trumpet within five miles of the Project site (CNDDDB 2003). Although the Project site is below the elevational range of this species, the valley foothill riparian habitat on the Project site is considered potential habitat for this species, including within the Miami Creek riparian. The species was not detected during site surveys in the spring of 2004 when the species would have been detectable and, therefore, is unlikely to occur onsite.

Small's Southern Clarkia. Small's southern clarkia (FSC, CNPS list 1B) occurs in cismontane woodland and lower montane coniferous forest habitats ranging in elevations from approximately 2,620 to 6,810 feet above MSL in Madera, Mariposa, and Tuolumne counties. This species is an annual herb with a blooming period that extends from May through August. There is a CNDDDB record of Small's southern clarkia within five miles of the Project site (CNDDDB 2003). This species was not observed during field surveys conducted for this EIR study. The species was not detected during site surveys in the spring of 2004 when the species would have been detectable and, therefore, is unlikely to occur onsite.

### **Listed and Special-Status Wildlife**

Based on review of the USFWS species lists for the Ahwahnee, Bass Lake, Fish Camp, Horsecamp Mountain, and O'Neal's quadrangles, records search of the CNDDDB, and documents pertaining to the natural resources of the Project site potential habitat for the following wildlife species occur along the Project area: valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), California horned lizard (*Phrynosoma coronatum frontale*), California red-legged frog (*Rana aurora draytonii*), foothill yellow-legged frog (*Rana boyii*), northwestern pond turtle (*Clemmys marmorata marmorata*), southwestern pond turtle (*Clemmys marmorata pallida*), California thrasher (*Toxostoma redivivum*), Lawrence's goldfinch (*Carduelis lawrencei*), little willow flycatcher (*Empidonax traillii brewsteri*), loggerhead shrike (*Lanius ludovicianus*), Nuttall's woodpecker (*Picoides nuttallii*), oak titmouse (*Baeolophus inornatus*), and tricolored blackbird (*Agelaius tricolor*). Additionally, other migratory birds and raptors, and special-status bat could potentially occur on the Project site.

Valley Elderberry Longhorn Beetle. The valley elderberry longhorn beetle (VELB; FT) is known to occur in association with its host plant, the elderberry (*Sambucus* spp.), which is a common component of riparian forests and adjacent upland habitats throughout the Central Valley and surrounding foothills. The use of the elderberry plant by VELB, a wood borer, is rarely apparent. Often, the only evidence of the elderberry's use is an exit hole created by the larva just prior to the pupal stage. There are four stages in VELB's life: egg, larva, pupa, and adult. VELB spends most of its life in the larval stage, living within the stems of an elderberry plant. Females lay their eggs in May on the bark of elderberry plants. After hatching, approximately



10 days later, the larvae burrow into the stems where they will feed on the interior wood for one to two years. The larvae then enter the pupal stage and transform into the adult stage, which is short-lived. Adults are active from March through early June.

There are CNNDDB records of VELB within five miles of the Project site (CNDBB 2003). Elderberry plants were observed throughout the foothill woodland and valley foothill riparian habitats on the Project site. During extensive elderberry shrub surveys, several insect exit holes were observed in mature stems of elderberry bushes, some of which were the size and shape of VELB exit holes. Therefore, VELB is likely to occur on the Project site.

### ***Amphibians and Reptiles***

*California Horned Lizard*. California horned lizard (FSC, CSC) is endemic to California, with a spotty distribution in the Central Valley from southern Tehama County south, Sierra foothills from Butte County to Tulare County below approximately 4,000 feet above MSL, the mountains of southern California below approximately 6,000 feet above MSL, and Coast Ranges south from Sonoma County. This species occurs in a wide variety of habitats, ranging from areas with an exposed gravelly-sandy substrate containing scattered shrubs, to clearings in riparian woodlands, to dry uniform chamise chaparral, to annual grassland with scattered seepweed or saltbush. Within these habitats, California horned lizard seem to require warmth (especially open areas for sunning), patches of fine loose soil where it can bury itself, and ants and other insect prey. This species is active between April and October, with increased activity in April and May. Copulation occurs between late April and early March, and clutches of 6 to 21 eggs are laid between April and June. Hatchlings first appear in July and August. The longevity of California horned lizard is unknown in the wild, but in captivity this species has lived for over 8 years. Thus, California horned lizard could occur on the Project site.

There are no CNDDDB records of California horned lizard within five miles of the Project site (CNDBB 2003). The open barren areas within the foothill woodland and valley foothill riparian habitats on the Project site are considered potential habitat for this species.

*California Red-Legged Frog*. California red-legged frog (CRLF; FT, CSC) is endemic to California and Baja California, Mexico. This species has been extirpated from 70 percent of its historical range, and now occurs primarily in coastal drainages of central California, from Marin County, California south to northern Baja California, Mexico, and in isolated drainages in the Sierra Nevada, northern Coast and northern Transverse Ranges of California. CRLF utilize a variety of habitats including various aquatic, riparian, and upland habitats below 5,200 feet; nearly all sightings have occurred below 3,500 feet. Although the use of upland habitats by CRLF is not well understood, during periods of wet weather, this species is known to make movements through upland habitats. CRLF rarely occur far from water during dry periods. Deep (greater than 2 feet) still or slow moving water and dense, shrubby riparian or emergent vegetation is necessary for the deposition of eggs. The breeding season occurs from November through April. Eggs require approximately 20-22 days to develop into tadpoles, and tadpoles require 11 to 20 weeks to develop



into terrestrial frogs. The diet of CRLF is highly variable; invertebrates appear to be the most common prey consumed of adult frogs.

There are no CNDDDB records of CRLF within five miles of the Project area; the closest record is approximately 43 miles north of the Project site in Wood Creek in Tuolumne County (CNDBB 2003). CRLF are historically known to exist within Miami Creek. Because much of the Sierra Nevada range is unsurveyed, particularly on private lands, the status of this species in this region is largely unknown. The open water and riverine habitats on the Project site are considered potential habitat for CRLF. For these reasons, CRLF has the potential to occur on the Project site. However, this species has not been observed in the area since the late 60s/early 70s, despite surveys conducted in 1989 and 2003 by Dr. Mark Jennings and in 2003 by California Department of Fish and Game biologists, and therefore its occurrence on the project site is unlikely.

*Foothill Yellow-Legged Frog.* In California Foothill yellow-legged frog (FSC, CSC) is distributed throughout the foothill portions of most drainages from the Oregon border to the San Gabriel River system in Los Angeles County. Isolated populations are also known from the floor of the Central Valley in San Joaquin County and the mountains of Los Angeles County. This species occurs in or near rocky creeks/streams in a variety of habitats including valley-foothill hardwood, valley-foothill hardwood-conifer, coastal scrub, mixed chaparral, and wet meadow habitats ranging in elevations from near sea level to approximately 6,000 feet above MSL. Because no detailed studies on the life history of foothill yellow-legged frog have been conducted, it is one of the most poorly known frog species in California. Breeding and oviposition usually follows the period of high flow discharge that results from winter rainfall and snowmelt. Typically, this occurs between mid-March and early June. Females deposit masses of 300 to 1,200 eggs on the downstream side of cobbles and boulders. Eggs hatch in approximately 5 days and a minimum of approximately 15 weeks is needed to attain metamorphosis. Although no data is available, two years are thought to be required to reach adult size. Tadpoles probably forage on algae and diatoms, while postmetamorphs probably eat both aquatic and terrestrial invertebrates.

There are no CNDDDB records of foothill yellow-legged frog within five miles of the Project site (CNDBB 2003), and the species has not been reported observed in Madera since 1970. The riverine habitats on the Project site are considered potential habitat for this species. Thus, though unlikely, foothill yellow-legged frog has the potential to occur in association with Miami and Carter Creeks on the Project site. However, this species has not been observed in the area since the late 60s/early 70s, despite surveys conducted in 1989 and 2003 by Dr. Mark Jennings and in 2003 by California Department of Fish and Game biologists, and therefore its occurrence on the project site is unlikely.

*Northwestern Pond Turtle and Southwestern Pond Turtle.* The western pond turtle (*Clemmys marmorata*) is currently divided into two subspecies: the northwestern pond turtle (FSC, CSC), which occurs from the vicinity of the American River in California northward to the lower Columbia River in Oregon and Washington, and the southwestern pond turtle (FSC, CSC), which occurs in coastal drainages from the



vicinity of Monterey, California south to northwestern Baja California, Mexico. There is an intergraded zone south of the American River and north of Monterey.

Western pond turtles are habitat generalists and occur in a wide variety of permanent or nearly permanent aquatic habitats, normally ponds, lakes, streams and irrigation ditches, with basking sites such as partially submerged logs, rocks, mats of floating vegetation, or open mud banks. Aquatic sites are usually left to reproduce, aestivate, and overwinter in upland habitats such as annual grasslands and oak woodlands. Breeding occurs in late April or early May, and eggs may be laid from April through August. Nests are typically dug in a substrate with a high clay or silt content and located on an unshaded slope. Females lay between 3 and 11 eggs and may lay additional clutches during a year. Because hatching-sized turtles have almost never been observed in aquatic sites during the fall, it is thought that hatchling turtles hatch and overwinter in the nest. Western pond turtles are can be seen from February through mid-November in the north and all year in the south. As an omnivorous species, this species feed on aquatic plant material and a variety of aquatic invertebrates.

There are CNDDDB records of western pond turtle within five miles of the Project site (CNDDDB 2003). The riverine and open water habitats on the Project site are considered potential habitat for northwestern and southwestern pond turtle, and the Department of Fish and Game documented the species' presence in Miami Creek in the late spring of 2003. Thus, pond turtles could occur in these habitats on the Project site.

### ***Birds***

*California Thrasher*. California thrasher (FSC) is a common resident of lowlands and foothills in cismontane habitats including moderate to dense chaparral habitats and extensive thickets in young and open valley foothill riparian habitats in California. This species feeds on acorns, fruits, seeds, and a variety of terrestrial invertebrates, seldom feeding more than a few feet from escape cover. California thrashers are monogamous, solitary nesters with a breeding season that extends from early December through early August, peaking from mid-April through mid-June. Nests are built in a large shrub or scrubby tree. Clutch size usually ranges from 2 to 4 eggs and incubation is approximately 14 days. Young are altricial and cared for by both parents for approximately 12 to 14 days.

There are no CNDDDB records of California thrasher within five miles of the Project site (CNDDDB 2003). Additionally, this species was not observed during the field survey. The foothill woodland and valley foothill riparian habitats on the Project site are considered potential habitat for this species. Thus, California thrasher could occur in these habitats on the Project site.

*Lawrence's Goldfinch*. Lawrence's goldfinch (FSC) is breeding resident of California, present mostly from April through September, in Monterey and Santa Clara counties and the foothills surrounding the Central Valley. A few individuals winter in northern California, as well. Typical habitats this species occurs in includes valley foothill hardwood, valley foothill hardwood-conifer, desert riparian, palm oasis, pinyon juniper, and lower montane. However, Lawrence's goldfinch prefers to breed in open



oak or other arid woodland and chaparral habitats near water. This species is monogamous and nests singly or near several other pairs. Breeding season begins in late March or early April and nests are built in dense foliage of a tree or shrub. Clutch size ranges from 3 to 6 eggs and incubation is approximately 12 to 13 days. Young are altricial and cared for by both parents for approximately 11 days.

There are no CNDDDB records of Lawrence's goldfinch within five miles of the Project area (CNDBB 2003). Additionally, this species was not observed on the Project site. The foothill woodland habitat on the Project is considered potential nesting and foraging habitat for this species. Thus, Lawrence's goldfinch could occur in this habitat on the Project site.

Loggerhead Shrike. Loggerhead shrike (FSC, CSC) is a common resident and winter visitor in lowlands and foothills throughout California. This species prefers open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches and low or sparse herbaceous cover. Highest densities occur in open-canopied valley foothill hardwood, valley foothill hardwood-conifer, valley foothill riparian, pinyon-juniper, desert riparian, and Joshua tree habitats. Loggerhead shrikes feed mostly on insects but, also feed on small birds, mammals, amphibians, reptiles, fish, and carrion. This species is a monogamous, solitary nester, with a breeding season that extends from March through May. Nests are built on stable branches in densely foliated shrubs or trees that are well-concealed. Clutch size ranges from 4 to 8 eggs and incubation is approximately 14 to 15 days. Young are altricial and cared for by both parents for approximately 18 to 19 days.

There are no CNDDDB records of loggerhead shrike within five miles of the Project area (CNDBB 2003). Additionally, this species was not observed on the Project site. However, potential habitat for this species occurs in the foothill woodland and valley foothill riparian habitats on the Project site. Thus, loggerhead shrikes could occur in these habitats on the Project site.

Nuttall's Woodpecker. Nuttall's woodpecker (SLC) is a common, permanent resident of low-elevation riparian deciduous and oak habitats in California. This species feeds mostly on larval insects, but also feeds on berries, nuts, sap, and seeds. Nuttall's woodpeckers breed from late March through early July, with a peak in April through June. Nests are typically excavated in dead trunks or limbs. Clutch size ranges from 3 to 6 eggs. Young are altricial and cared for by both parents.

There are no CNDDDB records of Nuttall's woodpecker within five miles of the Project site (CNDBB 2003). Additionally, this species was not observed during the field survey. The foothill woodland and valley foothill riparian habitats on the Project site are considered potential habitat for this species. Thus, Nuttall's woodpecker could occur in these habitats on the Project site.

Oak Titmouse. Oak titmouse (SLC) is a common resident in a variety of habitats, but is primarily associated with oaks, occurring in valley foothill and montane hardwood, valley foothill hardwood-conifer, and riparian habitats throughout California. This species feeds mostly on insects and nuts, but will also feed on fruits. Oak titmouse is a monogamous, solitary nester with a breeding season extending from March through July, peaking in April and May. Nests are built in natural cavities or nest



box. Clutch sizes range from 6 to 8 eggs and incubation is approximately 14 to 16 days. Young are altricial and cared for by both parents in the nest for approximately 20 days, and for another 3 to 4 weeks after leaving the nest.

There are no CNDDDB records of oak titmouse within five miles of the Project site (CNDDDB 2003). Additionally, this species was not observed during the field survey. The foothill woodland and valley foothill riparian habitats on the Project site are considered potential habitat for this species. Thus, oak titmouse could occur in these habitats on the Project site.

Raptors. Raptors forage and nests in various habitats throughout Madera County including American kestrel (*Falco sparverius*), Cooper's hawk (*Accipiter cooperii*), and red-tailed hawk. Raptor nests are protected under the MBTA and Section 3503.5 of the California Fish and Game Code. The habitats on the Project site provide potential nesting and foraging habitat for raptors. A turkey vulture was observed soaring above the foothill woodland habitat and a red-tailed hawk was heard calling in the valley foothill riparian habitat adjacent to Miami Creek in the western portion of the Project site. Additionally, American kestrel, Cooper's hawk, and great horned owl were observed in the vicinity of the Project site during a field survey conducted in December 1979. For these reasons, raptors may use the habitats on the Project site for foraging and nesting.

Bats. Special-status bat species have the potential to occur on the Project site including fringed myotis bat (*Myotis thysanodes*; FSC), greater western mastiff bat (*Eumops perotis californicus*; FSC, CSC), long-eared myotis bat (*Myotis evotis*; FSC), Pacific western big-eared bat (*Corynorhinus townsendii townsendii*; FSC, CSC), small-footed myotis (*Myotis ciliolabrum*; FSC), and spotted bat (*Euderma maculatum*; FSC, CSC). Due to recent population declines these species are of concern to federal and state resource agencies. Habitat for bat species consists of foraging, night roosting cover, maternity roost sites, and winter hibernacula. In general, the resource agencies are most concerned about the loss of maternity roosting sites. Bats are generally site faithful and will not abandon an established roosting site unless disturbed. Most bat species are present, although not necessarily in large numbers, in a variety of habitats.

There are no CNDDDB records of special-status bat species within five miles of the Project site. Additionally, no bats or evidence of bats (grease marks, urine stains, or guano) were observed during the field survey. The foothill woodland, riverine, and valley foothill riparian habitats on the Project site are considered potential habitat for bats. Additionally, the large culvert that Miami Creek flows through adjacent to the golf course in the western portion of the Project site could provide roosting habitat for bats. For these reasons, special-status bats could occur on the Project site.

## **SENSITIVE HABITATS**

Sensitive habitats include those that are of special concern to resource agencies or those that are protected under CEQA, Section 1600 of the California Fish and Game Code, or Section 404 of the Clean Water Act. Additionally, sensitive habitats are protected under the specific policies outlined in the Madera County General Plan and the Ahwahnee/Nipinnawasee Area Plan. Sensitive habitats on the Project site



include valley foothill riparian habitat, waters of the U.S. (including perennial and seasonal creeks/streams, and riverine seasonal wetlands). Wildlife movement corridors also occur on the project site. Exhibit 5.6-1 illustrates the habitat types in the project area.

Valley Foothill Riparian. Valley foothill riparian habitats support a diverse assemblage of plants and provide breeding, cover, and foraging habitat for a wide variety wildlife. This habitat occurs in association with the majority of the riverine habitats the Project site. Although valley foothill riparian habitat is not protected under federal or state law, it is considered a sensitive habitat by Madera County.<sup>1</sup> Additionally, the continued decline of valley foothill riparian habitat is of concern to the CDFG.

Waters of the U.S. Jurisdictional Waters of the U.S. on the Project site total approximately 25.46 acres.<sup>2</sup> This acreage includes portions of two perennial creeks, Carter Creek and Miami Creek (10.26 acres); unnamed ephemeral drainages (1.30 acres); man-made impoundments (6.36 acres); culverts connecting natural drainages (0.09 acre); and seasonal wetlands (7.46 acres). This acreage is based on a Corps-verified wetland delineation prepared by Live Oak Associates.

Wildlife Movement Corridors. Wildlife movement corridors are traditional routes used by wildlife to travel within their home range. Movement corridors typically provide wildlife with undisturbed cover and foraging habitat and are generally composed of several trails in contiguous spans of forested, riparian, riverine, and woodland habitats. The width of movement corridors varies depending on the topography. Movement corridors are an essential element of home ranges of a wide variety of wildlife including black bear (*Ursus americanus*), grey fox (*Urocyon cinereoargenteus*), mountain lion (*Felis concolor*), and various migratory wildlife. As a result, wildlife movement corridors are considered a sensitive habitat by Madera County and the CDFG.<sup>3</sup>

The valley foothill riparian habitats associated with the riverine habitat on the Project site likely functions as common wildlife movement corridors. Wildlife expected to use these habitats on the Project site for movement within their home range includes bobcat, coyote, raccoon, and various small mammals. Additionally, the movement corridors function as a migration corridor, that was used by the Oakhurst deer herd to travel between summer and winter ranges.

The Oakhurst deer herd was located on the west slope of the Sierra Nevada Mountains in Central California and was comprised of California mule deer (*Odocoileus hemionus californicus*). The herd range was located approximately 45 miles northeast of Fresno, with most of the area located within the Fresno River watershed in eastern Madera County. Generally, the deer herd wintered in chaparral and foothill woodland habitats ranging in elevations from approximately 2,500 to

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<sup>1</sup> *Ibid.*

<sup>2</sup> The creeks will be protected and buffered during project construction, except for limited impacts due to road crossings.

<sup>3</sup> Source: *Madera County General Plan Policy Document and Ahwahnee/Nipinnawasee Area Plan.*





4,500 feet above MSL around the Ahwahnee-Oakhurst and Bass Lake area and summered in mixed coniferous forest habitat ranging in elevations from approximately 6,000 to 8,000 feet above MSL around Central Camp, Fresno Dome, and Mount Raymond. A transition range was also identified between the upper wintering and lower summer range in yellow pine forest habitat ranging from approximately 5,000 to 6,000 feet above MSL.

From the late 1960s, the deer herd experienced a continuing population decline. Although herd data including buck harvest and fawn survival data is available, the mortality factors regulating the deer herd cannot be verified. The wintering range of the herd was located in an area where there has been excessive urban development since the early 1960s and is mostly private property. Thus, mortality from illegal hunting, predation by domestic dogs, and habitat reduction has been extreme and is considered to be a major factor affecting the deer herd.

The Oakhurst Deer Herd Management Plan prepared by CDFG in 1984 notes that between 1961 and 1984 the Oakhurst deer herd population had declined by 80 percent. By the early 1990s, it was considered to consist of only a few individuals that might have still wintered on Taylor Ridge, near Bass Lake. Development of winter habitat in and around the Oakhurst Basin, illegal hunting (poaching), predation by domestic dogs, traffic fatalities, et cetera, have all but eliminated the Oakhurst herd. Today, although resident deer are abundant in the Basin; any migratory deer that may still occur regionally do not appear to migrate into the Basin regularly, if at all. Therefore, the Project site probably does not constitute a movement corridor at this time.

## **IMPACTS**

### **SIGNIFICANCE CRITERIA**

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist form which includes questions relating to biological resources. The issues presented in the Initial Study Checklist have been utilized as thresholds of significance in this Section. Accordingly, a Project may create a significant environmental impact if it causes one or more of the following to occur:

- If the Project has 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 Game or U.S. Fish and Game and Wildlife Service (refer to Impact Statements 5.6-3 to 5.6-10).
- If the Project has 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 Game or U.S. Fish and Game and Wildlife Service (refer to Impact Statement 5.6-11).
- If the Project has 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 (refer to impact Statement 5.6-12).

- If the Project interferes substantially with the movement of any native or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impedes the use of native wildlife nursery sites (refer to Impact Statements 5.6-9, and 5.6-13).
- If the Project conflicts with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (refer to Impact Statements 5.6-1 and 5.6-2).
- If the Project conflicts with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan (refer to Section 10.0, *Effects Found Not to be Significant*).

CEQA Guidelines Section 15380 further provides that a plant or animal species may be treated as “rare or endangered” even if not on one of the official lists if, for example, it is likely to become endangered in the foreseeable future.

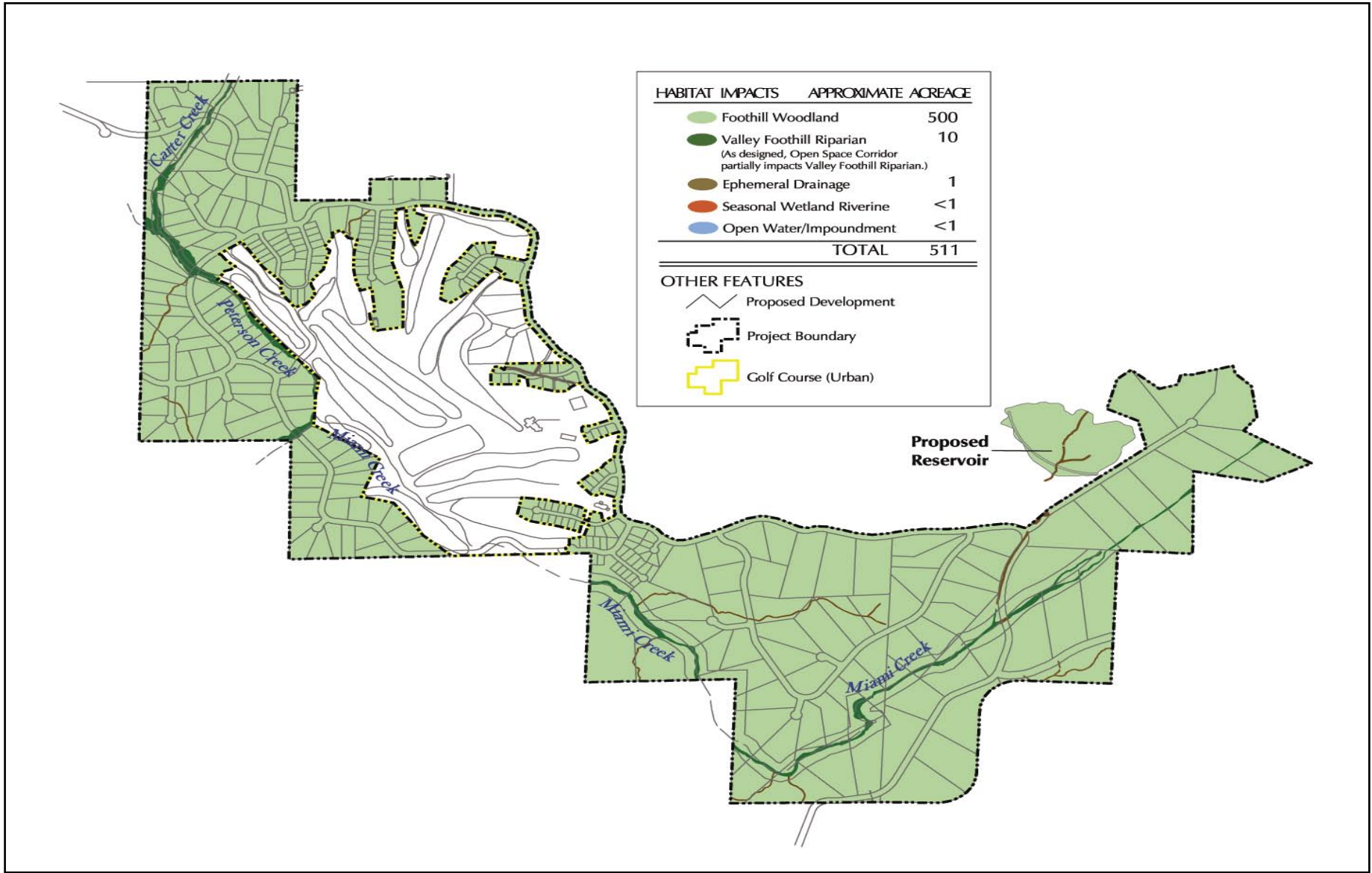
The evaluation of whether or not an impact on biological resources would be substantial considers both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish, or result in the loss of, an important biological resource, or those that would obviously conflict with local, state, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important, but not significant according to CEQA. The reason for this is that although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish, or result in the permanent loss of, an important resource on a population-wide or region-wide basis.

Impacts to biological resources are analyzed below according to topic. Mitigation measures at the end of this section directly correspond with the identified impact.

### **FOOTHILL WOODLAND VEGETATION**

- 5.6-1 *Development of the proposed Project could impact up to 500 acres of foothill woodland vegetation that is common throughout the Sierra Nevada foothills. Analysis has concluded that with implementation of recommended mitigation, impacts would be less than significant.*

As shown in Exhibit 5.6-2, *Habitat Impacts*, project implementation would impact approximately 500 acres of foothill woodlands. Exhibit 5.6-2 assumes a worse case scenario in which all of the foothill woodlands habitat would be impacted by development of the Project. However, direct grading impacts within the residential lots would be limited to the building pad areas. Although many of the smaller lots (less than one acre) would be almost entirely graded to accommodate the building



Source: Foothill Associates, September 2004.



Not to Scale



PLANNING ■ DESIGN ■ CONSTRUCTION

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pad, the larger lots would maintain much of the natural vegetation, as only a portion of the individual lots would be required for the building pads. For example, a typical lot designated for Rural Estate Residential (RER) land uses would be a minimum of five (5) acres and would include a building pad of approximately 0.5 acres (21,000 sf.). These lots would consist of a minimum of approximately 4.5 acres of undisturbed area. Thus, the project design would not result in full build-out of the lots, which would maintain portions of the existing foothill woodland vegetation throughout the project area.

As stated in the Existing Conditions above, foothill woodland vegetation is abundant throughout the Sierra Nevada foothills. Foothill woodlands cover several million acres in and around the Central Valley of California. Although a wide variety of common wildlife likely occurs on the project site, even under the worst-case impact scenario, due to the small percentage of potentially impacted foothill woodlands in comparison to the overall acreage of foothill woodlands within the Central Valley and since the overall project design would be consistent with the design criteria set forth in the General Plan and Area Plan, impacts to foothill woodlands are concluded to be less than significant.

However, per Madera County General Plan Policy 5.F.4, "The County shall ensure that landmark trees are preserved and protected." Landmark trees are considered those greater than 36 inches in diameter at breast height (dbh). Although the project design would incorporate a significant portion of the land to open space, direct or indirect impacts to landmark trees could result through the implementation of the proposed development plan. Disturbance or removal of landmark trees could occur during grading activities for building sites and infrastructure. This is considered a potentially significant impact. To minimize impacts to landmark trees, mitigation measures have been recommended. The recommended mitigation requires that the Project Applicant contract with an arborist to prepare a landmark tree survey in the developable area for the project site. If landmark trees would be removed during project construction activities, then a landmark tree mitigation and monitoring plan would be prepared by an arborist and subject to review and approval by Madera County. Implementation of the recommended mitigation measures would reduce all impacts to landmark trees to less than significant levels.

### **HABITAT FOR COMMON WILDLIFE**

5.6-2      *Development of the proposed Project would result in the loss of habitat for common wildlife currently utilizing the Project site. Analysis has concluded that impacts are less than significant.*

As shown in Appendix A of the Biological Assessment Report, a wide variety of common wildlife occurs on the proposed Project site. Common wildlife on the project site include a variety of fish, amphibians/reptiles, birds and mammals such as bluegill, catfish, bullfrog, western fence lizard, western toad, acorn woodpecker, American crow, brush rabbit, coyote, raccoon, striped skunk and western gray squirrel. These species are abundant in the region and throughout California, and, therefore, do not receive protection from federal, state, or local resource agencies. In addition, common wildlife would be wary of construction activities and are not likely to remain in the immediate vicinity during Project construction. The



surrounding undeveloped areas would provide habitat for common wildlife during and after construction activities. Thus, impacts to common wildlife are considered less than significant and no mitigation is required.

### **SPECIAL-STATUS PLANT SPECIES**

- 5.6-3 *Development of the proposed Project could result in removal of habitat for four special-status plant species potentially occurring on the Project site including Madera linanthus, Mariposa pussy-paws, Rawson's flaming-trumpet, and Small's southern clarkia. Analysis has concluded that since survey results have concluded that the species do not occur onsite, implementation of the proposed project would not result in significant impacts to these plant species.*

Seven special status vascular plant species are known to occur in the general project vicinity in (see Table 5.6-2). Three species, Bolander's clover, Ewan's larkspur, and Rawson's flaming trumpet, would have a low likelihood of occurrence on the site due to an absence of suitable habitat as discussed in Table 5.6-2 and the subsequent discussion of listed special status plants. Due to the likely absence of these species from the project site, the project would either result in no adverse environmental effect on these species, or at most a less than significant adverse effect.

The project site provides what appears to be suitable habitat for four special status plant species, the Madera linanthus, the Mariposa pussy-paws, the orange lupine, and the Small's southern clarkia. The staff of Live Oak Associates, Inc. surveyed the site for these four species in late April of 2004, a time when they should have been detectable had they been present. None of these listed species were identified on site, even though reference populations of the Mariposa pussy-paws and Orange lupine had been observed nearby. Therefore, these four species are presumed absent from the project site. The proposed project is not expected to result in any adverse environmental effect on any populations of these four species. Mitigation measures are not warranted.

### **SPECIAL-STATUS INVERTEBRATE SPECIES**

#### **VALLEY ELDERBURY LONGHORN BEETLE**

- 5.6-4 *Implementation of the proposed Project could result in removal of potential habitat for Valley elderberry longhorn beetle (VELB). Analysis has concluded that with implementation of the recommended mitigation measures in this Section and in Appendix 15.6, impacts would be less than significant.*

Elderberry shrubs were observed throughout the foothill woodland and valley foothill riparian habitats on the project site. This shrub is considered potential habitat for Valley Elderberry longhorn beetle (VELB). During the comprehensive, focused field surveys conducted by LOA, no exit holes were observed in association with the elderberry shrubs on the project site. Therefore, the potential for VELB to occur on the project site is likely, and there are CNDDDB records of this species within five miles of the project site as well. Because this species is protected under the FESA



and regulated by the USFWS, removal of any elderberry shrub is considered a potentially significant impact, regardless of whether or not focused surveys discover the VELB on the project site.

Mitigation has been recommended to reduce the significance of impacts to the VELB habitat. Refer to Appendix 15.6 which presents measures to avoid and minimize impacts to the VELB. Implementation of the recommended mitigation measures and measures referenced in Appendix 15.6 would reduce potentially significant impacts to the VELB habitat to less than significant levels.

## **SPECIAL-STATUS AMPHIBIAN/REPTILE SPECIES**

### **CALIFORNIA HORNED LIZARD**

5.6-5 *Project implementation would not result in removal and/or disturbance of potential habitat for the California horned lizard. Analysis has concluded that impacts are less than significant.*

California horned lizards occur in a wide variety of habitats, including foothill woodland and valley foothill riparian habitats, with open areas, patches of loose soil, and insect prey. Development of the proposed project could remove potential California horned lizard habitat. However, the project design would not result in the loss of all potential horned lizard habitat as the project would include large portions of undeveloped land. In particular, areas outside of the building pads on lots greater than one acre would provide habitat for the horned lizard. Thus, portions of the existing valley riparian habitat and foothill woodlands habitat would be maintained throughout the project area (refer to foothill woodland discussion in Impact Statement 5.6-1). For these reasons, removal of potential habitat is not expected to result in a local decline of this species population. Thus, it is concluded that impacts to the California horned lizard are less than significant.

### **CALIFORNIA RED-LEGGED FROG**

5.6-6 *Project implementation could result in removal and/or disturbance of potential habitat for the California red-legged frog (CRLF). Analysis has concluded that the likelihood of the species' occurrence on the project site is low and therefore the project is not likely to cause significant adverse impact to CRLF.*

Although the closest CNDDDB record of California red-legged frog (CRLF) is approximately 43 miles north of the Project site, the Project site is within the historic range of this species and focused surveys for this species have not been conducted in the Project vicinity. Potential habitat for CRLF occurs in the open water and perennial riverine habitats on the Project site. Although a buffer would be preserved along riparian corridors at project crossings on the Project site, if this species is found to be present, temporary impacts, as well as, direct take of this species could result from construction activities. Although this impact could be considered potentially significant if individuals were found to be present, based upon survey conditions presented in the existing conditions subsection, the likelihood is very low.



Based upon existing data and survey conditions, the project is unlikely to cause significant adverse impacts to CRLF, and mitigation is not warranted.

### **FOOTHILL YELLOW-LEGGED FROG**

5.6-7 *Project implementation could result in removal and/or disturbance of potential habitat for the Foothill yellow-legged frog (FYLF). Analysis has concluded that the likelihood of the species' occurrence on the project site is low, and therefore the project is not likely to cause significant adverse impacts to FYLF.*

Potential habitat for Foothill yellow-legged frog occurs in the perennial riverine habitats on the Project site. If this species is present, temporary impacts, as well as, direct take of this species could result from construction activities. Thus, this impact would be considered potentially significant, although the likelihood of the species being present is low.

This species has not been observed in Miami or Carter Creek for nearly 30 years, in spite of focused and general surveys by reputable herpetologists and aquatic biologists. Based upon existing data and survey conditions, the project is unlikely to cause significant adverse impact upon FYLF and mitigation is not warranted.

### **WESTERN POND TURTLE**

5.6-8 *Project implementation is unlikely to result in removal and/or disturbance of potential habitat for the Western pond turtle. Analysis has concluded that impacts would be less than significant.*

The proposed Project may result in impacts to both aquatic and upland habitat for the western pond turtle. These species have been observed in Miami Creek, and could also occur in slow-moving water of the lower reaches of Carter Creek and Peterson Creek. In addition, western pond turtle could occur in the open water habitats. Construction activities are unlikely to directly affect these species because pond turtles are very wary of humans and would likely move away from the area. Furthermore, the project design designates the majority of the riparian habitat to be considered open space. For these reasons, this species is not expected to be adversely affected by the proposed project and this impact is concluded to be less than significant.

### **SPECIAL-STATUS BIRD SPECIES**

5.6-9 *Development of the proposed Project could result in disturbance to nesting raptors. Analysis has concluded that with implementation of the recommended mitigation, impacts would be less than significant.*

The foothill woodland and valley foothill riparian habitats on the Project site provide potential nesting habitat for raptors, which include the American kestrel, Cooper's hawk, great-horned owl, and red-tailed hawk. The destruction of active raptor nests is a violation of both the MBTA and the CDFG Code 3503.5. Destruction and/or disruption of active raptor nests could occur in conjunction with Project development



if raptors were nesting in habitats within 500 feet of construction activities. Thus, this impact is considered potentially significant.

To reduce the significance of impacts to special status bird species, mitigation requiring focused surveys for raptors would be necessary if the project construction occurs during the breeding season (February through August). If nests were found during the surveys, no construction activities would be allowed within a certain distance of the raptor nests (to be determined in consultation with CDFG) until the young have fledged. Additionally, trees containing nests that must be removed as a result of project implementation would be removed during the non-breeding season. Implementation of the recommended mitigation measures would reduce potentially significant impacts to nesting raptors to less than significant levels.

### **SPECIAL-STATUS BAT SPECIES**

5.6-10 *Development of the proposed Project is unlikely to result in disturbance of breeding bat species. Analysis has concluded that impacts would be less than significant.*

Bats roost in a wide variety of habitats including buildings, mines, under bridges, rock crevices, caves, under tree bark, and in snags. These species may utilize the habitat communities on the project site for roosting and foraging. Suitable roosting habitat for these species includes in trees under bark, in snags, and caves. The disturbance of active maternity roosts can affect the reproductive success of the species, as young do not fly from the maternity roost until they reach several months in age. Construction of the proposed project could disturb roosting bats and thus eliminate future roosting opportunities. Construction of the project would require the removal of vegetation communities that could support roosting for these special-status bat species. Construction and operation of the project could also result in noise, dust, and other indirect disturbances to wildlife in the project vicinity.

These species are abundant in the nearby Sierra National Forest, Yosemite National Park, and other large areas of public lands that would continue to provide habitat for common wildlife during and after construction activities. Thus, impacts to these bat species are considered less than significant and no mitigation is required.

### **SENSITIVE HABITATS**

#### **VALLEY FOOTHILL RIPARIAN HABITAT**

5.6-11 *Development of the proposed Project could result in removal and disturbance of valley foothill riparian habitat. Analysis has concluded that with implementation of the recommended mitigation, impacts would be less than significant.*

Although valley foothill riparian habitat is not protected under federal or state laws, this habitat is considered a sensitive habitat by Madera County, and is protected in the Madera County General Plan (Policy 5.D.4) and the Ahwahnee/Nipinnawasee Area Plan (Policy OS-5). The decline of valley foothill riparian habitat is also of





concern to the CDFG. Exhibit 5.6-2, *Habitat Impacts*, illustrates the valley foothill riparian habitat that could potentially be impacted by the proposed Project.

To reduce the significance of impacts to valley foothill riparian habitat, the project has been designed to not only preserve approximately 65 acres of riparian habitat corridor along the creeks in the Project area, but also protect a substantial area of oak woodland on either side of that riparian corridor. The recommended mitigation would reduce impacts to a less than significant.

Proposed mitigation measures connected to the proposed project include the following:

- Buffers along Miami and Carter Creeks that are typically assumed at 100 feet in width as measured from the top of the bank on either side of the creek (or wider in areas of steep unbuildable terrain adjacent to some portions of Miami and Carter Creeks); these buffers would narrow to about 50 feet at one creek crossing (it is noted that the buffers are natural buffers and will not be recorded areas of dedication);
- Preservation of 10 acres of creek channel and 60 acres of open space habitat on either side of the creek channel; and
- Acquisition of Clean Water Act permit, Streambed Alteration Agreement, and Water Quality Certification prior to construction of any road crossing over any natural drainages identified as Waters of the United States.

### **JURISDICTIONAL WATERS OF THE U.S.**

5.6-12 *Development of the proposed Project could result in fill of jurisdictional waters of the U.S. Analysis has concluded that with implementation of the recommended mitigation, impacts would be less than significant.*

The Project site supports approximately 25.46 acres of jurisdictional waters of the U.S., which includes portions of two perennial creeks, ephemeral drainages, man-made impoundments, culverts connecting natural drainages, and seasonal wetlands. Exhibit 5.6-2, *Habitat Impacts*, illustrates the ephemeral drainage and seasonal wetland areas that could potentially be impacted by the proposed Project. The Corps and CDFG regulate these areas. Additionally, these areas are protected in the Madera County General Plan Goal 5.D. The Project proposes to cross the perennial creeks in several locations. Additionally, areas of the ephemeral drainages and seasonal wetlands may be filled by the proposed lot alignments. Thus, impacts to jurisdictional waters of the U.S. are considered a potentially significant impact.

To reduce the significance of impacts to jurisdictional waters of the U.S., the project Applicant shall obtain a Section 404 Permit from the Army Corps of Engineers and a 401 Permit from the Regional Water Quality Control Board based upon the verified jurisdictional waters of the U.S. delineation. The project Applicant would be required to also obtain a Streambed Alteration Agreement from the CDFG for each stream crossing and any other activities affecting the bed, bank, or associated riparian vegetation of the stream. Any jurisdictional waters that would be lost or disturbed



would be required to be replaced or rehabilitated on a “no-net-loss” basis in accordance with the Corps’ mitigation guidelines and Madera County GP Policy 5.D.2. Habitat restoration, rehabilitation, and/or replacement would be required to be at a location and by methods agreeable to the Corps. Implementation of the recommended mitigation measures would reduce potentially significant impacts to less than significant levels in this regard.

### **WILDLIFE MOVEMENT CORRIDORS**

5.6-13 *The migratory Oakhurst deer herd is unlikely to migrate through the project site, and the proposed project is unlikely to create obstacles to the home range movements of resident deer. Large buffers along Miami and Carter Creeks would facilitate the movement of various species through the site. Therefore, impacts would be less than significant, and no specific mitigation is proposed.*

The valley foothill riparian habitats on the Project site function as wildlife movement corridors, which are an essential element of home ranges of a wide variety of wildlife. While the movement corridors once functioned as a migration corridor for the Oakhurst deer herd, this herd is experiencing a continued population decline and has been all but eliminated from the Oakhurst Basin. Although mortality factors regulating the deer herd has not been verified, urban development within the herds’ wintering range is considered to be a major factor.

Although wildlife movement corridors are not directly protected under federal or state laws, this habitat is considered a sensitive habitat by Madera County, and is protected in the Madera County General Plan (Policies 5.E.2, 5.E.3, 5.E.5, and 5.E.6). The proposed Project would preserve approximately 65 acres of riparian habitats in a corridor along on-site creeks, which would mitigate effects to the wildlife corridor.

### **CUMULATIVE IMPACTS**

5.6-14 *Cumulative development in the Project area would impact the area’s biological resources. Analysis has concluded that cumulative impacts would be significant and unavoidable.*

According to the Madera County General Plan EIR, current and future rural development projects in Madera County would contribute to the ongoing loss of natural, undisturbed open space in the region. Impacts likely to result from these projects include loss of special-status plant species, loss of oak woodland and riparian habitat, disruption of wildlife movement corridors and movement routes, loss of habitat for stream dwelling wildlife species (i.e., foothill yellow-legged frog, western pond turtle, etc.), loss of migratory bird nesting habitat, and loss or disturbance of jurisdictional waters of the U.S. Specifically, the General Plan EIR notes that population growth and large amounts of clearing for fire breaks, new roads, and small parcel sizes (less than 5 acres) would result in “a substantial net loss of habitat for wildlife.” Additionally, traditional wildlife movement routes are likely to be obstructed by residential subdivision and roads, or otherwise modified by rural development. According to the General Plan EIR, replacement habitats suitable for



native wildlife cannot be created elsewhere as compensation for habitats lost to development. Thus, impacts to wildlife habitat, most significantly in the North 41 Corridor, cannot be adequately mitigated to a less than significant impact.

When viewed in conjunction with development anticipated by the Madera County General Plan for the Ahwahnee/Oakhurst area, the loss and/or disturbance of foothill woodlands vegetation, valley riparian habitat and other native vegetation, as well as the loss and/or disturbance of wildlife habitat could be considered a negative cumulative effect. Potential impacts would be site specific and an evaluation of potential impacts would be conducted on a project-by-project basis. This would be especially true of those developments located in areas that contain sensitive species and habitat. Each incremental development would be required to comply with all applicable County, State and Federal regulations concerning the preservation of biological resources.

Although the proposed project provides mitigation measures that reduce all potentially significant impacts to biological resources to less than significant levels, the proposed project would contribute to the cumulative loss of habitat for wildlife and wildlife movement corridors (specifically wintering habitat for the Oakhurst deer herd). Since the conversion of open space lands and fish and wildlife habitat areas is considered an irreversible environmental change that cannot be mitigated (per Madera County General Plan EIR), the project's contribution to cumulative impacts associated with the anticipated development identified in the Madera County General Plan is concluded to be a significant and unavoidable impact.

## **MITIGATION MEASURES**

The section directly corresponds to the identified Impact Statements in the impacts subsection.

### **FOOTHILL WOODLAND VEGETATION**

- 5.6-1a Prior to the onset of construction activities, the Project Applicant shall contract with an Arborist to complete a tree survey in the developable area focused on landmark trees. Upon completion of the survey, the arborist will submit a tree survey map of landmark trees that may be disturbed during development. If no landmark trees are found, no further studies are necessary. The survey map shall be reviewed and approved by Madera County.
- 5.6-1b Pursuant to Mitigation Measures 5.6-1a, if landmark trees are found during the tree survey that must be removed during construction activities, then a landmark tree mitigation and monitoring plan shall be prepared by an arborist and subject to review and approval by Madera County.

### **HABITAT FOR COMMON WILDLIFE**

- 5.6-2 No mitigation measures are recommended.



### **SPECIAL-STATUS PLANT SPECIES**

5.6-3 No mitigation measures are recommended.

### **SPECIAL-STATUS INVERTEBRATE SPECIES**

#### **Valley Elderberry Longhorn Beetle**

5.6-4 As VELB habitat exists on the project site and if elderberry shrubs in the Project area cannot be avoided, consultation with USFWS shall be required. If feasible, the Project shall be revised to avoid removal of or indirect impacts to elderberry shrubs. Typically, the USFWS requires a 100-foot setback from the outer dripline edge of each shrub; however, this setback may be reduced substantially depending on the site design. If shrubs cannot be avoided, a mitigation plan prepared by a qualified biologist and subject to review and approval by the USFWS, which must include one or more of the following, shall be implemented:

- Obtain credits at an approved mitigation bank; or
- Implement an onsite mitigation and monitoring plan that includes transplantation of the shrub and planting of elderberry seedlings. Specific transplanting procedures shall be included in the plan and shall follow the measures outlined in the USFWS *General Compensation Guidelines for the Valley Elderberry Longhorn Beetle* (July 1999). All transplanting shall occur during the shrub's dormant season (November through mid-February). Elderberry seedlings shall be planted for all shrubs with stems measuring one inch or greater at ground level that are transplanted or destroyed. Elderberry seedlings shall be planted in an approved mitigation location and shall follow mitigation ratios (seedlings per shrub disturbed) outlined in the USFWS *General Compensation Guidelines for the Valley Elderberry Longhorn Beetle* (July 1999). Ratios are based on location (riparian vs. non-riparian), stem diameter at ground level, and presence or absence of exit holes of affected elderberry shrubs and range from 1:1 to 8:1.

### **SPECIAL-STATUS AMPHIBIAN/REPTILE SPECIES**

#### **California Horned Lizard**

5.6-5 No mitigation measures are recommended.

#### **California Red-Legged Frog**

5.6-6 No mitigation measures are recommended.

#### **Foothill Yellow-Legged Frog**

5.6-7 No mitigation measures are recommended.



### **Western Pond Turtle**

- 5.6-8 No mitigation measures are recommended.

### **SPECIAL-STATUS BIRD SPECIES**

- 5.6-9a If Project construction is proposed during breeding season (February through August), a focused survey for raptors and their nests shall be conducted in the Project area within 30 days prior to the beginning of construction activities by a qualified biologist in order to identify active nests on the Project site. The survey shall be reviewed and approved by Madera County and/or CDFG. If no active nests are identified during the surveys or if Project construction is proposed to occur during the non-breeding season (September through January), no further mitigation would be required. If active nests are identified in the Project area during the focused surveys, Mitigation Measure 5.6-9b shall be implemented.
- 5.6-9b Pursuant to Mitigation Measure 5.6-9a, if active nests are identified in the Project area during the focused surveys for raptors, no construction activities shall take place within a certain distance of raptor nests (to be determined under consultation) with CDFG, until the young have fledged. Trees containing nests that must be removed as a result of Project implementation shall be removed during the non-breeding season (September through January). Madera County and/or CDFG shall monitor and enforce Mitigation Measure 5.6-9b.

### **SPECIAL-STATUS BAT SPECIES**

- 5.6-10 No mitigation measures are recommended.

### **SENSITIVE HABITATS**

#### **Valley Foothill Riparian Habitat**

- 5.6-11a Prior to issuance of a grading permit, a Streambed Alteration Agreement shall be obtained from CDFG, pursuant to Section 1600 of the California Fish and Game Code, for each stream crossing and any other activities affecting the bed, bank, or associated riparian vegetation of the stream.
- 5.6-11b To ensure impacts to Valley foothill riparian habitat is minimized, during grading plan review by Madera County, the County shall ensure that the buffer around riparian habitats is widened to encompass the entire riparian corridor and provides a 50-foot buffer from the canopy edge as per Madera County General Plan - Policy 5.D.4.
- 5.6-11c During construction activities within 100 feet of riparian habitats, such as the construction of road crossings, valley foothill riparian habitat that is not proposed for removal shall be protectively fenced in the areas where construction activity will directly impact the habitat. This fence shall be maintained until all construction activities are completed.



- 5.6-11d Riparian vegetation removed as part of construction activities shall be replaced at a 3:1 (3 new acres per one lost acre) mitigation ratio, per Madera County General Plan - Policy 5.D.6.

### **JURISDICTIONAL WATERS OF THE U.S.**

- 5.6-12a Based upon the jurisdictional waters of the U.S. delineation, an impact/fill map shall be submitted to the Corps with the appropriate Section 404 permit application. A Section 401 Water Quality certification or waiver also is required.
- 5.6-12b Any jurisdictional waters that would be lost or disturbed shall be replaced or rehabilitated on a “no-net-loss” basis in accordance with the Corps’ mitigation guidelines and the Madera County General Plan (Policy 5.D.2). Habitat restoration, rehabilitation, and/or replacement shall be at a location and by methods agreeable to the Corps.
- 5.6-12c Prior to issuance of a grading permit, a Streambed Alteration Agreement shall be obtained from CDFG, pursuant to Section 1600 of the California Fish and Game Code, for each stream crossing and any other activities affecting the bed, bank, or associated riparian vegetation of the stream. If required, the Project Applicant shall coordinate with CDFG in developing appropriate mitigation, and shall abide by the conditions of any executed permits.

### **WILDLIFE MOVEMENT CORRIDORS**

- 5.6-13 No mitigation measures are recommended.

### **CUMULATIVE IMPACTS**

- 5.6-14 No mitigation measures are recommended.

## **LEVEL OF SIGNIFICANCE AFTER MITIGATION**

The following biological resources impacts would remain significant and unavoidable:

- Cumulative loss of habitat for wildlife and wildlife movement corridors (such as riparian zones).

If Madera County approves the project, the County shall be required to cite their findings in accordance with Section 15091 of CEQA and prepare a Statement of Overriding Considerations in accordance with Section 15093 of CEQA.