12.0 BIOLOGICAL RESOURCES

This chapter describes biological resources that could be affected by the proposed project and federal, state, and local regulations pertaining to biological resources. This chapter also addresses impacts of the proposed project on biological resources and recommends mitigation measures to address potentially significant impacts.

12.1 ENVIRONMENTAL SETTING

This section describes vegetation communities, common wildlife, sensitive biological resources, and special-status species that have the potential to occur in the project area. Databases and literature reviewed for preparation of this section included reviews of the California Natural Diversity Database (CNDDB) (2007), the California Native Plant Society’s (CNPS’s) online inventory (CNPS 2006), and the Placer County Fish and Game Commission’s deer habitat map (Placer County Fish and Game Commission 1992). Field surveys conducted to support this section include reconnaissance surveys (DFG 2005, 2006, 2007), vegetation mapping (Placer County 2007), rare plant surveys (Placer County 2007) and wetland mapping (Placer County 2008) within the Spears Ranch portion of the Park.

12.1.1 VEGETATION COMMUNITIES

Most of the project area consists of gently rolling to steep hills covered by a patchwork of annual grassland and oak woodlands. Upland oak woodland can be divided into three types of woodland communities based on the dominant oak species: interior live oak woodland, blue oak woodland, and black oak woodland. Foothill pine (Pinus sabiniana) occurs throughout the property in all woodland types. Valley foothill riparian woodland and freshwater marsh have also been identified along the drainages. Vegetation communities present in the Spears Ranch portion of the Park and along Garden Bar Road were mapped onto aerial photographs (1 inch = 400 feet scale) during field surveys. The vegetation community polygons were later digitized onto a geographic information system (GIS) overlay and used to create a map showing the location and extent of each vegetation community present in the Spears Ranch portion of the Park and along Garden Bar Road (Exhibits 12-1a and 12-1b). Vegetation classifications are based on the California Department of Fish and Game’s (DFG’s) List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database (DFG 2003). Vegetation communities present in the Spears Ranch portion of the Park and along Garden Bar Road are described in more detail below. Biological surveys for the Didion Ranch portion of the Park were conducted as part of the 2004 Initial Study/Mitigated Negative Declaration (IS/MND) for the Didion property (Placer County 2004).

ANNUAL GRASSLAND

Annual grassland is mapped on approximately 89 acres of the project area, occurring in a few large grazed clearings. Annual grassland is an herbaceous plant community characterized by dense cover of nonnative annual grasses with numerous species of nonnative annual forbs, as well as some native wildflowers. Typical grass species include bromes (Bromus diandrus, B. hordeaceus), wild oat (Avena fatua), foxtail barley (Hordeum murinum ssp. murinum), medusahead (Taeniatherum caput-medusae), and Italian ryegrass (Lolium multiflorum). Common nonnative forbs observed include cut-leaved geranium (Geranium dissectum), filaree (Erodium botrys), blessed milk thistle (Silybum marianum), lesser hawkbit (Leontodon taraxacoides), and rose clover (Trifolium hirtum). Native wildflowers such as rusty popcorn flower (Plagiobothrys nothofulvus), Ithuriel’s spear (Triteleia laxa), harvest brodiaea (Brodiaea elegans), blow-wives (Achyrachaena mollis), caterpillar phacelia (Phacelia cicutaria), and native clovers (Trifolium spp.) are also present.
INTERIOR LIVE OAK WOODLAND

Interior live oak woodland is the dominant vegetation type in the project area, occupying approximately 683 acres. This oak woodland type is found on steep to moderate slopes of all aspects throughout the project area. Approximately one third of the Garden Bar Road corridor passes through interior live oak woodland. The vegetation is characterized by a dense to open canopy of interior live oak (*Quercus wislizeni*) with varying amounts of foothill pine. Blue oak (*Quercus douglasii*) may also be present. The understory shrub layer is mostly open and is characterized by species such as poison oak (*Toxicodendron diversilobum*), toyon (*Heteromeles arbutifolia*), and hairy honeysuckle (*Lonicera hispida*). The herb layer is variable depending on openings in the tree canopy and is characterized by species such as hedgehog dogtail (*Cynosurus echinatus*), field hedge parsley (*Torilis arvensis*), and climbing bedstraw (*Galium purrigens*). Native grass species such as blue wild rye (*Elymus glaucus*), woodland brome (*Bromus laevipes*), and California melicgrass (*Melica californica*) are also present in the understory in portions of the project area where this woodland occurs.

BLUE OAK WOODLAND

Blue oak woodland occurs on approximately 105 acres in the project area on moderate slopes near the tops of ridges. The southern two-thirds of the Garden Bar Road corridor is characterized by blue oak woodland and many of the large trees along the road in this portion of the project area are blue oaks. This oak woodland type is more open and savanna-like than other woodlands in the project area and is characterized by fairly evenly spaced and larger individual blue oaks. Interior live oak and foothill pine may also be present. A shrub layer is essentially absent and the understory is characterized by a dense cover of nonnative grasses and forbs, such as bromes, wild oat, foxtail barley, medusahead, cut-leaved geranium, and Italian thistle (*Carduus pycnocephalus*).

BLACK OAK WOODLAND

Black oak woodland covers approximately 53 acres of the project area and is found on steep north-facing slopes in the southeast portion of the Park. This woodland type is characterized by a dense canopy that is at least 50% relative cover of black oak (*Quercus kelloggii*), with interior live oak and blue oak also present. Scattered ponderosa pine (*Pinus ponderosa*) is also present. The shrub layer is usually dense and is characterized by species such as toyon, hoary coffeeberry (*Rhamnus tomentella*), and poison oak. The herb layer is usually sparse and contains a mix of native and nonnative grasses and forbs. Native grasses and forbs found in the understory of the black oak woodland include blue wild rye, woodland brome, California melicgrass, yarrow (*Achillea millefolium*), and twining brodiaea (*Dichelostemma volubile*).

VALLEY FOOTHILL RIPARIAN WOODLAND

Valley foothill riparian woodland covers 46 acres of the project area on the banks of Coon Creek, Deadman Creek, and intermittent drainages that have surface water for most of the year. These deciduous woodlands have a tree canopy dominated by Fremont cottonwood (*Populus fremontii*), valley oak (*Quercus lobata*), and white alder (*Alnus rhombifolia*). Shining willow (*Salix lucida var. lasiandra*), red willow (*S. laevigata*), and Oregon ash (*Fraxinus latifolia*) may also occur in the tree layer. Shrubs and lianas (i.e., woody climbing species) such as California grape (*Vitis californica*), arroyo willow (*Salix lasiolepis*), and Himalayan blackberry (*Rubus discolor*) form a dense understory layer, along with wetland herbaceous species such as torrent sedge (*Carex nudata*), mugwort (*Artemisia douglasiana*), and horsetail (*Equisetum arvense*) occurring along the water’s edge.
Vegetation Communities within the Spears Ranch Property

Source: Data provided by EDAW in 2007

Exhibit 12-1a
Vegetation Communities Along Garden Bar Road and Access Road

Source: Data provided by EDAW in 2007 and 2008
**FRESHWATER MARSH**

Freshwater marsh occurs on approximately 6 acres of the project area. This emergent herbaceous vegetation type is found in saturated soils on the fringes of the stock ponds and along intermittent drainages. The vegetation is characterized by obligate wetland herbaceous species such as spikerushes (*Eleocharis acicularis, E. macrostachya*), rushes (*Juncus effusus, J. bufonius*), cattails (*Typha angustifolia*), and smartweed (*Polygonum lapathifolium*). Often this vegetation is surrounded by woody riparian shrubs such as arroyo willow, Himalayan blackberry, and western dogwood (*Cornus sericea*).

### 12.1.2 WILDLIFE

The project area supports suitable habitat for a wide variety of resident and migratory wildlife species. Common bird species in upland oak woodland habitats include turkey vulture (*Cathartes aura*), acorn woodpecker (*Melanerpes formicivorus*), oak titmouse (*Baeolophus inornatus*), wild turkey (*Meleagris gallopavo*), Anna’s hummingbird (*Calypte anna*), and migratory birds such as ash-throated flycatcher (*Myiarchus cinerascens*) and violet-green swallow (*Tachycineta thalassina*). Mammals and reptiles that are commonly found in these woodlands include mule deer (*Odocoileus hemionus*), western rattlesnake (*Crotalus viridis*), western harvest mouse (*Reithrodontomys megalotis*), southern alligator lizard (*Elgaria multicarinata*), western fence lizard (*Sceloporus occidentalis*), gopher snake (*Pituophis melanoleucus*), gray fox (*Urocyon cinereoargenteus*), coyote (*Canis latrans*), and bobcat (*Lynx rufus*). These woodlands also support nonnative wild pigs (*Sus scrofa*), which are considered a nuisance wildlife species and are discussed further in Chapter 14.0, “Hazards and Hazardous Materials.”

Open annual grassland and oak savanna habitats support species such as red-tailed hawk (*Buteo jamaicensis*), black-tailed jackrabbit (*Lepus californicus*), western meadowlark (*Sturnella neglecta*), California ground squirrel (*Spermophilus beecheyii*), and loggerhead shrike (*Lanius ludovicianus*).

Valley foothill riparian woodlands provide resources, migration and dispersal corridors, and cover for diverse species. Bird species associated with this habitat include brown-headed cowbird (*Molothrus ater*), Hutton’s vireo (*Vireo huttoni*), red-shouldered hawk (*Buteo lineatus*), Bewick’s wren (*Thryomanes bewickii*), orange-crowned warbler (*Vermivora celata*), yellow-breasted chat (*Icteria virens*), spotted towhee (*Pipilo maculates*), and lesser goldfinch (*Cardelius psaltria*). Several amphibians and reptiles—western toad (*Bufo boreas halophilus*), northern pond turtle (*Emys marmorata*), green racer (*Coluber constrictor*), and Gilbert’s skink (*Eumeces gilbertii*)—use riparian woodlands in the project area. Mammals that use this habitat include mule deer, opossum (*Didelphis virginiana*), and cougar (*Felis concolor*). Bats, such as Yuma myotis (*Myotis yumanensis*), may forage for insects over riparian areas and roost in riparian trees.

Freshwater marsh in the project area provides habitat for Canada goose (*Branta canadensis*), mallard (*Anas platyrhynchos*), common muskrat (*Ondatra zibethicus*), Virginia rail (*Rallus limicola*), sora (*Porzana carolina*), American wigeon (*Anas americana*), American beaver (*Castor canadensis*), California newt (*Taricha torosa*), Pacific treefrog (*Hyla regilla*), northwestern pond turtle, common garter snake (*Thamnophis sirtalis*), and bullfrog (*Rana catesbeiana*).

### 12.1.3 FISHERIES AND AQUATIC RESOURCES

This section addresses common and sensitive fisheries and aquatic resources found in Coon Creek and Deadman Creek in Placer County. The analysis focuses on Coon Creek, as only the mouth of Deadman Creek at Coon Creek is within the project area. Hydrology and water quality are addressed in Chapter 11.0, “Hydrology and Water Quality.”
COON CREEK AND DEADMAN CREEK

Coon Creek, its tributaries (e.g., Deadman Creek), and other foothill streams that flow into the Sacramento River provide spawning, rearing, and/or migratory habitat for a diverse assemblage of native and nonnative species (Table 12-1). Coon Creek is connected to the Sacramento River through the East Side Canal (ESC)/Natomas Cross Canal (NCC), a channelized water conveyance canal in Sutter County that drains the area between the Bear River and American River drainages. Native species potentially present in Coon and Deadman Creeks can be separated into anadromous species (i.e., species that spawn in freshwater after migrating as adults from marine habitat) and resident species. Native anadromous species are Central Valley fall-/late fall-run chinook salmon evolutionary significant unit (ESU) (*Oncorhynchus tshawytscha*), Central Valley steelhead distinct population segment (DPS; formerly ESU) (*O. mykiss*), and Pacific lamprey (*Lampetra tridentata*). Native resident species are Sacramento pikeminnow (*Ptychocheilus grandis*), Sacramento splittail (*Pogonichthys macrolepidotus*), Sacramento sucker (*Catostomus occidentalis*), hardhead (*Mylopharodon conocephalus*), California roach (*Lavinia symmetricus*), and rainbow trout (*O. mykiss*). Nonnative resident species are largemouth bass (*Micropterus salmoides*), smallmouth bass (*M. dolomieu*), white and black crappie (*Pomoxis annularis, P. nigromaculatus*), channel catfish (*Ictalurus punctatus*), white catfish (*Ameiurus catus*), brown bullhead (*I. nebulosus*), bluegill (*Lepomis macrochirus*), green sunfish (*L. cyanellus*), and golden shiner (*Notemigonus cryssoleucas*).

### Table 12-1

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Native (N) or Introduced (I)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Valley fall-/late fall–run chinook salmon ESU</td>
<td><em>Oncorhynchus tshawytscha</em></td>
<td>N</td>
</tr>
<tr>
<td>Central Valley steelhead/rainbow trout DPS</td>
<td><em>Oncorhynchus mykiss</em></td>
<td>N</td>
</tr>
<tr>
<td>Pacific lamprey</td>
<td><em>Lampetra tridentata</em></td>
<td>N</td>
</tr>
<tr>
<td>Sacramento pikeminnow</td>
<td><em>Ptychocheilus grandis</em></td>
<td>N</td>
</tr>
<tr>
<td>Sacramento splittail</td>
<td><em>Pogonichthys macrolepidotus</em></td>
<td>N</td>
</tr>
<tr>
<td>Sacramento sucker</td>
<td><em>Catostomus occidentalis</em></td>
<td>N</td>
</tr>
<tr>
<td>Hardhead</td>
<td><em>Mylopharodon conocephalus</em></td>
<td>N</td>
</tr>
<tr>
<td>California roach</td>
<td><em>Lavinia symmetricus</em></td>
<td>N</td>
</tr>
<tr>
<td>Rainbow trout</td>
<td><em>Oncorhynchus mykiss</em></td>
<td>N</td>
</tr>
<tr>
<td>Largemouth bass</td>
<td><em>Micropterus salmoides</em></td>
<td>I</td>
</tr>
<tr>
<td>Smallmouth bass</td>
<td><em>Micropterus dolomieui</em></td>
<td>I</td>
</tr>
<tr>
<td>White crappie</td>
<td><em>Pomoxis annularis</em></td>
<td>I</td>
</tr>
<tr>
<td>Black crappie</td>
<td><em>Pomoxis nigromaculatus</em></td>
<td>I</td>
</tr>
<tr>
<td>Channel catfish</td>
<td><em>Ictalurus punctatus</em></td>
<td>I</td>
</tr>
<tr>
<td>White catfish</td>
<td><em>Ameiurus catus</em></td>
<td>I</td>
</tr>
<tr>
<td>Brown bullhead</td>
<td><em>Ictalurus nebulosus</em></td>
<td>I</td>
</tr>
<tr>
<td>Bluegill</td>
<td><em>Lepomis macrochirus</em></td>
<td>I</td>
</tr>
<tr>
<td>Green sunfish</td>
<td><em>Lepomis cyanellus</em></td>
<td>I</td>
</tr>
<tr>
<td>Golden shiner</td>
<td><em>Notemigonus cryssoleucas</em></td>
<td>I</td>
</tr>
</tbody>
</table>

Source: Navicky, pers. comm., 2007; Moyle 2002; compiled by EDAW 2008
The use of different areas of Coon and Deadman Creeks by different fish species is influenced by variations in habitat conditions, each species’ habitat requirements, life-history timing, and daily/seasonal movements and behavior. Habitat conditions are influenced by urbanization in the upper watershed and agricultural activities along the lower reaches. Flows within Coon Creek are extremely variable because of natural hydrologic variability, upstream wastewater treatment plant effluent discharge, urban stormwater inputs, and diversions along different reaches of the creek (see Chapter 11.0, “Hydrology and Water Quality”). The variation in flows through Coon Creek may substantially influence the presence and/or timing of anadromous fishes in the system because of associated variations in water quality and barriers and obstacles to passage.

Shaded riverine aquatic (SRA) vegetation and instream tree and shrub debris provide important components of fish habitat in Coon Creek. SRA habitat is defined as the nearshore aquatic habitat occurring at the interface between a river and adjacent woody riparian habitat. The principal attributes of this cover type are an adjacent bank composed of natural, eroding substrates supporting riparian vegetation that either overhang or protrude into the water; and water that contains variable amounts of woody debris (leaves, logs, branches, and roots) and has variable depths, velocities, and currents. Riparian habitat provides structure (through SRA habitat) and food for fish species. Shade decreases water temperatures and low overhanging branches can provide sources of food by attracting terrestrial insects. As riparian areas mature, the vegetation sloughs off into the rivers, creating structurally complex habitat consisting of large woody debris that furnishes refuge from predators, creates higher water velocities, and provides habitat for aquatic invertebrates. For these reasons, many fish species are attracted to SRA habitat.

Upper Coon Creek provides coldwater spawning and rearing habitat for chinook salmon and steelhead trout. Electrofishing surveys conducted by DFG in 2004 and 2005 as part of the Coon Creek System Resource Assessment Project confirmed the presence of steelhead/rainbow trout in the project area and juvenile chinook salmon downstream of the project area (Table 12-2). The channelized lower Coon Creek and ESC/NCC function primarily as a migration corridor and do not provide high-quality rearing and spawning habitat for splittail, salmon, or steelhead.

<table>
<thead>
<tr>
<th>Survey Date</th>
<th>Site</th>
<th>CS (Juvenile)</th>
<th>SH/RBT</th>
<th>SKR</th>
<th>PM</th>
<th>GSF</th>
<th>SMB</th>
</tr>
</thead>
<tbody>
<tr>
<td>4/15/05</td>
<td>Spears Ranch, below falls</td>
<td>0</td>
<td>11</td>
<td>8</td>
<td>13</td>
<td>2</td>
<td>39</td>
</tr>
<tr>
<td>4/25/05</td>
<td>Foggy Ranch, ~1 mile downstream of Spears Ranch</td>
<td>25</td>
<td>1</td>
<td>12</td>
<td>10</td>
<td>18</td>
<td>9</td>
</tr>
<tr>
<td>4/26/05</td>
<td>Spears Ranch, above falls</td>
<td>0</td>
<td>0</td>
<td>61</td>
<td>0</td>
<td>7</td>
<td>0</td>
</tr>
</tbody>
</table>

Notes: CS = chinook salmon; GSF = green sunfish; PM = Sacramento pikeminnow; SH/RBT = steelhead/rainbow trout; SKR = Sacramento sucker; SMB = smallmouth bass
Source: Navicky, pers. comm., 2007

12.1.4 SENSITIVE HABITATS

For the purposes of this EIR, sensitive habitats are defined as habitats with particularly high ecological values or functions, of limited distribution, or of concern otherwise to federal, state, and/or local resource agencies. This includes those that are of special concern to DFG (e.g., those identified as having high priority for inventory by the CNDDB, or those that are afforded specific consideration through CEQA, Section 1602 of the California Fish and Game Code, Section 404 of the Clean Water Act (CWA), or the Sustainable Fisheries Act, as amended). Sensitive habitats are of special concern because they have high potential to support special-status plant and
animal species. Sensitive habitats can also provide other important ecological functions, such as enhancing flood and erosion control and maintaining water quality.

Drainages, wetlands, and other areas identified in the wetland delineation as jurisdictional waters of the United States are protected under the CWA as regulated by the U.S. Army Corps of Engineers (USACE). Streams and adjacent riparian forest are also protected under the California Fish and Game Code. In addition, the Sacramento River, ESC/NCC, and Coon Creek have also been designated as essential fish habitat (EFH) by the Pacific Fishery Management Coon to protect and enhance habitat for coastal marine fish and macroinvertebrate species that support commercial fisheries. EFH is defined as waters and substrates necessary to fish for spawning, breeding, feeding, or growth to maturity. Under the Pacific Coast Salmon Fisheries Management Plan (Pacific Fishery Management Council 2003), the Sacramento River has been designated as EFH for spring-, fall-, late fall– and winter-run chinook salmon, and the ESC/NCC and Coon Creek have been designated as EFH for fall-run chinook salmon.

Sensitive habitats in the project area include the riparian habitat along Coon Creek, Deadman Creek, and intermittent drainages (described above as valley foothill riparian and freshwater marsh habitats).

**JURISDICTIONAL WETLANDS AND OTHER WATERS OF THE UNITED STATES**

A preliminary delineation of waters of the United States, including wetlands, was prepared for the Spears Ranch portion of the Park and Garden Bar Road. Fieldwork for the delineation report was conducted by EDAW wetland ecologists in April, May, June, and December 2007. The delineation identified the location of 31.5 acres of potentially jurisdictional waters of the United States on the Spears Ranch property and along Garden Bar Road, including 24.8 acres of perennial, intermittent, and ephemeral drainages, 1.2 acres of stock ponds, and 5.6 acres of freshwater marsh and seeps. All of these features qualify as sensitive habitats.

**12.1.5 SPECIAL-STATUS SPECIES**

Special-status species are plants and animals that are legally protected or otherwise considered sensitive by federal, state, or local resource conservation agencies and organizations. These species are federally listed and/or state listed as rare, threatened, or endangered; candidates or proposed for listing; identified by DFG or the U.S. Fish and Wildlife Service (USFWS) as species of concern; and plants considered by CNPS to be rare, threatened, or endangered.

The CNDDB (2007) was reviewed for sensitive biological resources, including sensitive habitats and special-status species that are known to occur in the project vicinity. The occurrences within the Gold Hill, Auburn, Lincoln, Pilot Hill, Rocklin, Roseville, Lake Combie, Wolf, and Camp Far West U.S. Geological Survey 7.5-minute quadrangles were reviewed. The CNDDB includes site-specific information on all reported occurrences of sensitive biological resources in California and is a “positive sighting” database. It provides only a record of occurrences as reported to the CNDDB; therefore, a lack of data for species in specific areas does not necessarily indicate absence of the species from that area. A database search of CNPS’s Inventory of Rare and Endangered Plants (CNPS 2006) was conducted as well.

**SPECIAL-STATUS PLANTS**

This section summarizes the results of a special-status plant survey report that was conducted for the Spears Ranch property and Garden Bar Road (Appendix G).

Special-status plants are defined as plants that are legally protected or otherwise considered sensitive by federal, state, or local resource conservation agencies and organizations. Special-status plants are species, subspecies, or varieties that fall into one or more of the following categories, regardless of their legal or protection status:

- officially listed by the federal government or the state of California as endangered, threatened, or rare;
Hidden Falls Regional Park Project DEIR
Placer County

- a candidate for state or federal listing as endangered, threatened, or rare;
- taxa that meet the criteria for listing, even if not currently included on any list, as described in Section 15380 of the State CEQA Guidelines;
- taxa designated as a special-status, sensitive, or declining species by other federal or state agencies or nongovernmental organizations; and
- taxa considered by CNPS to be “rare, threatened or endangered in California” (Lists 1B and 2).

The CNPS Inventory includes five lists for categorizing plant species of concern. Plants on CNPS Lists 1A, 1B, and 2 meet the definitions in Section 1901 (Native Plant Protection Act) or Sections 2062 and 2067 (California Endangered Species Act [CESA]) of the California Fish and Game Code and may qualify for state listing. Therefore, they are considered rare plants pursuant to Section 15380 of CEQA. DFG recommends, and local government agencies may require, that they be fully considered during preparation of environmental documents pursuant to CEQA. Some of the plants constituting CNPS Lists 3 and 4 meet the definitions included in Section 1901 et seq. or Sections 2062 and 2067 of the California Fish and Game Code and are eligible for state listing. DFG recommends, and local governments may require, that CNPS List 3 and List 4 plants be evaluated for consideration during preparation of environmental documents relating to CEQA (DFG 2000). The CNPS lists are categorized as follows:

- List 1A—plants presumed extinct in California;
- List 1B—plants rare, threatened, or endangered in California and elsewhere;
- List 2—plants rare, threatened, or endangered in California but more common elsewhere;
- List 3—plants about which we need more information (a review list); and
- List 4—plants of limited distribution (a watch list).

Searches of the CNPS and CNDDB databases identified 19 special-status plant species as occurring in the project vicinity, and one special-status plant species not reported in the database queries was documented in the project area. Seventeen of these species, which are listed below, were identified as having no potential to occur in the project area and thus are excluded from further analysis:

- Stebbin’s morning glory (*Calystegia stebbinsii*), Pine Hill ceanothus (*Ceanothus roderickii*), El Dorado bedstraw (*Galium californicum* ssp. *sierrae*), Red Hills soap root (*Chlorogalum grandiflorum*), and El Dorado County mule ears (*Wyethia reticulata*) are restricted to gabbro soils in El Dorado and Nevada Counties.
- Jepson’s onion (*Allium jepsonii*) and big-scale balsamroot (*Balsamorhiza macrolepis* var. *macrolepis*) are found on serpentine soils, which do not occur in the project area.
- Dwarf downingia (*Downingia pusilla*), Boggs Lake hedge-hyssop (*Gratiola heterosepala*), Ahart’s dwarf rush (*Juncus leiospermus* var. *ahartii*), Red Bluff dwarf rush (*J. leiospermus* var. *leiospermus*), legenere (*Legenere limosa*), and pincushion navarretia (*Navarretia myersii* spp. *myersii*) occur in vernal pool habitats, which do not occur in the project area.
- Hispid bird’s-beak (*Cordylanthus mollis* ssp. *hispidus*), where it is known to occur in Placer County, is found in damp alkaline meadows at about 150 feet elevation. These conditions are not present within the project area.
- Butte County fritillary (*Fritillaria eastwoodiae*) occurs primarily in the northern foothills of the Sierra Nevada and Cascade Range. The southernmost known occurrences are found north of the project area in Yuba County, where they occur at higher elevations in Ponderosa Pine forest.

Three special-status plant species have the potential to occur in the vicinity of the project: Brandegee’s clarkia (*Clarkia biloba* ssp. *brandegeae*), oval-leaved viburnum (*Viburnum ellipticum*), and Sierra monardella (*Monardella*...
Sierra monardella was not identified as a potential target special-status plant species from the database searches because no records currently exist in the CNDDB for this species. However, one population of Sierra monardella was encountered during 2007 rare plant surveys of the Spears Ranch property (EDAW 2007). Table 12-3 summarizes the regulatory status, habitat, and blooming period of Brandegee’s clarkia, oval-leaved viburnum, and Sierra monardella. Habitat and elevation range information for these species was obtained from the CNPS Electronic Inventory (2006) and *The Jepson Manual: Higher Plants of California* (Hickman 1993).

### Table 12-3

<table>
<thead>
<tr>
<th>Species</th>
<th>Status¹</th>
<th>Habitat and Blooming Period</th>
<th>Potential for Occurrence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Plants</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brandegee’s clarkia</td>
<td>– – 1B</td>
<td>Chaparral, cismontane woodland; often in roadcuts; 700–3,000 feet elevation; blooms May–July</td>
<td>Known to occur; identified in the project area during 2007 surveys.</td>
</tr>
<tr>
<td><em>Clarkia biloba</em> ssp. <em>brandegeeae</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sierra monardella</td>
<td>– – 4</td>
<td>Sandy or gravelly soils in chaparral, cismontane woodland, or lower montane coniferous forest; blooms April–July</td>
<td>Known to occur; identified in the project area during 2007 surveys.</td>
</tr>
<tr>
<td><em>Monardella candicans</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oval-leaved viburnum</td>
<td>– – 2</td>
<td>Chaparral, cismontane woodland, or lower montane coniferous forest; 600–4,000 feet elevation; blooms May–June</td>
<td>Unlikely to occur; suitable habitat in the project area was surveyed in 2007 and the species was not found. Most of the project area is below the elevation range of this species where it occurs in the central foothills.</td>
</tr>
<tr>
<td><em>Viburnum ellipticum</em></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

Notes: CNPS = California Native Plant Society; DFG = California Department of Fish and Game; USFWS = U.S. Fish and Wildlife Service

¹ Legal Status Definitions

<table>
<thead>
<tr>
<th>USFWS</th>
<th>DFG</th>
<th>CNPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>T</td>
<td>Rare</td>
<td>1B Plants rare, threatened, or endangered in California and elsewhere</td>
</tr>
<tr>
<td>E</td>
<td>Federal Endangered</td>
<td>2 Plants rare, threatened, or endangered in California but more common elsewhere</td>
</tr>
<tr>
<td>R</td>
<td>Rare</td>
<td>3 Plants for which more information is needed (a review list)</td>
</tr>
<tr>
<td>T</td>
<td>Threatened</td>
<td>4 Plants of limited distribution (a watch list)</td>
</tr>
<tr>
<td>E</td>
<td>Endangered</td>
<td></td>
</tr>
</tbody>
</table>

CNPS Listing Categories:

Sources: CNDDB 2007, CNPS 2006, Hickman 1993

As part of special-status plant surveys conducted for the project (EDAW 2007), two special-status plant species—Brandegee’s clarkia and Sierra monardella—were documented in the Spears Ranch portion of the Park. All areas of suitable habitat for oval-leaved viburnum were surveyed, but the species was not found. Locations of Brandegee’s clarkia and Sierra monardella were mapped and are displayed in Exhibit 12-2. Descriptions of these two species, including their habitat and distribution in the project area, are provided below.
Location of Brandegee's Clarkia and Sierra Monardella in the Spears Ranch Property

Source: Data provided by EDAW in 2007

LEGEND
- Brandegee's clarkia
- Sierra monardella
- Study Area

Habitat:
- Annual Grassland
- Black Oak Woodland
- Blue Oak Woodland
- Foothill Pine Oak Woodland
- Valley Foothill Riparian
- Freshwater Marsh

Exhibit 12-2
**Brandegee’s Clarkia**

Brandegee’s clarkia, a member of the evening primrose family, is a CNPS List 1B plant. Brandegee’s clarkia is found in the central Sierra Nevada foothills between 800 and 2,900 feet above sea level in chaparral and woodland habitats, often along roadcuts. It is an annual herb with rose-pink flowers that blooms from May to July.

Brandegee’s clarkia was encountered during surveys conducted in 2007 throughout the Park on steep north-facing slopes in openings in black oak woodlands. Populations of Brandegee’s clarkia are abundantly distributed throughout the southeastern corner of the Spears Ranch portion of the Park and continue into the Didion Ranch portion of the Park, where they are found flourishing along the new hiking trails created within that portion of the Park. This species is commonly associated species include hedgehog dogtail, field hedge parsley, poison oak, blue wild rye, and white globe lily (*Calochortus albus*). Many of the populations are found on the roadcuts along the Whiskey Diggins Canal and associated maintenance road where individual plants number in the thousands. Scattered populations are also found along Garden Bar Road from where the access road begins to about 0.5 mile north along the road.

**Sierra Monardella**

Sierra monardella, a member of the mint family, is a CNPS List 4 plant. It is a small, annual plant with 0.5-inch heads of white flowers that bloom from April to July. Sierra monardella grows on sandy or gravelly soils in oak woodland, chaparral, and ponderosa pine forest throughout the Sierra Nevada foothills.

A single population of Sierra monardella was located in the Spears Ranch property during the 2007 surveys (Exhibit 12-2). Sierra monardella occurs in the openings of the interior live oak woodland on the north side of Coon Creek. The surrounding plant community is moderately dense annual grassland on a low gradient southwest-facing terrace above the creek. Associated species include bromes, lupines (*Lupinus* sp.), smooth cat’s ears (*Hypochaeris glabra*), four spot (*Clarkia purpurea*), Ithuriel’s spear, needleleaf navarretia (*Navarretia intertexta*), and brodiaea (*Brodiaea elegans*).

**SPECIAL-STATUS FISH AND WILDLIFE**

Four special-status fish species have the potential to occur in Coon and Deadman Creeks (Table 12-4). Of these species, the Central Valley steelhead DPS is the only species federally listed as threatened. USFWS delisted Sacramento splittail from its threatened status on September 22, 2003. The National Marine Fisheries Service (NMFS) determined that listing is not warranted for Central Valley fall-/late fall–run chinook salmon. However, this species is still designated a species of concern by NMFS and a species of special concern by DFG because of concerns about specific risk factors. The remaining species (hardhead) is considered a species of special concern by DFG.

Twenty-two special-status wildlife species have the potential to occur in the project vicinity, based on records in the CNDDDB and the regional presence of potentially suitable habitat. A table consisting of these species and an assessment of their potential for occurrence in the project area is included in Appendix H. Fifteen species that could occur or are known to occur in the project area are presented in Table 12-4, which describes the level of protection, habitat, and potential to occur within the project area. Each of these species is discussed briefly after Table 12-4.

**FISH**

**Central Valley Fall-/Late Fall–Run Chinook Salmon ESU**

Adult Central Valley fall-/late fall–run chinook salmon ESU enter the Sacramento and San Joaquin River systems from July through April and spawn from October through February. This species is a federal species of concern and state species of special concern (Table 12-4). During spawning, the female digs a redd (gravel nest) where she deposits her eggs, which are then fertilized by the male and undergo an incubation period. Newly emerged
chinook salmon fry remain in shallow, lower-velocity edgewaters, particularly where debris congregates and makes the fish less visible to predators (DFG 1998). Juveniles typically rear in freshwater (in their natal streams, the Sacramento River system, and the Sacramento–San Joaquin Delta [Delta]) for up to 5 months before entering the ocean. Juveniles migrate downstream between January and June.

Cover structure, space, and food are necessary components of chinook salmon rearing habitat. Suitable habitat includes areas with instream and overhead cover—undercut banks, downed trees, and large overhanging tree branches. The organic materials that form fish cover also help provide food sources in the form of both aquatic and terrestrial insects. Juvenile chinook salmon that grow faster are likely to migrate downstream sooner, which helps to reduce the risks of predation and competition in freshwater systems. DFG fish sampling in Coon Creek downstream of Garden Bar Road on Foggy Ranch confirmed the presence of juvenile chinook salmon in 2005 (Navicky, pers. comm., 2007).

Central Valley Steelhead DPS

Historically, Central valley steelhead DPS spawned and reared in most of the accessible upstream reaches of the Sacramento and American Rivers and many of their tributaries. The Central Valley steelhead DPS generally migrated farther than chinook salmon into tributaries and headwater streams where cool, well-oxygenated water is available year round. This species is federally listed as threatened (Table 12-4). Central Valley steelhead spawn mainly from January through March, but spawning has been reported from late December through April (McEwan and Jackson 1996). During spawning, the female digs a redd in which she deposits her eggs, which are then fertilized by the male and undergo an incubation period. Newly emerged steelhead fry move to shallow, protected areas along streambanks but move to faster, deeper areas of the river as they grow.

Juvenile steelhead feed on a variety of aquatic and terrestrial insects and other small invertebrates. They rear throughout the year and may spend 1–3 years in freshwater before emigrating to the ocean. Smoltification, the physiological adaptation that juvenile salmonids undergo to tolerate saline waters, occurs in juveniles as they begin their downstream migration. DFG fish sampling efforts that took place on April 15, 2005, on the Spears Ranch portion of Coon Creek captured numerous rainbow trout individuals (Navicky, pers. comm., 2007).

Sacramento Splittail

Sacramento splittail was recently delisted from federally threatened status but remains a state species of special concern (Table 12-4). A large freshwater cyprinid that is tolerant of moderate salinities, this species is a bottom forager that feeds on small invertebrates and detritus. Sacramento splittail migrate from brackish water to freshwater to spawn over flooded terrestrial (preferred) or aquatic vegetation (Moyle 2002, Wang 1986). Larval splittail are commonly found in shallow, vegetated areas where spawning occurs and eventually move into deeper, open-water habitats as they grow and become juvenile. Splittail were historically present in Coon Creek, but they are unable to access the creek within the Spears Ranch portion of the Park because of downstream natural barriers (i.e., waterfalls) in the channel.

Hardhead

Hardhead is a federal species of concern and a state species of special concern (Table 12-4). This species is widely distributed in streams at low to middle elevations throughout the main Sacramento–San Joaquin drainage, including the Sacramento River system, and prefers undisturbed portions of larger streams. Hardhead are able to withstand summer water temperatures above 20°C; however, they will select areas with lower water temperatures when they are available. Pools with sand-gravel substrates and slow water velocities are the preferred habitat; adult fish inhabit the lower half of the water column, while the juvenile fish remain in the shallow water closer to the stream edges. Hardhead typically feed on small invertebrates and aquatic plants at the bottom of quiet water (Moyle 2002).
<table>
<thead>
<tr>
<th>Species</th>
<th>Status 1</th>
<th>Status 2</th>
<th>Habitat</th>
<th>Potential for Occurrence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fish</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central Valley fall-/late fall–run chinook salmon ESU <em>Oncorhynchus tshawytscha</em></td>
<td>SC</td>
<td>SSC</td>
<td>EFH designated; requires cold, freshwater streams with suitable gravel for spawning; rears in seasonally inundated floodplains, rivers, and tributaries, and in the Delta</td>
<td>Occurs downstream in the lower Sacramento River, the ESC/NCC, and Coon Creek. Unlikely to pass waterfalls and access segment of Coon Creek within the Park boundaries under most flow conditions.</td>
</tr>
<tr>
<td>Central Valley steelhead DPS <em>Oncorhynchus mykiss</em></td>
<td>T</td>
<td>–</td>
<td>Critical Habitat designated; requires cold, freshwater streams with suitable gravel for spawning; rears in seasonally inundated floodplains, rivers, and tributaries, and in the Delta</td>
<td>Occurs downstream in the lower Sacramento River, the ESC/NCC, and Coon Creek on the Spears Ranch property.</td>
</tr>
<tr>
<td>Sacramento splittail <em>Pogonichthys macrolepidotus</em></td>
<td>DT</td>
<td>SSC</td>
<td>Spawning and juvenile rearing from winter to early summer in shallow weedy areas inundated during seasonal flooding in the lower reaches and flood bypasses of the Sacramento River</td>
<td>Occurs downstream in the lower Sacramento River; may also occur in the ESC/NCC and Coon Creek. Unlikely to pass waterfalls and access the segment of Coon Creek on the Spears Ranch property under most flow conditions.</td>
</tr>
<tr>
<td>Hardhead <em>Mylopharodon conocephalus</em></td>
<td>–</td>
<td>SSC</td>
<td>Spawning occurs in pools and side pools of rivers and creeks; juveniles rear in pools of rivers and creeks, and in shallow to deeper water of lakes and reservoirs</td>
<td>Occurs downstream in the lower Sacramento River; may also occur in the ESC/NCC and Coon Creek on the Spears Ranch property.</td>
</tr>
<tr>
<td><strong>Amphibians</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>California red-legged frog <em>Rana aurora draytonii</em></td>
<td>T</td>
<td>SSC</td>
<td>Riparian and slow-water rivers and lakes with emergent aquatic vegetation</td>
<td>Could occur; several cattle stock ponds and freshwater marshes in the southwest section of the Spears Ranch property provide suitable habitat.</td>
</tr>
<tr>
<td>Foothill yellow-legged frog <em>Rana boylii</em></td>
<td>–</td>
<td>SSC</td>
<td>Perennial rocky streams in a wide range of deciduous and coniferous habitats; rarely found far from permanent water</td>
<td>Could occur; Coon Creek and other shallow, perennial drainages with cobble provide suitable habitat.</td>
</tr>
<tr>
<td><strong>Reptiles</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northwestern pond turtle <em>Emys marmorata</em></td>
<td>–</td>
<td>SSC</td>
<td>Ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation</td>
<td>Known to occur; surveys conducted in 2005 confirmed presence along Coon Creek.</td>
</tr>
<tr>
<td>Species</td>
<td>Status</td>
<td>Habitat</td>
<td>Potential for Occurrence</td>
<td></td>
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<td></td>
<td>USFWS/NMFS</td>
<td>DFG</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Birds</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooper’s hawk Accipiter cooperii</td>
<td>–</td>
<td>SSC Typically inhabits oak savannah, woodlands, and open grassland habitats</td>
<td>Likely to occur; suitable foraging and nesting habitat present on the Spears Ranch property in oak woodlands.</td>
<td></td>
</tr>
<tr>
<td>Sharp-shinned hawk Accipiter striatus</td>
<td>–</td>
<td>SSC Nests and forages in woodlands but may occur in the more open savannah woodland type habitats such as blue oak woodland and blue oak–foothill pine</td>
<td>Could occur; suitable foraging and nesting habitat present on the Spears Ranch property in oak woodlands.</td>
<td></td>
</tr>
<tr>
<td>Golden eagle Aquila chrysaetos</td>
<td>–</td>
<td>SSC; FP Forages over open shrub and grasslands; nests on cliffs or large rock outcrops</td>
<td>Known to occur; suitable foraging and nesting habitat present on the Spears Ranch property in annual grasslands and oak woodlands.</td>
<td></td>
</tr>
<tr>
<td>Yellow-breasted chat Icteria virens</td>
<td>–</td>
<td>SSC Forages and nests in riparian thickets of willow, blackberry, wild grape, and other brushy tangles near watercourses</td>
<td>Known to occur; foraging and nesting habitat present on the Spears Ranch property in patches of blackberry thickets along Coon Creek and surrounding freshwater marshes and stock ponds.</td>
<td></td>
</tr>
<tr>
<td>Yellow warbler Dendroica petechia</td>
<td>–</td>
<td>SSC Nests in mesic, deciduous thickets, especially riparian; preferred habitat includes moist areas with dense insect prey populations</td>
<td>Could occur; no suitable breeding habitat present in the project area; possible occurrence as a migrant.</td>
<td></td>
</tr>
<tr>
<td>White-tailed kite Elanus leucurus</td>
<td>–</td>
<td>FP Forages in grasslands and agricultural fields; nests in isolated trees or small woodland patches</td>
<td>Could occur; marginally suitable foraging habitat present in the project area in grasslands with scattered oak trees.</td>
<td></td>
</tr>
<tr>
<td>California black rail Laterallus jamaicensis cotorniculus</td>
<td>–</td>
<td>T Forages and nests in freshwater marshes with shallow water and little to no fluctuation that are composed of dense stands of bulrushes and/or cattails</td>
<td>Known to occur; suitable foraging and nesting habitat present in marshes along Coon Creek.</td>
<td></td>
</tr>
<tr>
<td>Loggerhead shrike Lanius ludovicianus</td>
<td>–</td>
<td>SSC Forages in grasslands and nests in shrubs and small trees</td>
<td>Could occur; suitable foraging habitat present in the project area in grasslands with scattered oak trees.</td>
<td></td>
</tr>
</tbody>
</table>
Table 12-4
Special-Status Fish and Wildlife Species with Potential to Occur in the Project Area

<table>
<thead>
<tr>
<th>Species</th>
<th>USFWS/NMFS Status 1</th>
<th>DFG Status</th>
<th>Habitat</th>
<th>Potential for Occurrence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mammals</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ringtail&lt;br&gt;Bassariscus astutus</td>
<td>– FP</td>
<td></td>
<td>Finds optimum habitat in low- to mid-elevation riparian deciduous areas; seldom found more than 0.6-mile from water; requires rock crevices, hollow trees, or snags for breeding or resting</td>
<td>Known to occur; suitable foraging habitat and denning habitat present in large (&gt; 6 inches dbh) trees along Coon Creek.</td>
</tr>
<tr>
<td>Townsend’s big-eared bat&lt;br&gt;Corynorhinus townsendii</td>
<td>– SSC</td>
<td></td>
<td>Lives in a wide variety of habitats but most common in mesic sites; typically roosts in caves, mines, and similar structures</td>
<td>Could occur; suitable habitat present in the project area in rock crevices within foothill pine-oak woodlands.</td>
</tr>
</tbody>
</table>

Notes: dbh = diameter at breast height; DFG = California Department of Fish and Game; EFH = essential fish habitat; ESC = East Side Canal; NCC = Natomas Cross Canal; NMFS = National Marine Fisheries Service; USFWS = U.S. Fish and Wildlife Service

1 Legal Status Definitions

USFWS/NMFS: T Federal Threatened<br>E Federal Endangered<br>DT Recently delisted from threatened status<br>SC Species of Concern

DFG: R Rare<br>T Threatened<br>E Endangered<br>SSC Species of Special Concern<br>FP Fully Protected


AMPHIBIANS AND REPTILES

California Red-Legged Frog

California red-legged frog is federally listed as threatened and is a state species of special concern (Table 12-4). This species is commonly found in lowlands or foothills adjacent to streams; it also inhabits humid forests, woodlands, grasslands, and streambeds with plant cover. Adults will use mammal burrows or other refuges, such as moist leaf litter, in upland habitats for estivation (Jennings and Hayes 1994). A buffer of 200 feet (60 meters) from aquatic habitat is sufficient to provide upland foraging and dispersal habitat for most California red-legged frogs inhabiting the project area (USFWS 2006). California red-legged frogs are usually associated with aquatic habitats such as creeks, streams, and ponds, occurring primarily in areas that have pools approximately 3 feet deep with adjacent dense emergent or riparian vegetation (Jennings and Hayes 1988). Adult frogs rarely move large distances from their aquatic habitat.

California red-legged frogs historically occupied portions of the western slope of the Sierra Nevada from Shasta County south to Tulare County, but these populations have been fragmented and nearly eliminated. Currently, only a few drainages in the foothills of the Sierra Nevada are known to support California red-legged frogs (USFWS 2002).

Although there are no CNDDB records of California red-legged frog within 10 miles of the project area (CNDDB 2007), suitable habitat in the Sierra Nevada foothills is often located on private land where surveys are infrequently conducted. Within the Spears Ranch property, Coon Creek, Deadman Creek, intermittent creeks, freshwater marshes, and cattle stock ponds provide suitable habitat for California red-legged frog. The presence of bullfrogs in stock ponds and marshes may make these habitats less suitable to unsuitable as spawning and rearing.
habitat for this species, but for the purpose of this EIR California red-legged frog are presumed to potentially occur.

**Foothill Yellow-Legged Frog**

Foothill yellow-legged frog is a state species of special concern (Table 12-4). This species is characteristically found close to water in association with perennial streams and ephemeral creeks that retain perennial pools through the end of summer. In rivers, breeding areas are often associated with confluences of tributary streams that are predominantly perennial (Seltenrich and Pool 2002). These frogs require shallow, flowing streams with some cobble-sized substrate on which they deposit large masses of eggs. Egg laying normally follows the period of high-flow discharge associated with winter rainfall, usually between late March and early June. Eggs hatch in about 15–30 days depending on water temperature, and tadpoles metamorphose into juvenile frogs in 3–4 months.

There are no CNDDB records of foothill yellow-legged frog within 10 miles of the project area (CNDDB 2007). However, several of the drainages that cross the Spears Ranch property, especially Coon Creek, may provide suitable breeding pools for foothill yellow-legged frogs. For the purpose of this EIR foothill yellow-legged frog are presumed to potentially occur.

**Northwestern Pond Turtle**

Northwestern pond turtle is a state species of special concern (Table 12-4). This species generally occurs in streams, ponds, freshwater marshes, and lakes from sea level to about 6,000 feet above sea level. Northwestern pond turtles require still or slow-moving water with instream emergent woody debris, rocks, or other similar features for basking sites. Their nests are typically located on unshaded upland slopes in dry substrates with clay or silt soils. Hatchlings and juveniles require shallow water with abundant emergent vegetation.

Surveys conducted by DFG along Coon Creek in fall 2005 revealed that northwestern pond turtles are present within the Spears Ranch property. A total of 25 individuals were captured at three locations along Coon Creek. In addition, there are two CNDDB records of northwestern pond turtle within 10 miles of the project area (CNDDB 2007). These records occur 7.25 miles northeast of the project area along Wolf Creek and 5.25 miles from the project area close to Rock Creek near Camp Far West Reservoir. Suitable aquatic habitat is present in freshwater marshes along Coon Creek and other drainages and stock ponds in the southwestern section of the Spears Ranch property.

**PROTECTED RAPTORS**

Several raptor species that are considered state species of special concern or state fully protected species—Cooper’s hawk, sharp-shinned hawk, golden eagle, and white-tailed kite—may forage and/or nest in the project area (Table 12-4). Other raptors, including red-shouldered hawk, red-tailed hawk, western screech owl, and great-horned owl (*Bubo virginianus*) also may nest in the project area.

Cooper’s hawks and sharp-shinned hawks typically nest within high crotches or cavities of deciduous trees in oak woodlands and riparian corridors and forage in openings in these woodlands. Golden eagles and white-tailed kites favor open terrain for foraging, such as grasslands, shrublands with tree saplings, and open-canopy blue oak woodlands. The golden eagle prefers cliffs and large trees with large horizontal branches and for roosting and perching.

The nearest record of white-tailed kite is approximately 9 miles south of the project area (CNDDB 2007). Two golden eagles were observed on the Spears Ranch property during point count surveys (DFG 2007), and three Cooper’s hawks were observed on the Spears Ranch property during playback surveys (DFG 2005). In addition, a golden eagle nest was found within the Park in the southeast corner, within about 100 feet of Whiskey Diggins Canal Road, in 2007. Within the Spears Ranch property, grasslands with scattered oaks in the southwest section of the Spears Ranch property may provide suitable foraging and nesting habitat for white-tailed kite and foraging
habitat for golden eagles. Cliffs with overhanging ledges and large trees (Zeiner et al. 1990) within the Spears Ranch property could also be utilized by golden eagles for nesting habitat. Foothill pine–oak woodland habitats with scattered openings may provide Cooper’s hawks and sharp-shinned hawks with suitable foraging and nesting habitat.

**OTHER SPECIAL-STATUS BIRDS**

**California Black Rail**

The California black rail is state listed as threatened and is a fully protected species (Table 12-4). This species typically inhabits coastal tidal and Delta marshes but has been known to utilize freshwater marshes on hardwood rangelands. The black rail typically makes its concealed nest under a mat of dead marsh vegetation. Habitat loss and degradation for this species has resulted primarily from water and flood-control projects, land-use changes, agriculture, and livestock grazing.

One black rail was detected at a freshwater marsh on the Spears Ranch property during a DFG survey in spring 2005 (DFG 2005), but there are no other records of California black rail within 10 miles of the project area (CNDDB 2007). Freshwater marshes, seeps, blackberry patches, and stock ponds on the Spears Ranch property provide suitable habitat for California black rail.

**Yellow-Breasted Chat**

Yellow-breasted chat is a state species of special concern (Table 12-4). Yellow-breasted chats typically nest in riparian habitats with a dense shrub layer. They tend to prefer willow, wild grape, and blackberry thickets (Ricketts et al. 2000). They prefer areas of scattered trees, dense shrubbery, and any other moist, shady areas such as willow thickets for nesting.

One yellow-breasted chat was detected on the Spears Ranch property during a DFG survey in spring 2005 (DFG 2005). There are no CNDDB records of yellow-breasted chats within 10 miles of the project area; however, blackberry thickets surrounding ponds and freshwater marshes on the Spears Ranch property may provide suitable habitat for this species.

**Loggerhead Shrike**

Loggerhead shrike is a state species of special concern (Table 12-4). Loggerhead shrikes are most commonly found in grasslands, agricultural lands, open shrublands, and open woodlands. Special habitat features that improve shrike abundance, survival, and reproductive success are hunting perches, low nesting trees and shrubs, thorny vegetation, and/or barbed wire on which to impale their prey.

There are no CNDDB records of this species within 10 miles of the project area; however, grassland habitat interspersed with scattered shrubs and trees in the southwest section of the Spears Ranch property may provide suitable foraging and nesting habitat for the loggerhead shrike.

**MAMMALS**

**Ringtail**

Ringtail is a state fully protected species (Table 12-4). This species occurs in mixed riparian and other forest and shrubby habitats, in close association with permanent water and rocky areas (Belluomini 1980). Ringtail use rock crevices, hollow trees, logs, snags, abandoned burrows, or woodrat nests for dens. Ringtail young are typically born in May and June (Belluomini 1980).
Riparian vegetation on the Spears Ranch property provides suitable habitat for ringtail. Surveys conducted by DFG in 2005 along Coon Creek revealed that ringtail is present within the Spears Ranch property (DFG 2005).

**Townsend’s Big-Eared Bat**

Townsend’s big-eared bat is a state species of special concern (Table 12-4). This species lives in a variety of communities: coastal conifer and broad-leaf forests, oak and conifer woodlands, arid grasslands and deserts, and high-elevation forests and meadows. Throughout most of its geographic range, it is most common in mesic sites (Kunz and Martin 1982). Known roosting sites in California include limestone caves, lava tubes, mine tunnels, buildings, and other human-made structures (Dalquest 1947; Graham 1966; Pearson, Koford, and Pearson 1952). Habitat for Townsend’s big-eared bats must include appropriate roosting, maternity, and hibernacula sites free from disturbances by humans. Females typically roost in large maternity colonies that are highly susceptible to disturbances by humans (Barbour and Davis 1969). Males usually roost singly or in small groups and are probably not affected as much as females by disturbances. Both sexes hibernate in buildings, caves, and mine tunnels, either singly (males) or in small groups (Pearson, Koford, and Pearson 1952).

Townsend’s big-eared bats may use rock crevices within foothill pine–oak woodlands and riparian habitat present on the Spears Ranch property.

**12.2 REGULATORY SETTING**

**12.2.1 FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS**

**FEDERAL ENDANGERED SPECIES ACT**

Pursuant to the federal Endangered Species Act of 1973 (ESA), as amended (Title 16, Section 1531 et seq. of the U.S. Code [i.e., 16 USC 1531 et seq.]), USFWS has regulatory authority over federally listed species. Under ESA, a permit to “take” a listed species is required for any federal action that may harm an individual of that species. “Take” is defined under Section 9 of ESA as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.” Under federal regulation, take is defined further to include habitat modification or degradation where it would be expected to result in death of or injury to listed wildlife by significantly impairing essential behavioral patterns (breeding, feeding, or sheltering). In addition to listed species, USFWS publishes a list of candidate species for which it has sufficient biological information to support a proposal to list as endangered or threatened. Species on this list are not protected under ESA, but they receive special attention during environmental review.

Section 7 of the ESA requires all federal agencies to consult with USFWS and NMFS to ensure that their actions are not likely to “jeopardize the continued existence” of any listed species or “result in the destruction or adverse modification” of designated critical habitat. Because implementation of the proposed project could result in the fill of waters of the United States, consultation between USACE, USFWS, and NMFS under Section 7 of ESA would be required for California red-legged frog and Central Valley steelhead. Section 7 of ESA allows USFWS and NMFS to issue a biological opinion authorizing the incidental take of listed species if such take is accompanied by measures to minimize and mitigate impacts associated with the take.

**MIGRATORY BIRD TREATY ACT**

The Migratory Bird Treaty Act, first enacted in 1918, domestically implements a series of treaties between the United States and Great Britain (on behalf of Canada), Mexico, Japan, and Russia that provide for international protection of migratory birds. The act authorizes the U.S. Secretary of the Interior to regulate the taking of migratory birds, providing that it shall be unlawful, except as permitted by regulations, “to pursue, take, or kill…any migratory bird, or any part, nest or egg of any such bird, included in the terms of conventions” with certain other countries (16 USC 703). This includes direct and indirect acts, although harassment and habitat
modification are not included unless they result in direct loss of birds, nests, or eggs. The current list of species protected by the Migratory Bird Treaty Act includes several hundred species and essentially includes all native birds. Migratory birds are found in the project area.

**SECTION 404 OF THE CLEAN WATER ACT**

Pursuant to Section 404 of the CWA, USACE regulates discharge of dredged or fill material into waters of the United States. Waters of the United States and their lateral limits are defined in Title 33, Part 328.3(a) of the Code of Federal Regulations (i.e., 33 CFR 328.3[a]) and include navigable waters of the United States, interstate waters, all other waters where the use or degradation or destruction of the waters could affect interstate or foreign commerce, tributaries to any of these waters, and wetlands that meet any of these criteria or that are adjacent to any of these waters or their tributaries. For purposes of describing habitat values and characteristics, waters of the United States are often categorized as “jurisdictional wetlands” (i.e., wetlands over which USACE exercises jurisdiction pursuant to Section 404) and “other waters of the United States.” Fill is defined as any material that replaces any portion of a water of the United States with dry land or changes the bottom elevation of any portion of a water of the United States. Activities resulting in the placement of dredged or fill material within waters of the United States usually require a permit from USACE, even if the area would be dry at the time the activity would take place.

Many surface waters and wetlands in California, including intermittent streams and seasonal lakes and wetlands, meet the criteria for waters of the United States. Jurisdictional waters of the United States in the project area include Coon Creek, intermittent and ephemeral drainages flowing into Coon Creek (e.g., Deadman Creek), stock pond impoundments on those drainages, adjacent freshwater marshes and seeps, and some ditches and canals.

**12.2.2 STATE PLANS, POLICIES, REGULATIONS, AND LAWS**

**CALIFORNIA ENDANGERED SPECIES ACT**

Pursuant to Section 2081 of CESA, a permit from DFG is required for projects that would result in the take of a state-listed rare, threatened, or endangered plant or animal species. Under CESA, “take” is defined as an activity that would directly or indirectly kill an individual of a species; however, the CESA definition of take does not include “harming” or “harassing,” as the definition under the federal ESA does. As a result, the threshold for take is higher under CESA than under ESA (i.e., habitat modification is not necessarily considered take under CESA).

**SECTIONS 3503 AND 3513 OF THE CALIFORNIA FISH AND GAME CODE—PROTECTION OF BIRDS**

Section 3503 of the California Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3503.5 specifically states that it is unlawful to take, possess, or destroy any raptors (i.e., eagles, hawks, owls, and falcons), including their nests or eggs. Section 3513 provides for adoption of the provisions of the Migratory Bird Treaty Act.

**FULLY PROTECTED SPECIES UNDER THE CALIFORNIA FISH AND GAME CODE**

Protection of fully protected species is described in four sections of the California Fish and Game Code that list 37 fully protected species (Sections 3511, 4700, 5050, and 5515). These statutes prohibit take or possession of fully protected species. DFG is unable to authorize incidental take of fully protected species when activities are proposed in areas inhabited by those species. DFG has informed nonfederal agencies and private parties that they must avoid take of any fully protected species in carrying out projects. Fully protected species known or expected to occur in the project area are golden eagle, white-tailed kite, and ringtail.
SECTION 1602 OF THE CALIFORNIA FISH AND GAME CODE—STREAMBED ALTERATION

Under Section 1602, it is unlawful for any person, governmental agency, or public utility to substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake, or to deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake, without first notifying DFG of such activity. A stream is defined as a body of water that flows at least periodically or intermittently through a bed or channel having banks that support fish or other aquatic life. This definition includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation. DFG’s jurisdiction within altered or artificial waterways is based on the value of those waterways to fish and wildlife. A DFG streambed alteration agreement must be obtained for any project that would result in an impact on a river, stream, or lake.

PORTER-COLOGNE ACT CERTIFICATION

Each of the nine regional water quality control boards (RWQCBs) must prepare and periodically update water quality control plans (basin plans) pursuant to the Porter-Cologne Water Quality Control Act. Each basin plan sets forth water quality standards for surface water and groundwater, as well as actions to control nonpoint and point sources of pollution to achieve and maintain these standards. Basin plans offer an opportunity to achieve wetland protection based on water quality objectives. Another opportunity for wetland protection is the Section 401 certification process. Under Section 401 of the CWA, an applicant for a Section 404 permit (to discharge dredged or fill material into waters of the United States) must obtain a certificate from the appropriate state agency stating that the fill is consistent with the state’s water quality standards and criteria. In California, the authority to grant water quality certification is delegated by the State Water Resources Control Board to the nine RWQCBs.

SENATE BILL 1334

Although oak trees and oak woodland habitats are not afforded special protection under federal law, the California Legislature enacted Senate Bill (SB) 1334 (Chapter 732, Statutes of 2004), which added oak woodland conservation regulations to the Public Resources Code. This law requires each county to determine whether a project within its jurisdiction may result in a conversion of oak woodlands resulting in a significant effect on the environment. If a county determines that there may be a significant effect to oak woodland resources, the county must consider alternative approaches to mitigate the effect. Such mitigation alternatives include conservation easements; planting and maintaining an appropriate number of replacement trees; contributing funds to the Oak Woodlands Conservation Fund to purchase oak woodlands conservation easements; and/or other mitigation measures developed by the county.

12.2.3 LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

PLACER COUNTY GENERAL PLAN

The following are relevant goals and policies identified by the Placer County General Plan (Placer County 1994) for biological resources.

► Policy 6.A.7. [Placer] County shall discourage grading activities during the rainy season, unless adequately mitigated, to avoid sedimentation of creeks and damage to riparian habitat.

GOAL 6.B: Protect wetland communities and related riparian areas throughout Placer County as valuable resources.

► Policy 6.B.1. The County shall support the “no net loss” policy for wetland areas regulated by USACE, USFWS, and DFG. Coordination with these agencies at all levels of project review shall continue to ensure that appropriate mitigation measures and the concerns of these agencies are adequately addressed.
► **Policy 6.B.4.** The County shall strive to identify and conserve remaining upland habitat areas adjacent to wetlands and riparian areas that are critical to the survival and nesting of wetland and riparian species.

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

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

a. wetland areas including vernal pools;

b. stream environment zones;

c. any habitat for rare, threatened, or endangered animals or plants;

d. critical deer winter ranges (winter and summer), migratory routes, and fawning habitat;

e. large areas of nonfragment natural habitat, including blue oak woodlands, valley foothill riparian, and vernal pool habitat;

f. identifiable wildlife movement zones, including but not limited to nonfragmented stream environment zones, avian and mammalian migratory routes, and known concentration areas of waterfowl within the Pacific Flyway; and

g. important spawning areas for anadromous fish.

► **Policy 6.C.6.** The County shall support preservation of the habitats of rare, threatened, endangered, and/or other special-status species. Federal and state agencies, as well as other resource conservation organizations, shall be encouraged to acquire and manage endangered species’ habitats.

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

**GOAL 6.D:** To preserve and protect the valuable vegetation resources of Placer County.

► **Policy 6.D.3.** The County shall support the preservation of outstanding areas of natural vegetation, including but not limited to oak woodlands, riparian areas, and vernal pools.

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

► **Policy 6.D.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.

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

The County Tree Ordinance applies to any project with the potential to affect protected trees. Protected trees are defined as any native tree species with a diameter at breast height (dbh) of 6 inches or greater. The County Tree Ordinance acknowledges Placer County’s value for native trees and their preservation. This ordinance prohibits the removal of landmark trees, including stands or groves of native trees, native tree corridors, and other significant native tree habitats. In addition, trees that are designated for preservation and avoidance are not to be damaged. Removal of trees from riparian areas is also prohibited by the ordinance without prior evaluation and consideration of suitable mitigation measures.

**Placer County Conservation Plan**

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

The PCCP establishes a comprehensive, countywide plan for the conservation of all natural communities, endangered species, and other less sensitive species of native wildlife, fish, and plants in western Placer County and is an important part of the Placer Legacy Open Space and Agricultural Conservation Program (see Section 1.4.1). The PCCP is under consideration by USFWS, NMFS, and DFG, and under the granted permit term is proposed to extend to the year 2050. Once approved, the PCCP would provide the County with a scientific and legal basis for a series of regulatory permits under Section 10 of ESA and authorization issued from DFG under Section 2081 of the California Fish and Game Code, in compliance with CESA that will make the environmental review of future public and private projects more consistent, more predictable and more efficient.

### 12.3 Impacts

#### 12.3.1 Analysis Methodology

The biological resources investigation involved the following:

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

Effects of the proposed project on biological resources were assessed based on the project facilities described in Chapter 3.0, “Project Description.”

#### 12.3.2 Thresholds of Significance

Based on the Placer County CEQA checklist and the State CEQA Guidelines, the proposed project would result in a potentially significant impact on biological resources if it would:

- substantially affect a rare, threatened, or endangered species;
interfere substantially with the movement of any resident or migratory fish or wildlife species;

- substantially diminish habitat for fish, wildlife, or plants;

- substantially affect on any riparian areas or wetlands;

- conflict with any local policies or ordinances protecting biological resources; or

- conflict with an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

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

Based on guidelines established by USFWS and DFG, a project could be considered to have a significant adverse impact on biological resources if it would result in substantial disruption to or destruction of any special-status species, its habitat, or breeding grounds. A project would also have a significant impact if it would result in a substantial loss of important plant or animal species or cause a change in species composition, abundance, or diversity beyond that of normal variability.

The construction and long-term use of the proposed trails, facilities, and road improvements along Garden Bar Road would not substantially interfere with the movement of any resident or migratory fish or wildlife species, nor would it affect important deer migration routes (Placer County Fish and Game Commission 1992). Vegetation would be removed only within the trail corridors, along Garden Bar Road, and immediately surrounding structures such as bridges and restrooms. The proposed project would support the plans and policies of the General Plan. The proposed project is within the area covered by the draft PCCP, but not within any adopted conservation plan areas. Because the proposed project would have no impact on these thresholds, they are not discussed further in this chapter.

The Didion Ranch parking area expansion, including relocation of the adjacent helistop, is in an area adjacent to the existing parking area that has been previously graded. A biological resources assessment was conducted by Northfork Associates in 2006, and no biological resources were identified within expansion area. Therefore, it is assumed that there would be no additional impacts to biological resources as a result of the parking area expansion and it will not be discussed further in this chapter.

12.3.3 IMPACT ANALYSIS

**IMPACT** 12-1 Biological Resources—Potential Disturbance of Aquatic Habitats and the Native Fish Community.

Several native fish species, including special-status steelhead and fall-/late fall-run chinook salmon, are known to use aquatic habitats in Coon Creek within or immediately downstream of the project area. Implementation of the proposed project could result in temporary and long-term degradation of aquatic habitats, loss of instream cover, and increased injury or mortality of fishes because of increased angling pressure.

**Significance** Potentially Significant
TEMPORARY CONSTRUCTION-RELATED EFFECTS ON AQUATIC HABITATS

Construction-related increases in sediments and turbidity and the release and exposure of contaminants (e.g., fuels, lubricants) could adversely affect aquatic habitats and fish species immediately adjacent to and downstream of the project area. Increases in turbidity and sediment can harm fish respiration, feeding, and ability to perform other critical basic biological activities. Further, contamination of Coon Creek with construction-related chemicals could impair or even kill aquatic species. Fish population levels and survival have been linked to levels of turbidity and siltation in a watershed. Prolonged exposure to high levels of suspended sediment could create a loss of visual capability in fish, leading to a reduction in feeding and growth rates; a thickening of the gill epithelia, potentially causing the loss of respiratory function; clogging and abrasion of gill filaments; and increases in stress levels, reducing the tolerance of fish to disease and toxicants (Waters 1995).

Also, high levels of suspended sediments would cause the movement and redistribution of fish populations and could affect physical habitat. Once suspended sediment is deposited, it could reduce water depths in pools, decreasing the water’s physical carrying capacity for juvenile and adult fish (Waters 1995). Increased sediment loading could degrade food-producing habitat downstream of the project area as well. Sediment loading could interfere with photosynthesis of aquatic flora and displace aquatic fauna. Many fish are sight feeders, and turbid waters reduce the ability of these fish to locate and feed on prey. Some fish, particularly juveniles, could become disoriented and leave areas where their main food sources are located, ultimately reducing their growth rates.

In addition, the potential exists for contaminants such as fuels, oils, and other petroleum products used during construction activities to be introduced into the water system directly or through surface runoff. Contaminants may be toxic to fish or may alter oxygen diffusion rates and cause acute and chronic toxicity to aquatic organisms, thereby reducing growth and survival.

LONG-TERM EFFECTS ON AQUATIC HABITATS AND THE FISH COMMUNITY

Construction of the trail system and bridges over Coon Creek would result in disturbance and removal of native riparian vegetation. Removal of such riparian vegetation or woody material could result in loss of SRA habitat that is important to fish, including special-status species. Construction of the on-site parking areas and access road would remove or adversely affect the dripline of native trees. Further, the construction of 14 miles of new natural-surface trails would increase the amount of soil exposed to erosion. In addition to the new trails that would be constructed in the project area, there are 10 miles of existing ranch roads for hikers, bikers, and equestrians, including bridge crossings over Coon Creek, Deadman Creek, and ephemeral streams. Increased use of these trails could increase erosion and degrade water quality.

Depending on the design used, the construction and long-term presence of bridges across Coon Creek could have an adverse effect on geomorphic processes and associated habitat functions in the creek. If bridge pilings were placed within the active stream channel, they could affect local currents, resulting in modified stream morphology and flow habitats.
As discussed above, DFG sampling in 2005 confirmed the presence of steelhead/rainbow trout in the project reach of Coon Creek and chinook salmon slightly downstream; however, these species were found to be present in low abundance. Increases in the number of anglers related to improved access to fishing locations and associated pressure in the project area could degrade habitats and, depending on the method and equipment used, increased angling pressure could result in varying effects on the fish community. The small populations of anadromous salmonids in Coon Creek could be adversely affected by increased angling pressure and would be subject to a decline in abundance.

Riparian and aquatic habitat restoration projects are planned for the reach of Coon Creek that is within the Park. Restoration of habitat along and within the creek would have a beneficial long-term effect on aquatic habitats and fisheries. These restoration projects would be implemented as funding allows and, therefore, the ultimate extent of restoration is unknown at this time.

**CONCLUSION**

Implementation of the proposed project could result in temporary and long-term degradation of aquatic habitats, loss of important SRA habitat functions, and increased injury or mortality of fishes related to increased angling pressure. This impact would be potentially significant. Implementation of Mitigation Measures 12-1, 12-2, 5-1, and 11-1 would reduce this impact to a less-than-significant level.

**IMPACT**

**12-2**

**Biological Resources—Potential Disturbance of California Red-Legged Frog.** Suitable habitat for California red-legged frog exists within the project area. Construction and operation of proposed trails, bridges, septic system, and structures across or adjacent to stock ponds, creeks with backwaters, and freshwater marshes could degrade and possibly result in removal of aquatic habitat or could result in physical injury to red-legged frog.

**Significance**

Potentially Significant

**Mitigation Proposed**

*Mitigation Measure 12-3: Implement Measures to Protect California Red-legged Frog*

**Residual Significance**

Less than Significant

Creeks on the Spears Ranch property, including several areas with freshwater marsh and stock ponds with emergent vegetation, have an intermixed fringe of cattails appropriate for use by California red-legged frog. If California red-legged frog is present in the project area, construction of proposed trails, roads, and foot bridges across drainages, viewing boardwalks, a septic system, and other structures within 200 feet of occupied habitat could directly and indirectly affect California red-legged frogs. Construction at these locations could kill adults, larvae, or eggs. Construction in aquatic sites could also cause loss of habitat. Indirect effects could result from the temporary release of sediments or spills of hazardous materials into occupied aquatic habitat. Trail use is not expected to have a long-term significant effect on California red-legged frogs, because foot bridges and boardwalks would be provided for trail users to avoid long-term damage to waterways. However, the construction-related impact would be potentially significant. Implementation of Mitigation Measure 12-3 would reduce this impact to a less-than-significant level.
Impact 12-3: Biological Resources—Potential Disturbance of Foothill Yellow-Legged Frog and Northwestern Pond Turtle. Habitat for foothill yellow-legged frog and northwestern pond turtle occurs in the project area. Construction of trails across drainages could degrade aquatic habitat or could result in physical injury to yellow-legged frog and pond turtle.

Significance Potentially Significant

Mitigation Proposed

Mitigation Measure 12-4: Implement Measures to Protect Foothill Yellow-Legged Frog and Northwestern Pond Turtle

Residual Significance Less than Significant

Foothill yellow-legged frog could occur within the project area. Most of Coon Creek is too wide and deep to support populations of foothill yellow-legged frog; however, a few areas along Coon Creek have terraces and small pools with tail-outs that may have appropriate substrate and water velocity for egg deposition and development. Northwestern pond turtle occurs in Coon Creek and may occur in other drainages and stock ponds in the southwestern section of the Park.

Construction and installation of proposed trails, roads, and foot bridges across drainages, viewing boardwalks, a septic system, and other structures during the breeding season may affect foothill yellow-legged frog and northwestern pond turtles by causing the temporary release of sediments in the water. Direct effects could result from physically disturbing foothill yellow-legged frog egg masses, larvae, or adults. Indirect effects could result from the release of sediments or hazardous materials into aquatic habitat. Northwestern pond turtle could also be affected in the same manner by construction of viewing boardwalks at stock ponds.

Trail use is not expected to have a significant effect on foothill yellow-legged frogs or northwestern pond turtle because crossings over Coon Creek would be provided for trail users to avoid impacts on waterways. However, construction-related impacts would be potentially significant. Implementation of Mitigation Measure 12-4 would reduce this impact to a less-than-significant level.

Impact 12-4: Biological Resources—Potential Disturbance of Nests of Raptors and Other Birds. Trees and other vegetation in and adjacent to the project area provide potential nest sites for raptors and migratory birds. Removal of trees or other vegetation during construction and maintenance of trails and fuel breaks and for road improvements could destroy or disturb nests, resulting in loss of eggs or young. Use of the Park by reservation-based events may also cause nest failure. Use of trails could cause potential temporary disturbance to golden eagle nest sites.

Significance Potentially Significant

Mitigation Proposed

Mitigation Measure 12-5: Implement Measures to Protect Raptors and Other Nesting Birds

Residual Significance Less than Significant

Removal of vegetation would occur between September to March, outside of the raptor breeding season, or outside of nesting areas identified during preconstruction surveys. Removal of trees greater than 6 inches dbh would be avoided to the extent possible; however, removal of some trees to conduct road improvements and to
construct and install bridges, trails, and other structures may be unavoidable. Removal of trees and shrubs could result in loss of golden eagle nests and migratory birds. Indirect disturbance during construction or during reservation-based events permitted in the Park (e.g. filming movies) could also result in the loss of raptor nests.

Nesting golden eagles are particularly sensitive to disturbances near their nests. In 2007 a golden eagle nest was documented within 100 feet of a Park road that would be used as a trail. Public use of trails in the Park could result in an elevated level of disturbance to golden eagle nests near trails, which could cause the abandonment or failure of an active nest. Therefore this impact would be potentially significant. Implementation of Mitigation Measure 12-5 would reduce this impact to a less-than-significant level.

**IMPACT**

**12-5** Biological Resources—Potential Disturbance of Dens and Individual Ringtails. Trees along riparian portions of the project area such as Coon Creek that are 6 inches or greater dbh and are hollow or have large cavities provide potential den sites for ringtail. Removal of such trees or other vegetation during trail construction and for road improvements could destroy dens, resulting in potential loss of adults and/or young.

**Significance** Potentially Significant

**Mitigation Proposed** Mitigation Measure 12-6: Implement Measures to Protect Ringtail and Townsend’s Big-Eared Bat

**Residual Significance** Less than Significant

Although removal of trees greater than 6 inches dbh that are hollow or contain large cavities would be avoided during construction to the extent possible, removal of some trees in riparian areas to construct trails would be unavoidable. Removal of these trees could result in loss of ringtail dens and loss of adults and/or young. This impact would be potentially significant. Implementation of Mitigation Measure 12-6 would reduce this impact to a less-than-significant level.

**IMPACT**

**12-6** Biological Resources—Potential Disturbance of Townsend’s Big-Eared Bat Habitat or Individuals. Limited habitat for Townsend’s big-eared bats occurs in the project area. Construction of trails, bridges, and structures could result in the disturbance of Townsend’s big-eared bat maternity or winter roosts.

**Significance** Potentially Significant

**Mitigation Proposed** Mitigation Measure 12-6: Implement Measures to Protect Ringtail and Townsend’s Big-Eared Bat

**Residual Significance** Less than Significant

Townsend’s big-eared bat, which is a state species of special concern, could occur within the project area. This species may use rock crevices for roosting within foothill pine–oak woodlands and riparian habitat present in the project area. Construction of trails, bridges, and structures could result in the disturbance of Townsend’s big-eared bat maternity or winter roosts. This species uses rock crevices, bridges, and other artificial structures for roosting. Also, vibrations and noise associated with construction could disturb bats roosting adjacent to construction activities. This impact would be potentially significant. Implementation of Mitigation Measure 12-6 would reduce this impact to a less-than-significant level.
**IMPACT 12-7** Biological Resources—Potential Loss of Brandegee’s Clarkia. *Populations of Brandegee’s clarkia were documented in the Spears Ranch portion of the Park. Construction of trails, fuel breaks, parking areas, and road improvements along Garden Bar Road could potentially disturb known populations of Brandegee’s clarkia.*

**Significance** Potentially Significant

**Mitigation Proposed** Mitigation Measure 12-7: Implement Measures to Protect Brandegee’s Clarkia

**Residual Significance** Less than Significant

Multiple populations of Brandegee’s clarkia, a CNPS List 1B plant species, were observed and mapped throughout the Spears Ranch property during focused botanical surveys. Construction of trails, fuel breaks, parking areas, and Park facilities could potentially result in reductions of these populations. Most of the populations of Brandegee’s clarkia occur along existing roads on roadcuts. Brandegee’s clarkia is an annual plant and is somewhat tolerant to disturbance, especially if the ground disturbance occurs once the plant has dispersed its seeds in the fall. However, road widening or trail construction has the potential to remove entire populations of Brandegee’s clarkia. Therefore, this impact would be potentially significant. Implementation of Mitigation Measure 12-7 would reduce this impact to a less-than-significant level.

**IMPACT 12-8** Biological Resources—Impacts on Waters of the United States and Waters of the State. *A preliminary wetland delineation identified approximately 31.5 acres of potentially jurisdictional waters of the United States and waters of the state on the Spears Ranch property and along Garden Bar Road. Although the majority of this area would be avoided and not affected by project implementation, installation of stream crossings and bridges, viewing boardwalks, and trail construction in the project area and road improvements along Garden Bar Road could result in the fill of jurisdictional waters of the United States and waters of the state, including wetlands.*

**Significance** Potentially Significant

**Mitigation Proposed** Mitigation Measure 12-2: Replace, Restore, or Enhance Affected Jurisdictional Waters of the United States and Waters of the State

**Residual Significance** Less than Significant

Construction of the trail system would minimize fill of jurisdictional waters through design and location. However, trail construction would require the installation of multiple stream crossings and three bridges across Coon Creek and other drainages. Placement of trail material or bridge footings in the drainages or in adjacent wetlands, and construction of a viewing boardwalk adjacent to one of the stock pond would fill jurisdictional waters of the United States and waters of the state. Road widening along Garden Bar Road and the access road between Garden Bar Road and the Park would also result in permanent and temporary fill of jurisdictional waters of the United States and waters of the state. Temporary and permanent impacts to waters of the United States and waters of the state from construction of project facilities and improvements to Garden Bar Road and the access road to the western parking area would be less than 0.5 acre. Because the proposed project would have an impact on waters of the United States and waters of the state, this impact would be potentially significant. Implementation of Mitigation Measure 12-2 would reduce this impact to a less-than-significant level.
**Biological Resources—Impacts on Oak Woodland Habitat.** The proposed project may result in the removal of trees that are 6 inches dbh or larger from oak woodland habitat. Native oak trees are protected under the Placer County Tree Ordinance and SB 1334.

**Significance**  
Potentially Significant

**Mitigation Proposed**  
Mitigation Measure 12-8: Protect Oak Woodland Habitat

**Residual Significance**  
Less than Significant

Although removal of trees greater than 6 inches dbh would be avoided to the extent possible by refining precise facility locations and trail alignments and constructing road improvements on the side of the road with the least amount of trees, some tree removal as a result of construction of the proposed project may be unavoidable. Fuel load reduction activities performed in the Park under the guidance of a registered forester and approved by the fire authority would not include removal of oaks larger than 6 inches dbh. This includes the establishment of shaded fuel breaks. All status oaks were avoided during trail layout within the Didion Ranch portion of the Park. In addition, a 2-year post construction survey by a qualified biologist within the Didion portion of the Park confirmed that there was negligible impact to the health of oaks adjacent to the newly constructed trail system. Similar construction methods would be used for the development of trails within the Spears Ranch Portion of the Park so that oak impacts associated with trail construction would be minimized. Although tree removal would be avoided to the extent possible, some trees greater than 6 inches dbh may need to be removed. Native trees that are 6 inches dbh or larger are protected under the Placer County Tree Ordinance and oak woodland habitat is protected under SB 1334 (2004). This impact would be potentially significant.

Implementation of Mitigation Measure 12-8 would reduce this impact to a less-than-significant level.

### 12.4 MITIGATION MEASURES

**Mitigation Measure 12-1: Implement Measures to Protect Aquatic Habitats and the Native Fish Community.**

*Mitigation Measure 12-1 applies to Impact 12-1.*

The County and its primary construction contractor shall implement the following measures to reduce impacts on aquatic habitats and the native fish community in the project area:

- All in-water construction activities shall be conducted during months when sensitive fish species are less likely to be present or less susceptible to disturbance (i.e., April 15 - October 15 or as directed by DFG).

- The County shall obtain and implement the conditions of a streambed alteration agreement. DFG shall be consulted regarding potential disturbance to fish habitat, including SRA habitat, as part of the process for obtaining a streambed alteration agreement, pursuant to Section 1602 of the California Fish and Game Code. Affected habitats shall be replaced and/or rehabilitated to the extent feasible and practicable. The acreage of riparian habitat that would be removed shall be replaced or rehabilitated on a “no-net-loss” basis in accordance with DFG regulations and as specified in the streambed alteration agreement. Habitat restoration, rehabilitation, and/or replacement shall be at a location and by methods agreeable to DFG. Minimization and compensation measures adopted through the permitting process shall be implemented.
The County shall consult and coordinate with DFG to develop regulations and limits for angling in Coon Creek, restrict angling activities while adult steelhead and salmon are present, and coordinate on enforcement of the area to monitor and regulate fishing activities.

Implementation of this mitigation measure along with Mitigation Measure 12-2 below, Mitigation Measure 5-1 in Chapter 5.0, “Soils, Geology, and Seismicity,” and Mitigation Measure 11-1 in Chapter 11.0, “Hydrology and Water Quality,” would reduce Impact 12-1 to a less-than-significant level.

**Mitigation Measure 12-2: Replace, Restore, or Enhance Affected Jurisdictional Waters of the United States and Waters of the State.**

**Mitigation Measure 12-2 applies to Impacts 12-1 and 12-8.**

Prior to construction, the County shall obtain a verified wetland delineation from USACE. Based on the results of the verified delineation, the County shall commit to replace, restore, or enhance on a “no net loss” basis, in accordance with USACE and the Central Valley RWQCB, the acreage of all waters of the United States and wetland habitats that would be affected by implementation of the project. Wetland restoration, enhancement, and/or replacement shall be at a location and by methods agreeable to USACE, DFG, and the Central Valley RWQCB, as determined during the Sections 404, 1602, and 401 permitting processes.

The County shall either obtain credits from an approved mitigation bank, at a rate determined by USACE, to replace lost wetland values at a 1:1 ratio, or shall prepare and submit a wetland mitigation and monitoring plan to USACE for the creation of jurisdictional waters at a mitigation ratio no less than 1 acre of created water of the United States, including wetlands, for each acre filled. The mitigation plan shall demonstrate how the USACE criteria for jurisdictional waters will be met through implementation. The wetland mitigation and monitoring plan shall include the following:

- target areas for creation,
- a complete biological assessment of the existing resources on the target areas,
- specific creation and restoration plans for each target area,
- performance standards for success that will illustrate that the compensation ratios are met, and
- a monitoring plan, including schedule and annual report format.

The County shall secure the following permits and regulatory approvals, as necessary, and implement all permit conditions before implementation of any construction activities associated with the proposed project.

- Authorization for the fill of jurisdictional waters of the United States shall be secured from USACE through the CWA Section 404 permitting process before any fill is placed in jurisdictional wetlands. Timing of compliance with the specific conditions of the 404 permit shall be in accordance with conditions specified by USACE as part of permit issuance. In its final stage and once approved by USACE, this mitigation plan shall detail proposed wetland restoration, enhancement, and/or replacement activities that would ensure no net loss of jurisdictional wetlands function and services in the project vicinity. As required by Section 404, approval and implementation of the wetland mitigation and monitoring plan shall ensure no net loss of jurisdictional waters of the United States, including jurisdictional wetlands.

- Water quality certification pursuant to Section 401 of the CWA is required as a condition of issuance of the 404 permit. Before construction in any areas containing wetland features, the County shall obtain water quality certification for the project. Any measures required as part of the issuance of water quality certification shall be implemented.

Implementation of this mitigation measure along with Mitigation Measure 12-1 above, Mitigation Measure 5-1 in Chapter 5.0, “Soils, Geology, and Seismicity,” and Mitigation Measure 11-1 in Chapter 11.0, “Hydrology and Water Quality,” would reduce Impacts 12-1 and 12-8 to a less-than-significant level.
Mitigation Measure 12-3: Implement Measures to Protect California Red-Legged Frog.

Mitigation Measure 12-3 applies to Impact 12-2.

The County and its primary contractor shall implement the following measures to reduce impacts on California red-legged frogs:

► Before any work in or within 200 feet of aquatic habitat, the County shall determine whether aquatic habitat is occupied by California red-legged frog, in consultation with USFWS. This determination may be supported by a habitat assessment for California red-legged frog prepared according to USFWS guidelines (USFWS 2005) as revised, and focused surveys if recommended by USFWS. If aquatic habitat in the project area is not occupied by California red-legged frog, there would be no impacts on this species and no further mitigation would be required.

► If aquatic habitat in the project area is occupied by California red-legged frog, the County shall minimize impacts on California red-legged frog by implementing the following measures:

• Worker awareness training shall be provided to construction crews working in California red-legged frog habitat. At a minimum, the training shall include a description of California red-legged frog and its habitat and their importance, general measures that are being implemented to conserve California red-legged frog as such measures relate to the project, and the boundaries within which construction activities shall occur.

• Suitable California red-legged frog habitat shall be surveyed 2 weeks before the start of construction activities. If California red-legged frogs, tadpoles, or eggs are found, they may be moved from the project area only with regulatory agency approval. If California red-legged frogs are not identified, construction may proceed.

• Exclusionary fencing (i.e., silt fences) shall be installed no more than 200 feet around all areas that are within or adjacent to California red-legged frog habitat.

• A USFWS-approved biologist shall be present at active project areas until the removal of California red-legged frog, instruction of workers, and habitat disturbance have been completed. After this time, the County shall designate a person to monitor on-site compliance with all minimization measures.

• If any work area will be temporally dewatered by pumping, intakes shall be completely screened with wire mesh not larger than 5 millimeters. Water shall be released downstream at an appropriate rate to maintain downstream flows during construction and in such a manner as to prevent erosion. Dewatering structures shall be removed upon completion of the project.

• Guidelines shall be implemented to protect water quality and prevent erosion, as outlined in the best management practices (BMPs) in Mitigation Measure 11-1, “Obtain Authorization for Construction Activities with the Central Valley Regional Water Quality Control Board and Implement Erosion and Sediment Control Measures as Required.”

• The County shall compensate for permanently lost habitat by developing and/or implementing a habitat creation/restoration plan for California red-legged frog. This plan shall, at a minimum, compensate for lost habitat on an acre-for-acre basis, and it shall include verifiable performance criteria and remediation measures developed with USFWS during the Section 7 consultation process.

Implementation of this mitigation measure would reduce Impact 12-2 to a less-than-significant level.
Mitigation Measure 12-4: Implement Measures to Protect Foothill Yellow-Legged Frog and Northwestern Pond Turtle.

*Mitigation Measure 12-4 applies to Impact 12-3.*

The County and its contractor shall implement the following measures to reduce impacts on foothill yellow-legged frogs and northwestern pond turtles:

▸ Construction of foot bridges and trails across smaller drainages shall occur when the drainages are dry, to the extent feasible.

▸ Before any work in Coon Creek, the County shall determine, in consultation with DFG, whether aquatic habitat at work sites would support foothill yellow-legged frog and/or northwestern pond turtle habitat. If no aquatic habitat for foothill yellow-legged frog or northwestern pond turtle habitat occurs at a work site, there would be no impacts on these species and no further mitigation is required.

▸ If aquatic habitat for foothill yellow-legged frog and/or northwestern pond turtle is present at work sites, the County shall minimize impacts on these species by implementing the following measures:

• Worker awareness training shall be provided to construction crews working in foothill yellow-legged frog and northwestern pond turtle habitat. At a minimum, the training shall include a description of foothill yellow-legged frog and northwestern pond turtle and their habitats and their importance, general measures that are being implemented to conserve foothill yellow-legged frog and northwestern pond turtle as such measures relate to the project, and the boundaries within which construction activities shall occur.

• Suitable foothill yellow-legged frog and northwestern pond turtle aquatic habitat shall be surveyed within 2 weeks before the start of construction activities. If northwestern pond turtles or foothill yellow-legged frogs, tadpoles, or eggs are found, they may be moved from the project area only with DFG approval. If neither northwestern pond turtle nor foothill yellow-legged frog is identified, construction may proceed.

• A qualified biologist holding the appropriate permits shall be present at active work sites until the removal of foothill yellow-legged frog and northwestern pond turtle, instruction of workers, and habitat disturbance have been completed. After this time, the County shall designate a person to monitor on-site compliance with all minimization measures.

• If any work site will be temporally dewatered by pumping, intakes shall be completely screened with wire mesh not larger than 5 millimeters. Water shall be released downstream at an appropriate rate to maintain downstream flows during construction and in such a manner as to prevent erosion. Dewatering structures shall be removed upon completion of the project.

• Guidelines shall be implemented to protect water quality and prevent erosion, as outlined in the BMPs in Mitigation Measure 11-1, “Obtain Authorization for Construction Activities with the Central Valley Regional Water Quality Control Board and Implement Erosion and Sediment Control Measures as Required.”

Implementation of this mitigation measure would reduce Impact 12-3 to a less-than-significant level.

Mitigation Measure 12-5: Implement Measures to Protect Raptors and Other Nesting Birds.

*Mitigation Measure 12-5 applies to Impact 12-4.*

The County and its contractors shall implement the following measures to reduce impacts on raptors and other nesting birds:
If trees larger than 6 inches dbh must be removed, then the following mitigation measures shall be implemented:

- Tree removal shall be completed in accordance with the Placer County Tree Ordinance.

- For any construction activities that take place between March 1 and August 31 (raptor breeding season), preconstruction or pre-event surveys for active raptor nests shall be conducted no more than 2 weeks prior to the start of the activity. If no active raptor nests are found, no further mitigation is required. If any active raptor nests are identified during surveys, then impacts on active raptor nests shall be avoided by establishing minimum buffers of 500 feet (0.25 mile for golden eagle) until young have fledged or the nest is otherwise no longer active. These buffers may be reduced if a qualified biologist determines that such a reduction would not risk failure of a nest.

If active golden eagle nests are located within 0.25-mile of public trails or roads, the County shall:

- Notify DFG of the nest; and

- Cooperate with DFG in implementation of measures to protect the nests during nesting.

Implementation of this mitigation measure would reduce Impact 12-4 to a less-than-significant level.

**Mitigation Measure 12-6: Implement Measures to Protect Ringtail and Townsend’s Big-Eared Bat.**

*Mitigation Measure 12-6 applies to Impacts 12-5 and 12-6.*

The County and its contractor shall implement the following measures to protect Townsend’s big-eared bat and ringtail:

- A qualified biologist shall conduct pre-construction surveys to identify bat hibernation roost and maternity sites and potential ringtail den sites in suitable habitat within 100 feet of proposed trails (i.e., those areas directly affected by trail construction). For bats, roost habitat surveys should focus on locations of mine tunnels, caves, abandoned buildings, and rock crevices; for ringtail, potential den site surveys should focus on locations of trees 6 inches dbh or greater in riparian areas.

- The County shall avoid locating trails within 100 feet of bat roosts and ringtail dens. If avoidance is not possible, the County shall survey those locations to determine if they are occupied by the target species. If sites are not occupied, they may be sealed or removed in accordance with the following specifications:

  - Potential Townsend’s big-eared bat nursery roosts may be sealed from September through March, before the nursery season. The County shall verify that the potential roost is not occupied immediately before sealing it.

  - Potential Townsend’s big-eared bat hibernation roosts may be sealed from April through October, prior to the hibernation season. The County shall verify that the potential roost is not occupied immediately before sealing it.

  - Potential ringtail den sites may be removed only from September through April. The County shall verify that the potential den is not occupied immediately before sealing it.

Implementation of this mitigation measure would reduce Impact 12-5 to a less-than-significant level.
Mitigation Measure 12-7: Implement Measures to Protect Brandegee’s Clarkia.

*Mitigation Measure 12-7 applies to Impact 12-7.*

The County and its contractor shall implement the following measures to protect Brandegee’s clarkia populations:

► The locations of known Brandegee’s clarkia occurrences in the project area shall be clearly marked for avoidance by construction crews before the commencement of project construction activities.

► If construction activities cannot avoid Brandegee’s clarkia occurrences, then prior to commencement of construction, the following measures shall be implemented:

• Information on Brandegee’s clarkia occurrences in the project area shall be recorded on California Native Species Field Survey Forms and submitted to the CNDDB.

• Seed from Brandegee’s clarkia populations shall be collected and redistributed into suitable habitat by a qualified botanist. Seed shall be distributed over an area twice the size of the affected area. Because Brandegee’s clarkia is an annual plant that is tolerant of some disturbance, this measure will allow the perpetuity of populations in the project area and minimize the impact of project activities.

Implementation of this mitigation measure would reduce Impact 12-7 to a less-than-significant level.

Mitigation Measure 12-8: Protect Oak Woodland Habitat

*Mitigation Measure 12-8 applies to Impact 12-9.*

If removal of native trees larger than 6 inches dbh is required during construction of the proposed project, the County shall compensate for removal of those trees by paying in-lieu fees into the County approved oak woodland preservation fund as stipulated in the Placer County Tree Ordinance and in consultation with a certified arborist.

Implementation of this mitigation measure would reduce Impact 12-9 to a less-than-significant level.