

7.4 Wildlife Resources

7.4.1 Overview

This section discusses wildlife resources in the vicinity¹ of Yuba County Water Agency's (YCWA or Licensee) Yuba River Development Project (Project) with a focus on special-status² and commercially valuable species. In addition to this overview, Section 7.4 is divided into five subsections: Section 7.4.2 discusses general wildlife habitat in the Project Vicinity; Section 7.4.3 discusses special-status wildlife species in the Project Vicinity as well as the suitable habitat type for each special-status species, their temporal and spatial distributions within the Project Vicinity, and any occurrences within the Project Vicinity; Section 7.4.4 discusses species listed by the California Department of Fish and Game (CDFG) as commercially valuable (*i.e.*, harvestable) species; and Section 7.4.5 describes existing, relevant and reasonably available information regarding wildlife resources in areas upstream of the Project (*i.e.*, on the Middle Yuba River upstream of Our House Diversion Dam, on Oregon Creek upstream of Log Cabin Diversion Dam, and on the North Yuba River upstream of New Bullards Bar Reservoir); within the Project Area;³ and downstream of the Project (*i.e.*, on the Yuba River downstream of the United States Army Corps of Engineers' (USACE) Daguerre Point Dam).

7.4.2 Wildlife Habitat

Based on the general vegetation patterns described in the Botanical Resources section of this Preliminary Information Package (Section 7.5), Licensee classified wildlife habitats in the Project Vicinity using CDFG's California Wildlife Habitat Relationships (CWHR) system (de Becker and Sweet 1988; CDFG 2005, 2009a). The CWHR model predicts wildlife use in a user-defined area based on habitat type, age class, size class, canopy closure or cover, and occurrence of specific habitat elements that influence thermal cover, forage, prey availability, nesting, escape cover, and breeding.

Table 7.4.2-1 presents the CWHR habitat types identified in the Project Area and within 0.50 mile of the Federal Energy Regulatory Commission (FERC) Project Boundary,⁴ and the corresponding United States Department of Agriculture (USDA) Forest Service (Forest Service) CalVeg vegetation classification system (USFS 2004; CDFG 2005, 2009a). Descriptions of the CalVeg types and the methods used by Licensee for vegetation mapping are presented in Section 7.5.2 (Upland Vegetation) of the Botanical Resources section of the Preliminary Information Package (Section 7.5). The dominant habitat types present in the Project Vicinity are lacustrine,

¹ For the purposes of this document, the Project Vicinity is defined as the area surrounding the Project on the order of a United States Geological Survey (USGS) 1:24,000 topographic quadrangle.

² Refer to Section 7.4.3 for a definition of special-status wildlife species as used in this Preliminary Information Package.

³ For the purposes of this document, the Project Area is defined as the area within the Federal Energy Regulatory Commission (FERC) Project Boundary and the land immediately surrounding the FERC Project Boundary (*i.e.*, within about 0.25 mile of the FERC Project Boundary) and includes Project-affected reaches between facilities and downstream to the next major water controlling feature or structure.

⁴ The FERC Project Boundary is the area that Licensee uses for normal Project operations and maintenance, and is shown on Exhibits J, K, and G of the current license.

representing 54 percent of the habitat found within 0.50 mile of the FERC Project Boundary and Douglas-Fir (21.1%). The next most represented habitat is montane hardwood forest (8.2%).

Table 7.4.2-1. Wildlife Habitat Types in Project Area and their equivalent Vegetation Community Types.

California WHR ¹	CalVeg Types ²	Acres ³	%
Annual Grassland	Annual Grasses/Forbs	33	0.4
Barren	Barren	122	1.6
Blue Oak- Foothill Pine	Gray Pine, Blue Oak	23	0.3
Blue Oak Woodland	Blue Oak	22	0.3
Douglas Fir	Pacific Douglas Fir, Sitka Spruce, Douglas Fir, White Fir, Ponderosa Pine, Grand Fir	1,645	21.1
Lacustrine	Water	4,212	54.0
Mixed Chaparral	Lower Montane Mixed Chaparral, Manzanita Chaparral	38	0.5
Montane Chaparral	Deerbrush, Greenleaf Manzanita, Huckleberry Oak, Pinemat Manzanita, Upper Montane, Mixed Chaparral	41	0.5
Montane Hardwood-Conifer	California Black Oak, Canyon Live Oak, Live Oak-Madrone, Interior Mixed Hardwood, Ponderosa Pine, Douglas Fir, Incense Cedar	480	6.1
Montane Hardwood	California Black Oak, Canyon Live Oak, Interior Live Oak, Interior Mixed Hardwood, Montane Mixed Hardwood	639	8.2
Ponderosa Pine	Ponderosa Pine	83	1.1
Riverine	Water	59	0.8
Sierran Mixed Conifer	Mixed Conifer-Fir, Mixed Conifer-Pine, Ponderosa Pine-White Fir	378	4.8
Urban	Urban	31	0.4
Total	14 habitat types	7,806	100

¹ de Becker and Sweet 1988, CDFG 2005, 2009a

² USFS 2004

³ Rounded to nearest acre

This analysis indicates that the Project Vicinity supports a diversity of wildlife habitats and associated wildlife species that reflect wide variations in elevation, topography, and soils. Using the identified habitat types and CDFG’s CWHR system, Licensee identified 54 terrestrial vertebrate wildlife species of special-status that potentially may occur within the Project Vicinity (CDFG 2009b). These species include one reptile, 35 birds, and 18 mammals. Special-status amphibians and aquatic reptiles are discussed in the Aquatic Resources Section of this Preliminary Information Package (Section 7.3). The complete CWHR species list is presented at the end of this section on compact disk (CD) as Attachment 7.4A.

Although a useful tool for predicting general species occurrence, CWHR-generated lists should be interpreted cautiously, because errors of omission (*e.g.*, excluding a species that is present) and commission (*e.g.*, including a species that is absent) are likely when this broad-scale model is used for localized applications.

7.4.3 Special-status Wildlife Species

For the purpose of this Preliminary Information Package, a special-status wildlife species (*i.e.*, reptile, bird, or mammal) is referred to as a species that has a reasonable possibility of occurring in the Project Area and meets one or more of the following criteria:

- Found on National Forest System (NFS) land managed by the Forest Service, and formally listed on the Forest Service's list of Forest Sensitive Species (FSS).
- Found on public land administered by the United States Department of Interior (USDOI) Bureau of Land Management (BLM), and formally listed as Sensitive (BLM-S) on BLM's *Animal Sensitive Species List* (BLM 2006).
- Found on NFS land managed by the Forest Service as either the Tahoe National Forest (TNF) or the Plumas National Forest (PNF), and formally listed by that forest as a Management Indicator Species (MIS).
- Found on CDFG Commission's list of *State and Federally Listed Endangered and Threatened Animals of California* (CDFG 2009b). Species on the list that are considered special-status for the purpose of the relicensing are those that are candidates for listing under the California Endangered Species Act (CESA) as endangered (SCE) or threatened (SCT), or a candidate for delisting (SCD). Also considered special-status are those wildlife species CDFG has designated Species of Special Concern (CSC).⁵
- Found on the list of species afforded protection under the federal Endangered Species Act (ESA) that occur in the Project Area which includes the United States Geological Survey (USGS) 1:24,000 topographic quadrangles Strawberry Valley (574D, 1994), Clipper Mills (574C, 1994), Challenge (558B, 1995), Camptonville (558A, 1995), Pike (557B, 1975), French Corral (558C, 1995), Oregon House (559D, 1995), and Smartville⁶ (543A, 1995) (USFWS 2009). Species on the list that are considered special-status for the purpose of the relicensing are those species that are proposed for listing as endangered or threatened under the ESA (FPE and FPT, respectively), candidates for listing under the ESA (FC), or proposed for delisting from the ESA (FPD).⁷

Table 7.4.3-1, located at the end of this section, presents a list of special-status wildlife species (*i.e.*, terrestrial reptiles, birds, and mammals) that occur, or have the potential to occur in the Project Vicinity. Potential occurrences of special-status wildlife species and their corresponding temporal and spatial information were derived from a query of the CWHR database (CDFG 2009a, b). Habitat types listed in Table 7.4.2-1 were used as the search criteria within CWHR, and included all habitats known or likely to occur within the Project Vicinity (CDFG 2009a). Descriptions of suitable habitat types used by each species were synthesized from species accounts found online at NatureServe® and the CDFG CWHR life history database (NatureServe 2009; CDFG 2009d). Temporal data provided in this table correspond to the seasonal occurrence of the species within the Project Vicinity. Spatial data provided in the table correspond to the habitat types typically supporting each species. The California Natural Diversity Database (CNDDDB) was used as the primary source to identify previously reported

⁵ Species listed as threatened (ST) or endangered (SE) under the CESA, and species that are considered Fully Protected (SFP) are not considered special-status for the purpose of the relicensing proceeding. These species are discussed separately in the Threatened, Endangered and Fully Protected Species Section of this Preliminary Information Package (Section 7.7).

⁶ In 2008, the people of this community petitioned to have the name changed to Smartsville, with an 's'. However, the USGS gage refers to the former spelling of the community name. Therefore in this document, the community is referred to as such.

⁷ Wildlife species listed as threatened (FT) or endangered (FE) under the ESA are not considered special-status for the purpose of the relicensing proceeding. These species are discussed separately in the Threatened, Endangered, and Fully Protected Species Section of this Preliminary Information Package (Section 7.7).

occurrences of special-status species and sensitive habitats in the Project Area (CDFG 2009c). The complete CNDDDB query is presented at the end of this section on compact disk (CD) as Attachment 7.4B. The CNDDDB is a statewide inventory, managed by CDFG, and is continually updated with the locations and conditions of the State's rare and declining species and habitats. Although the CNDDDB is the most current and reliable tool for tracking occurrences of special-status species, it contains only those records that have been submitted to CDFG. Thus, additional sources of information were used to identify potentially occurring special-status species. These additional sources include the USDOJ, United States Fish and Wildlife Service (USFWS) Sacramento Field Office database of listed species (USFWS 2009), the CWHR database (CDFG 2005, 2009a, b), and other published sources located during Licensee's gathering of existing, relevant and reasonably available information.

Table 7.4.3-1, located at the end of this section, includes 54 wildlife species, one reptile, 35 birds, and 18 mammals. This list includes:

- Six species listed only as BLM-S (*i.e.*, black-crowned night heron, ferruginous hawk, Yuma myotis, long-eared myotis, fringed myotis, and western small-footed myotis).
- Twenty-eight species listed only as CSC (*i.e.*, common loon, American white pelican, northern harrier, black tern, long-eared owl, short-eared owl, purple martin, loggerhead shrike, yellow-breasted chat, common yellowthroat, vesper sparrow, grasshopper sparrow, Hutton's vireo, olive-sided flycatcher, red winged blackbird, yellow-headed blackbird, black swift, Vaux's swift, California quail, greater white-fronted goose, redhead, Barrow's goldeneye, harlequin duck, black-tailed jackrabbit, American badger, broad-footed mole, Sierra Nevada snowshoe hare, and Sierra Nevada mountain beaver).
- Six species listed only as MIS (*i.e.*, mountain quail, fox sparrow, hairy woodpecker, black-backed woodpecker, blue grouse, and mule deer).
- Fourteen species are listed as special-status species by two or more agencies (*i.e.*, coast horned lizard, northern goshawk, burrowing owl, California spotted owl, yellow warbler, tri-colored blackbird, western red bat, spotted bat, Townsend's big-eared bat, pallid bat, western mastiff bat, northern flying squirrel, Sierra marten, and Pacific fisher,).

7.4.4 Commercially Valuable Wildlife Species

Table 7.4.4-1, located at the end of this section, includes wildlife species known to occur, or with the potential to occur, in the Project Vicinity that are listed as commercially harvested by the CDFG (CDFG 2009b, c). Temporal and spatial information for these species were derived from the CWHR database (CDFG 2009c). Descriptions of suitable habitat types used by each species were synthesized from species accounts found online at NatureServe® and the CDFG CWHR life history database (NatureServe 2009; CDFG 2009d). Habitat types listed in Table 7.4.2-1 were used as search criteria within the CWHR computer program and include all habitats known or likely to occur within the Project Vicinity. Temporal data correspond to the seasonal occurrence of the species within the Project Vicinity. Spatial data provided in the table correspond to the habitat types typically supporting each species; these spatial data can be used in conjunction with vegetation descriptions and mapping presented in the Botanical Resources

section of this Preliminary Information Package (Section 7.5). This list includes 35 bird and 20 mammal species.

Of the commercially valuable (*i.e.*, harvestable) species listed in Table 7.4.4-1, located at the end of this section, nine species are also included in the list of special-status wildlife species occurring or potentially occurring in the Project Vicinity (Table 7.4.3-1). Species include American badger (CSC), Burrow's goldeneye (CSC), black-tailed jackrabbit (CSC), blue grouse (MIS), California quail (CSC), mountain quail (MIS), mule deer (MIS), redhead, and tule greater white-fronted goose, black-tailed jackrabbit, and American badger (CDFG 2009a; USFWS 2009).

7.4.5 Wildlife Resources of the Yuba River Area

7.4.5.1 Upstream of Project

In addition to the information provided above, Licensee found the following information regarding wildlife resources of special concern upstream of the Project Vicinity. The source documents⁸ for wildlife resources of special concern upstream of the Project Vicinity include Nevada Irrigation District's (NID) Pre-Application Document (PAD), the Sierra Nevada Forest Management Indicator Species Amendment (SNFMISA), CWHR query, CNDDDB query, and a special-status bat study performed by NID.

Nevada Irrigation District Pre-Application Document

NID prepared a PAD for the Yuba-Bear Hydroelectric Project relicensing and identified 58 state and/or federally listed and special-status wildlife species that could potentially occur in the Yuba-Bear Hydroelectric Project Area (NID 2008). The Yuba-Bear Hydroelectric Project is located upstream of the Project on the Middle and South Yuba rivers, approximately 35 miles due east of the Project Area. Of the 58 species identified, 45 are special-status species, and included one reptile, 28 birds, and 16 mammals. The 45 special-status species are as follows: coast horned lizard; yellow warbler; northern goshawk; California spotted owl; blue grouse; fox sparrow; mountain quail; hairy woodpecker; black-backed woodpecker; common loon; merlin; double-crested cormorant; osprey; long-eared owl; short-eared owl; purple martin; gray vireo; yellow-breasted chat; Barrow's goldeneye; harlequin duck; sharp-shinned hawk; Cooper's hawk; California gull; black swift; ferruginous hawk; long-billed curlew; black tern; California horned lark; western red bat; American martin; western small-footed myotis; Yuma myotis; long-eared myotis; fringed myotis; spotted bat; western mastiff bat; northern flying squirrel; Townsend's big-eared bat; pallid bat; Pacific fisher; Sierra Nevada snowshoe hare; mule deer; Sierra Nevada mountain beaver; and white tailed hare.

Based on a query of the CNDDDB, of these species, five have been confirmed within 0.25 mile of the Yuba-Bear Hydroelectric Project FERC Project Boundary and include northern goshawk, bald eagle, golden eagle, osprey, and California spotted owl (NID 2008). In addition, important deer habitat areas occur throughout the Yuba-Bear Hydroelectric Project Area, particularly surrounding project water bodies (NID 2008).

⁸ A source document is considered a document reporting original surveys or data.

Sierra Nevada Forest Management Indicator Species Amendment

Both TNF and PNF are located upstream of the Project Area. TNF is located to the east of the Project and PNF is located to the north of the Project. Prior to 2007, 20 MIS terrestrial wildlife species were identified in PNF and included peregrine falcon, bald eagle, spotted owl, goshawk, golden eagle, prairie falcon, Canada goose, mule deer, and American marten (USFS 2006). MIS species identified prior to 2007 in TNF include peregrine falcon, bald eagle, California spotted owl, northern goshawk, pileated woodpecker, mallard duck, black bear, blue grouse, and willow flycatcher (USFS 1988). In 2007, the SNFMISA Record of Decision (ROD), revised the MIS listings and associated monitoring strategies for 10 National Forests in the Sierra Nevada, including PNF and TNF (USFS 2007). These MIS replace the former MIS designations. Identified MIS species included fox sparrow, mule deer, yellow warbler, mountain quail, blue grouse, California spotted owl, northern flying squirrel, American marten, hairy woodpecker, and black-backed woodpecker for TNF (USFS 2007). These same species, excluding American marten, were identified for PNF (USFS 2007).

CWHR

Based on a query of the CWHR database for Sierra County (upstream of the Project Area), species likely to occur upstream of the Project, based on habitats, include 56 species (CDFG 2009c) as follows:

- Eight species listed only as BLM-S (*i.e.*, sagebrush lizard, black-crowned night heron, ferruginous hawk, Yuma myotis, long-eared myotis, fringed myotis, western small-footed myotis, and great basin pocket mouse).
- Two species listed only as FSS (*i.e.*, ring-necked snake and lodgepole chipmunk).
- Twenty-four species listed only as CSC (*i.e.*, gopher snake, common loon, American white pelican, northern harrier, black tern, long-eared owl, short-eared owl, purple martin, yellow warbler, common yellowthroat, spotted towhee, song sparrow, vesper sparrow, Hutton's vireo, Bewick's wren, olive-sided flycatcher, yellow-headed blackbird, black swift, Vaux's swift, broad-footed mole, deer mouse, mountain lion, vagrant shrew, and Sierra Nevada snowshoe hare).
- Nine species listed as CSC and are harvestable species (*i.e.*, sooty grouse, California quail, redhead, black-tailed jackrabbit, American badger, greater sage grouse, western spotted skunk, bobcat, and mule deer).
- Thirteen species listed as special-status species by two or more agencies (*i.e.*, western skunk, California mountain kingsnake, northern goshawk, burrowing owl, western red bat, spotted bat, Townsend's big-eared bat, western mastiff bat, pallid bat, northern flying squirrel, American marten, Pacific fisher, and northern river otter).

CNDDDB

A query of the CNDDDB for special concern species that have been confirmed within quadrangles located immediately upstream of the Project identified 13 known occurrences of special of concern wildlife species (CDFG 2009f). Queries were conducted for Clio, Calpine, Antelope Valley, Loyalton, Beckwourth Pass, Constantina, Evans Canyon, Frenchman Lake, and McKesick Peak USGS topographic quadrangles. Documented sensitive species included four

birds, and nine mammals (*i.e.*, northern goshawk, prairie falcon, great gray owl, long-eared owl, spotted bat, pallid bat, fringed myotis, Yuma myotis, Sierra Nevada snowshoe hare, western white-tailed jackrabbit, Sierra marten, Pacific fisher, and American badger). State or federally listed species are discussed in the Threatened, Endangered, and Fully Protected Species Section of this Preliminary Information Package (Section 7.7).

Nevada Irrigation District Special-status Bat Survey

In 2007, NID conducted preliminary special-status bat surveys in four powerhouses and related auxiliary buildings at the Yuba-Bear Hydroelectric Project site. No signs of bat activity or access points were found at any of the survey locations, but bats of unknown species were observed nearby at the Pacific Gas and Electric Company (PG&E) Drum-Spaulding Project site (NID 2008).

7.4.5.2 In Project Area

Besides the information provided above, Licensee found two source documents regarding wildlife resources in the Project Vicinity. These documents included the 2007 Final Environmental Impact Report/Environmental Impact Statement (FEIR/EIS) for the Lower Yuba River Accord (Accord), and the University of California Agriculture and Natural Resources Sierra Foothill Research & Extension Center (SFREC) Birds of SFREC.

Yuba River Accord FEIR/EIS

A FEIR/EIS was prepared in 2007 for of the Lower Yuba River Accord. The Accord comprises three separate but interrelated proposed agreements to protect and enhance fisheries resources in the lower Yuba River, increase local supply reliability, and provide increased operational flexibility for protection of Sacramento-San Joaquin Delta (Delta) fisheries resources. The FEIR/EIS contains a discussion of the wildlife resources (*i.e.*, habitat and associated special-status species) within the Accord study area that may be affected by the Proposed Project/Action. The study area extends from USACE's Englebright Dam downstream to the Yuba River and Feather River confluences. Because the Accord study area overlaps with the lower extent of the Project Area (*i.e.*, the portion of the Yuba River between USACE's Englebright Dam and Daguerre Point Dam), all information pertaining to wildlife resources obtained from the FEIR/EIS explicitly identified as occurring within USGS quadrangles common to both the Project and the Accord are included here. All other terrestrial wildlife information gathered from the FEIR/EIS not explicitly identified as occurring within USGS quadrangles common to both the Project and the Accord are included in Section 7.4.5.3 below.

As part of the FEIR/EIS, a CNDDDB query was performed in order to identify known occurrences of special-status species within the study area. The CNDDDB query indicated occurrences of bald eagle within the Camptonville and Oregon House quadrangles, and valley elderberry longhorn beetle within the Browns Valley quadrangle (USACE's Daguerre Point Dam is centered within the quadrangle). The number of occurrences within each quadrangle was not provided. The FEIR/EIS did not identify the presence of other special-status terrestrial wildlife between USACE's Englebright Dam and Daguerre Point Dam.

University of California Agriculture and Natural Resources, Sierra Foothill Research and Extension Center

University of California's Sierra Foothill Research and Extension Center (SFREC) borders the northwest shores of USACE's Englebright Reservoir and northern banks of the Yuba River below USACE's Englebright Dam. SFREC encompasses 5,721 acres of mixed hardwood and open annual grassland habitats between 220 and 2,020 feet above mean sea level (MSL). SFREC has identified 112 species of seasonal migrant or year-long resident birds, 92 of whom use the field station for breeding, cover or food (SFREC 2009; Block and Morrison 1990). A probable breeding population of California black rail (*Laterallus jamaicensis coturniculus*), a species usually associated with Northern San Francisco Bay estuarine habitats, has also been observed on SFREC, adjacent to tributaries of Dry Creek, upstream of the Yuba River (Aigner *et al.* 1995).

In addition to birds, one amphibian, three reptiles and seven mammals have also been recorded on site (Block and Morrison 1990): California slender salamander (*Batrachoseps attenuatus*); Western fence lizard (*Sceloporus occidentalis*); Western skunk (*Eumeces skiltonianus*); Southern alligator lizard (*Elgaria multicaudata*); brush mouse (*Peromyscus boylii*); pinyon mouse (*Peromyscus truei*); deer mouse (*Peromyscus maniculatus*); California vole (*Microtus californicus*); Western harvest mouse (*Reithrodontomys megalotis*); Botta's pocket gopher (*Thomomys bottae*); and ornate shrew (*Sorex ornatus*).

7.4.5.3 Downstream of Project

Licensee found one source document regarding wildlife resources downstream of the Project and queried additional special-status species information from the CNDDDB. Both the source document and the CNDDDB query have been summarized below.

CNDDDB

A query of the CNDDDB for special concern species within quadrangles located immediately downstream of the Project (*e.g.*, Browns Valley and Yuba City), confirmed documented occurrences of three special concern wildlife species (CDFG 2009h). Documented sensitive species included one bird (tricolored blackbird) and two aquatic reptiles (CDFG 2009a). Aquatic reptiles are discussed in the Aquatic Resources Section (Section 7.3), and state or federally listed species are discussed in the Threatened, Endangered, and Fully Protected Species Section (Section 7.7) of this Preliminary Information Package.

Yuba River Accord FEIR/EIS

The second source of anecdotal information is the FEIR/EIS that was prepared in 2007 for implementation of the Accord (discussed in Section 7.4.5.2 above). Because of the overlap between the Accord study area and the Project Area, all information pertaining to wildlife resources obtained from the FEIR/EIS not explicitly identified as occurring within USGS quadrangles common to both the Project and Accord is included here. Information pertaining to wildlife resources from the FEIR/EIS that is explicitly identified as occurring within USGS quadrangles common to both the Project and Accord is included in Section 7.4.5.2 (above).

A list of vegetation communities and habitats within the Accord study area that may be affected by the Proposed Project/Action and alternatives was derived from the USGS Gap Analysis of Mainland California (GAP) vegetation categorization and the CDFG's Wetland and Riparian Classification System. The list was then compared to Holland's 1986 classification system to determine synonymous category nomenclature. The resulting list of primary vegetation communities and habitats include freshwater emergent wetlands, valley foothill riparian forest, great valley cottonwood riparian forest, great valley oak riparian forest, and early successional riparian woodland (Yuba River Accord FEIR/EIS 2007).

The list of species included in the FEIR/EIS was restricted to those associated with the vegetation communities and habitats that may be impacted by the Proposed Project/Action alternatives. Additionally, the CNDDDB was queried for known occurrences within the affected area. The special-status species criterion used in the Accord FEIR/EIS included species with the following designation: federal status-endangered (E), threatened (T) proposed (P), delisted (D), species of concern under the ESA (SC), and species of local concern-other species of concern to the Sacramento USFWS office; state status-endangered (CE), threatened (CT), fully protected (FP) under CDFG Code, and specified bird (SB) under CDFG Code (SB); and status-other species of concern identified by CALFED. Table 7.4.5-1 located at the end of this section lists those special-status species identified in the Accord.

The Accord FEIR/EIS CNDDDB query revealed the following special-status species occurrences and the quadrangle downstream of the Project in which the species occurred: Western yellow-billed cuckoo in the Yuba City quadrangle; Valley elderberry longhorn beetle in the Olivehurst and Browns Valley quadrangles (USACE's Daguerre Point Dam is centered within the quadrangle); and bank swallow in the Olivehurst and Yuba City quadrangles. The number of occurrences within each quadrangle was not provided.

7.4.6 List of Attachments

This section includes two attachments:

- Attachment 7.4A - CWHR for habitats within the Yuba River Development Project (Adobe Portable Document Format).
- Attachment 7.4B - CNDDDB results for species accounts within the Yuba River Development Project Area (Adobe Portable Document Format).

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Table 7.4.3-1. Special-status wildlife species (i.e., reptiles, birds, mammals) occurring or potentially occurring in the Project Vicinity.

Common Name / Scientific Name	Status ¹	Suitable Habitat Type	Temporal and Spatial Distribution ²	Occurrence in Project Vicinity
REPTILES				
Coast horned lizard <i>Phrynosoma coronatum</i>	BLM-S, CSC, FSS	Occurs in a variety of habitats, including scrubland, grassland, coniferous woods, and broadleaf woodlands; typically it is found in areas with sandy soil, scattered shrubs, and ant colonies, such as along the edges of arroyo bottoms or dirt roads.	Yearlong-AGS, BOP, BOW, MHC, PPN	Potentially occur within suitable habitat.
BIRDS				
American white pelican <i>Pelecanus erythrorhynchos</i>	CSC	Rivers, lakes, reservoirs, estuaries, bays, marshes; sometimes inshore marine habitats.	Summer-BAR, Yearlong & Winter-WAT	Potentially occur within suitable habitat.
Common loon <i>Gavia immer</i>	CSC	Lakes containing both shallow and deep water.	Yearlong-WAT	Potentially occur within suitable habitat.
Redhead <i>Aythya americana</i>	CSC	Open water on lakes, ponds, and reservoirs.	Winter-WAT	Potentially occur within suitable habitat.
Barrow's goldeneye <i>Bucephala islandica</i>	CSC	Winters on lakes, rivers, estuaries, and bays. Usually nests near lake or pond surrounded by dense vegetation.	Yearlong-WAT	Potentially occur within suitable habitat.
Harlequin duck <i>Histrionicus histrionicus</i>	CSC	Historic breeding grounds include west slope of the Sierra Nevada along shores of swift, shallow rivers.	Yearlong-WAT	Potentially occur within suitable habitat.
Black-crowned night heron <i>Nycticorax nycticorax</i>	BLM-S	Marshes, swamps, wooded streams, mangroves, shores of lakes, ponds, lagoons.	Yearlong-BOP, BOW, MCP, MHC, MHW, WAT	Potentially occur within suitable habitat.
Northern harrier <i>Circus cyaneus</i>	CSC	Marshes, meadows, grasslands, and cultivated fields.	Yearlong-AGS, BAR, BOP, BOW, WAT. Summer-DFR, MCP, MHC, MHW, PPN, SMC	Potentially occur within suitable habitat.
Northern goshawk <i>Accipiter gentilis</i> (nesting)	BLM-S, CSC, FSS, DF-S	Deciduous, coniferous, and mixed forests. Prefers large tracts of mature forest, especially those dominated with ponderosa pine, aspen, fir, cedar, hemlock, or spruce. Usually nests on north slopes near water.	Yearlong-DFR, MCP, MHC, MHW, PPN, SMC. Winter-BOP, BOW	Potentially occur within suitable habitat: three occurrences within Project vicinity quads on CNDDDB.
Ferruginous hawk <i>Buteo regalis</i>	BLM-S	Open grasslands, sagebrush flats, desert scrub, low foothills, & fringes of pinyon-juniper habitats. Mostly eats lagomorphs, ground squirrels, and mice.	Winter-AGS, BAR, BOP, BOW	Potentially occur within suitable habitat.
Blue Grouse <i>Dendragapus obscurus</i>	MIS	Mixed forests dominated by Black Oak, Lodgepole Pine, Red Fir, Mountain Hemlock and White Pine dominated forest from 1200 ft to 7500 ft elevation	Yearlong-MHC, SMC, PPN, WFR, SCN	Potentially occur within suitable habitat.
California quail <i>Callipepla californica</i>	CSC	Lower elevations and transition zone of mixed conifer forest between 1200 and 7000 ft elevation.	Yearlong-AGS, BOP, BOW, DFR, MCH, MCP, MHC, MHW, PPN, SMC	Potentially occur within suitable habitat.
Mountain Quail <i>Oreortyx pictus</i>	MIS	Mixed forests dominated by Black Oak, Lodgepole Pine, Red Fir, Mountain Hemlock and White Pine dominated forest from 1200 ft to 7500 ft elevation and mountain chaparral	Yearlong-RFR, MHW, SMC, PPN, WFR, SCN	Potentially occur within suitable habitat.
Black tern <i>Chlidonias niger</i>	CSC	Marshes, along sloughs, rivers, lakeshores, and impoundments, or in wet meadows.	Summer-WAT	Potentially occur within suitable habitat.
Tule greater white-fronted goose <i>Anser albifrons elgasi</i>	CSC	Wetlands, grain fields, grassy fields, marshes, lakes and ponds.	Winter-AGS, WAT	Potentially occur within suitable habitat.
Burrowing owl <i>Athene cunicularia</i>	BLM-S, CSC	Open grasslands, especially prairie, plains, and savanna, sometimes in open areas such as vacant lots near human habitation or airports.	Yearlong-AGS, BAR, BOP, BOW, MCP, PPN	Potentially occur within suitable habitat.

Table 7.4.3-1. (continued)

Common Name / Scientific Name	Status ¹	Suitable Habitat Type	Temporal and Spatial Distribution ²	Occurrence in Project Vicinity
BIRDS (continued)				
Long-eared owl <i>Asio otus</i>	CSC	Riparian bottomland forest with overstory of willows and cottonwoods; Riparian forest along stream corridors (often dominated by live oak trees). Wooded areas with dense vegetation needed for roosting and nesting, adjacent open areas needed for hunting.	Yearlong-AGS, BOP, BOW, MCP, MHC, MHW, PPN, SMC	Potentially occur within suitable habitat: one occurrence within Project Vicinity quads on CNDDDB.
Short-eared owl <i>Asio flammeus</i>	CSC	Broad expanses of open land with low vegetation for nesting and foraging are required.	Yearlong-AGS Winter-BOP, BOW, DFR, NHC, PPN, SMC	Potentially occur within suitable habitat.
California spotted owl <i>Strix occidentalis occidentalis</i>	BLM-S, CSC, MIS	Mixed forests dominated by Black Oak, Lodgepole Pine, Red Fir from 1200 ft to 5500 ft elevation	Yearlong-BOP, MHW. Summer-MRI	Potentially occur within suitable habitat.
Purple martin <i>Progne subis</i>	CSC	A wide variety of open and partly open situations, frequently near water or around towns.	Summer-AGS, BOP, BOW, DFR, MHC, MHW, PPN, SMC, WAT	Potentially occur within suitable habitat.
Loggerhead shrike <i>Lanius ludovicianus</i>	CSC	Open country with scattered trees and shrubs, savanna, desert scrub, and, occasionally, open woodland; often perches on poles, wires or fence posts.	Yearlong-AGS, BAR, BOP, BOW, MCH, MHC, MHW, PPN	Potentially occur within suitable habitat.
Yellow-breasted chat <i>Icteria virens</i>	CSC	Second growth, shrubby old pastures, thickets, bushy areas, scrub, woodland undergrowth, and fence rows, including low wet places near streams, pond edges, or swamps; thickets with few tall trees	Yearlong-WAT	Potentially occur within suitable habitat.
Yellow warbler <i>Dendroica petechia</i>	CSC, MIS	Open scrub, second-growth woodland, thickets, farmlands, and gardens, especially near water; riparian woodlands, especially of willows, in the West.	Summer-BOP, BOW, MCP, MHC, MHW, PPN, SMC. Migrant-DFR	Potentially occur within suitable habitat.
Common yellowthroat <i>Geothlypis trichas</i>	CSC	Marshes (especially cattail), thickets near water, bogs, brushy pastures, and old fields. In migration and winter also in brushy and shrubby areas in both moist and arid regions.	Yearlong-AGS, BOP, BOW, DFR, MCP, MHC, MHW, PPN, SMC. Summer-MRI	Potentially occur within suitable habitat.
Fox Sparrow <i>Passerella iliaca</i>	MIS	Dense thickets in coniferous or mixed woodlands, chaparral, along rivers and creeks. Requires dense brushy cover during the nesting season.	Yearlong-MHC, MCH	Potentially occur within suitable habitat.
Vesper sparrow <i>Pooecetes gramineus</i>	CSC	Plains, prairie, dry shrublands, savanna, weedy pastures, fields, sagebrush, arid scrub, and woodland clearings.	Winter-AGS, BOP, BOW. Summer-MCP	Potentially occur within suitable habitat.
Grasshopper sparrow <i>Ammodramus savannarum</i>	CSC	Prefer grasslands of intermediate height and are often associated with clumped vegetation interspersed with patches of bare ground. Other habitat requirements include moderately deep litter and sparse coverage of woody vegetation.	Summer-AGS	Potentially occur within suitable habitat.
Hutton's vireo <i>Vireo huttoni</i>	CSC	Pine-oak association, oak woodland, and riparian woodland, primarily in low trees and scrub. Nests in deciduous or conifer trees.	Yearlong-BOP, BOW, DFR, MHC, MHW, PPN, SMC	Potentially occur within suitable habitat.
Olive-sided flycatcher <i>Contopus cooperi</i>	CSC	Forest and woodland, in burned-over areas with standing dead trees, in taiga, subalpine coniferous forest and mixed coniferous-deciduous forest. Also swampy edges of lakes, marshy streams, backwaters of rivers.	Summer-DFR, MHC, MHW, PPN, SMC. Migrant-BOP	Potentially occur within suitable habitat.
Red-winged blackbird <i>Agelaius phoeniceus</i>	CSC	Fresh-water marshes of cattails, tule, bulrushes, and sedges. Nests in vegetation of marshes or thickets.	Yearlong-AGS	Potentially occur within suitable habitat.
Yellow-headed blackbird <i>Xanthocephalus xanthocephalus</i>	CSC	Fresh-water marshes of cattail, tule, or bulrushes. Nests in wet grasses, reeds, cattails. Also in open cultivated lands, pastures and fields.	Yearlong-WAT. Summer-AGS	Potentially occur within suitable habitat.
Tricolored blackbird <i>Agelaius tricolor</i>	BLM-S, CSC	Fresh-water marshes of cattails, tule, bulrushes, and sedges. Nests in vegetation of marshes or thickets, sometimes nests on the ground. Historically strongly tied to emergent marshes; in recent decades much nesting has shifted to non-native vegetation.	Yearlong-AGS	Potentially occur within suitable habitat.

Table 7.4.3-1. (continued)

Common Name / Scientific Name	Status ¹	Suitable Habitat Type	Temporal and Spatial Distribution ²	Occurrence in Project Vicinity
BIRDS (continued)				
Black swift <i>Cypseloides niger</i>	CSC	Nests in moist crevices or caves, or on cliffs near waterfalls in deep canyons. Forages widely over many habitats.	Summer-AGS, BAR, BOP, BOW, DFR, MCP, MHC, MHW, PPN, SMC, WAT	Potentially occur within suitable habitat.
Vaux's swift <i>Chaetura vauxi</i>	CSC	Found in mature forests but also forages and migrates over open country.	Summer-BOP, DFR, MCP, MHC, MHW, PPN, SMC, WAT	Potentially occur within suitable habitat.
Black-backed woodpecker <i>Picoides arcticus</i>	MIS	Associated with boreal and montane coniferous forests, especially in areas with standing dead trees such as burns, bogs, and windfalls; less frequently in mixed forest	Yearlong-SMC, MHC	Potentially occur within suitable habitat.
Hairy woodpecker	MIS	Found in mixed conifer and riparian deciduous habitat from sea level to 9000ft.	Yearlong-MHC, MHW	Potentially occur within suitable habitat.
MAMMALS				
Broad-footed mole <i>Scapanus latimanus</i>	CSC	Prefers moist, fairly rich soils with little vegetation.	Yearlong-AGS, BOP, BOW, DFR, MHC, MHW, PPN, SMC	Potentially occur within suitable habitat.
Yuma myotis <i>Myotis yumaensis</i>	BLM-S	Found in a wide variety of upland and lowland habitats, including riparian, desert scrub, moist woodlands, and forests, but usually found near open water. Flies low. Nursery colonies usually are in buildings, caves and mines, and under bridges.	Yearlong-AGS, BOP, BOW, DFR, MCP, MHC, MHW, PPN, SMC. Summer-WAT	Potentially occur within suitable habitat.
Long-eared myotis <i>Myotis evotis</i>	BLM-S	Mostly forested areas, especially those with broken rock outcrops; also shrubland, over meadows near tall timber, along wooded streams, over reservoirs. Often roosts in buildings, also in hollow trees, mines, caves, fissures, etc.	Yearlong-BAR, BOP, BOW, DFR, MCP, MHC, MHW, PPN, SMC, WAT	Potentially occur within suitable habitat.
Fringed myotis <i>Myotis thysanodes</i>	BLM-S	Primarily at middle elevations in desert, grassland, and woodland habitats. Roosts in caves, mines, rock crevices, buildings, and other protected sites. Nursery colonies occur in caves, mines, and sometimes buildings.	Yearlong-AGS, BAR, BOP, BOW, DFR, MCP, MHC, SMC. Summer-MHW, PPN, WAT	Potentially occur within suitable habitat.
Western red bat <i>Lasiurus blossevillei</i>	CSC, FSS	Roosts in foliage, forages in open areas (sea level up through mixed conifer forests).	Yearlong-AGS, BOP, BOW, MCP, MHC. Summer-DFR, MHW, PPN, SMC, WAT	Potentially occur within suitable habitat: two occurrences within Project Vicinity quads on CNDDDB.
Western small-footed myotis <i>Myotis ciliolabrum</i>	BLM-S	Generally inhabits desert, badland, and semiarid habitats: more mesic habitats in southern part of range. Maternity colonies often are in abandoned houses, barns, or similar structures.	Yearlong-AGS, BAR, BOP, BOW, MCP, MHC, MHW, PPN, SMC. Summer-WAT	Potentially occur within suitable habitat.
Spotted bat <i>Euderma maculatum</i>	BLM-S, CSC	Possibly occupies coniferous stands in summer and migrates to lower elevations in late summer/early fall.	Yearlong-AGS, BOP, BOW, MCP, MHC, PPN, SMC, WAT	Potentially occur within suitable habitat.
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	BLM-S, CSC, FSS	Maternity and hibernation colonies typically are in caves and mine tunnels. Prefers relatively cold places for hibernation, often near entrances and in well-ventilated areas.	Yearlong-BAR, BOP, BOW, DFR, MCP, MHC, MHW, PPN, SMC. Summer-AGS, WAT	Potentially occur within suitable habitat.
Pallid bat <i>Antrozous pallidus</i>	BLM-S, CSC, FSS	Arid deserts and grasslands, often near rocky outcrops and water. Less abundant in evergreen and mixed conifer woodland. Usually roosts in rock crevice or building, less often in cave, tree hollow, mine, etc.	Yearlong-AGS, BAR, BOP, BOW, DFR, MCP, MHC, MHW, PPN, SMC. Sumer-WAT	Potentially occur within suitable habitat: one occurrence within Project Vicinity quads on CNDDDB.

Table 7.4.3-1. (continued)

Common Name / Scientific Name	Status ¹	Suitable Habitat Type	Temporal and Spatial Distribution ²	Occurrence in Project Vicinity
MAMMALS (continued)				
Western mastiff bat <i>Eumops perotis</i>	BLM-S, CSC	Roosts in crevices and shallow caves on the sides of cliffs and rock walls, and occasionally buildings. Roosts usually high above ground with unobstructed approach. Most roosts are not used throughout the year. May alternate between different day roosts.	Yearlong-AGS, BAR, BOP, BOW, MCP, MHC, MHW, PPN	Potentially occur within suitable habitat.
Black-tailed jackrabbit <i>Lepus californicus bennettii</i>	CSC	Open plains, fields, and deserts; open country with scattered thickets or patches of shrubs.	Yearlong-AGS, BOP, BOW, DFR, MCP, MHC, MHW, PPN, SMC	Potentially occur within suitable habitat.
Sierra Nevada snowshoe Hare <i>Lepus americanus tahoensis</i>	CSC	Montane riparian habitats (5,000–8,000 ft)	Yearlong-DFR, SMC	Potentially occur within suitable habitat.
Northern flying squirrel <i>Glaucomys sabrinus</i>	CSC, FSS, MIS	Coniferous and mixed forest, but will utilize deciduous woods and riparian woods.	Yearlong-BOP, BOW, DFR, MHC, MHW, PPN, SMC	Potentially occur within suitable habitat.
Sierra marten <i>Martes Americana sierra</i>	FSS, MIS	Mixed evergreen forest with > 40% crown closure.	Yearlong-BAR, DFR, MHC, PPN, SMC	Potentially occur within suitable habitat: one occurrence within Project Vicinity quads on CNDDDB.
Pacific fisher <i>Martes pennant (pacific)</i>	BLM-S, CSC, FWS-FC, FSS	Dense coniferous or mixed forests and successional forest with dense overhead cover, especially when associated with riparian areas. Use hardwood stands in summer but prefer coniferous or mixed forests in winter.	Yearlong-DFR, MHC, PPN, SMC	Potentially occur within suitable habitat: one occurrence within Project Vicinity quads on CNDDDB.
Mule Deer	MIS	Early to intermediate successional stages of most forest, woodland, and brush habitats interspersed with herbaceous openings, dense brush or tree thickets, riparian areas, and abundant edge.	Yearlong-AGS, BOP, BOW, DFR, MCP, MHC, MHW. Summer-PPN, SMC	Potentially occur within suitable habitat.
American badger <i>Taxidea taxus</i>	CSC	Prefers open areas and may also frequent brushlands with little groundcover. When inactive, occupies underground burrow.	Yearlong-AGS, BAR, BOP, BOW, DFR, MCP, MHC, MHW, PPN, SMC	Potentially occur within suitable habitat.
Sierra Nevada mountain beaver <i>Aplodontia rufa californica</i>	CSC	Dense riparian-deciduous and open, brushy stages of most forest types	Yearlong-MCH, MHC, SMC	Potentially occur within suitable habitat.

Sources: CDFG 2009b, c, d, f, g; Humple and Geupel 2004; NatureServe 2009; USFS 2008; USFWS 2009

¹ Status:

- FSS = Forest Service Sensitive Species (CDFG 2009b, c);
- MIS = Forest Service Management Indicator Species (USFS 2008)
- BLM-S = BLM Sensitive Species (BLM 2006; CDFG 2009b, c)
- CSC = California Species of Special Concern (CDFG 2009b, c)
- CDF-S = CDF Sensitive Species (CDFG 2009b, c)
- FWS-FC = Federal Candidate Species (CDFG 2009b, c; USFWS 2008)
- HARVEST = Harvestable Species (CDFG 2009b)

² CWHR Habitat Types:

- AGS = Annual Grass
- BAR = Barren

- BOP = Blue Oak Foothill Pine
- BOW = Blue Oak Woodland
- DFR = Douglas Fir
- MCH = Mixed Chaparral
- MCP = Montane Chaparral
- MHC = Montane Hardwood Conifer
- MHW = Montane Hardwood
- PPN = Ponderosa Pine
- SMC = Sierran mixed Conifer
- URB = Urban
- WAT = Lacustrine and Riverine (Water)

Table 7.4.4-1. Commercially valuable wildlife species occurring or potentially occurring in the Project Vicinity.

Common Name / Scientific Name	Suitable Habitat Type	Temporal and Spatial Distribution ²	Occurrence in Project Vicinity
BIRDS			
Snow goose <i>Chen caerulescens</i>	Freshwater wetlands, wet prairies and extensive sandbars, foraging in pastures, cultivated lands and flooded fields	Winter-AGS, WAT	Potentially occur within suitable habitat.
Ross's goose <i>Chen rossii</i>	Marshy lakes, wet prairies, foraging in grassy areas, pastures and cultivated fields	Winter-AGS, WAT	Potentially occur within suitable habitat.
Canada goose <i>Branta canadensis</i>	Overhead while migrating, marshes with tall grass and sedges near water	Yearlong-AGS, URB, WAT	Potentially occur within suitable habitat.
Wood duck <i>Aix sponsa</i>	Inland waters near woodlands such as swamps and marshes	Yearlong-BOP, BOW, DFR, MHW, SMC, PPN, MHC, WAT	Potentially occur within suitable habitat.
Blue grouse ¹ <i>Dendragapus obscurus</i>	Mixed forests dominated by Black Oak, Lodgepole Pine, Red Fir, Mountain Hemlock and White Pine dominated forest from 1200 ft to 7500 ft elevation	Yearlong-MHC, SMC, PPN, WFR, SCN	Potentially occur within suitable habitat.
California quail ¹ <i>Callipepla californica</i>	Lower elevations and transition zone of mixed conifer forest between 1200 and 7000 ft elevation	Yearlong-AGS, BOP, BOW, DFR, MCH, MCP, MHC, MHW, PPN, SMC	Potentially occur within suitable habitat.
Greater white-fronted goose ¹ <i>Anser albifrons</i>	Wetlands, grain fields, grassy fields, marshes, lakes and ponds. Breeds on arctic tundra on edge of marshes, lakes, sloughs, rivers	Yearlong-AGS, WAT	Potentially occur within suitable habitat.
Northern pintail <i>Anas acuta</i>	Lakes, rivers, marshes and ponds in grasslands, barrens, dry tundra, open boreal forest, or cultivated fields. Most breeding associated with seasonal and semi-permanent wetlands.	Yearlong-AGS, WAY. Winter-WAT	Potentially occur within suitable habitat.
Gadwall <i>Anas strepera</i>	Open water on lakes, ponds, reservoirs and backwaters	Yearlong-AGS, WAT	Potentially occur within suitable habitat.
Redhead ¹ <i>Aythya americana</i>	Open water on lakes, ponds and reservoirs	Winter-WAT	Potentially occur within suitable habitat.
American wigeon <i>Anas americana</i>	Open water on lakes, ponds, reservoirs and backwaters	Yearlong-AGS, WAT	Potentially occur within suitable habitat.
Eurasian wigeon <i>Anas penelope</i>	Winters primarily in freshwater (marshes, lakes) and brackish situations in coastal areas but migrates extensively through inland regions; occurs in shallow water and fields and meadows.	Winter-AGS, WAT	Potentially occur within suitable habitat.
Mallard <i>Anas platyrhynchos</i>	Primarily shallow waters such as ponds, lakes, marshes, and flooded fields.	Yearlong-AGS, WAT	Potentially occur within suitable habitat.
Bufflehead <i>Bucephala albeola</i>	Lakes, ponds, rivers and seacoasts. Breeds in tree cavities in mixed coniferous-deciduous woodland near lakes and ponds.	Yearlong-WAT	Potentially occur within suitable habitat.
Cinnamon teal <i>Anas cyanoptera</i>	Shallow open water on lakes, ponds, reservoirs and in marshes	Summer-AGS. Yearlong-WAT	Potentially occur within suitable habitat.
Northern shoveler <i>Anas clypeata</i>	Open water on lakes, ponds and reservoirs	Yearlong-AGS, WAT	Potentially occur within suitable habitat.
Green-winged teal <i>Anas crecca</i>	Open water on lakes, ponds, reservoirs and in marshes.	Yearlong-AGS, WAT. Winter-WAT	Potentially occur within suitable habitat.
Blue-winged teal <i>Anas discors</i>	Open water on lakes, ponds, reservoirs and in Marshes.	Yearlong-WAT. Summer-AGS	Potentially occur within suitable habitat.
Canvasback <i>Aythya valisineria</i>	Open water on lakes, ponds, reservoirs, and Marshes.	Winter-WAT	Potentially occur within suitable habitat.
Ring-necked duck <i>Aythya collaris</i>	Open water on lakes, ponds, and reservoirs.	Winter-WAT	Potentially occur within suitable habitat.

Table 7.4.4-1. (continued)

Common Name / Scientific Name	Suitable Habitat Type	Temporal and Spatial Distribution ²	Occurrence in Project Vicinity
BIRDS (continued)			
Lesser scaup <i>Aythya affinis</i>	Open water on lakes, ponds and reservoirs.	Winter-WAT	Potentially occur within suitable habitat.
Greater scaup <i>Aythya marila</i>	Open water and on emergent wetlands. Breeds primarily in tundra and northern borders of the taiga.	Summer-AGS. Yearlong-WAT	Potentially occur within suitable habitat.
Common goldeneye <i>Bucephala clangula</i>	Open water on lakes, ponds and reservoirs.	Winter-WAT	Potentially occur within suitable habitat.
Barrow's goldeneye ¹ <i>Bucephala islandica</i>	Open water on lakes, ponds and reservoirs	Yearlong-WAT	Potentially occur within suitable habitat.
Harlequin duck <i>Histrionicus histrionicus</i>	Nests along fast-moving rivers and mountain streams on rocky islands or rocky banks.	Yearlong-WAT	Potentially occur within suitable habitat.
Hooded merganser <i>Mergus cucullatus</i>	Open water on lakes, ponds and reservoirs.	Winter-WAT	Potentially occur within suitable habitat.
Common merganser <i>Mergus merganser</i>	Open water on lakes, ponds and reservoirs.	Yearlong-WAT	Potentially occur within suitable habitat.
Red-breasted merganser <i>Mergus serrator</i>	Open water on lakes, ponds and reservoirs.	Winter-WAT	Potentially occur within suitable habitat.
Ruddy duck <i>Oxyura jamaicensis</i>	Open water on lakes, ponds, reservoirs and Marshes.	Yearlong-WAT	Potentially occur within suitable habitat.
Ring-necked pheasant <i>Phasianus colchicus</i>	Open country (especially cultivated areas, scrubby wastes, open woodland and edges of woods), grassy steppe, desert oases, riverside thickets, swamps and open mountain forest.	Yearlong-AGS, BOP	Potentially occur within suitable habitat.
Wild turkey <i>Meleagris gallopavo</i>	Pinyon-Juniper woodlands.	Yearlong-AGS, BOP, BOW, MCH, MCP, MHC, MHW, PPN. Summer-SMCI	Potentially occur within suitable habitat.
Band-tailed pigeon <i>Columba fasciata</i>	Lower elevations and transition zone of mixed conifer forest between 1200 and 5500 ft elevation.	Yearlong-MHC, MHW, PPN. Winter-BOP, BOW. Summer-MCP, SMC	Potentially occur within suitable habitat.
Mountain quail ¹ <i>Oreortyx pictus</i>	Mixed forests dominated by Black Oak, Lodgepole Pine, Red Fir, Mountain Hemlock and White Pine dominated forest from 1200 ft to 7500 ft elevation and mountain Chaparral.	Yearlong-AGS, DFR, MCP, MHC, MHW, PPN, SMC. Winter-BOP	Potentially occur within suitable habitat.
Common moorhen <i>Gallinula chloropus</i>	Freshwater marshes, canals, quiet rivers, lakes, ponds, mangroves, primarily in areas of emergent vegetation and grassy borders.	Yearlong-WAT	Potentially occur within suitable habitat.
American coot <i>Fulica americana</i>	Open water areas, along lake shores and stream edges, and in marshes.	Winter-AGS. Yearlong-WAT	Potentially occur within suitable habitat.
Mourning dove <i>Zenaida macroura</i>	Lower elevations and transition zone of mixed conifer forest between 1200 and 5500 ft elevation.	Yearlong-AGS, BOP, BOW, DFR, MHC, SMC. Summer-MCP, MHW, PPN	Potentially occur within suitable habitat
American crow <i>Corvus brachyrhynchos</i>	Open and partly open country: agricultural lands, suburban areas, orchards, and tidal flats.	Yearlong-AGS, BOP, BOW, DFR, MHW, WAT. Migrant-MHC, PPN, SMC	Potentially occur within suitable habitat.

Table 7.4.4-1. (continued)

Common Name / Scientific Name	Suitable Habitat Type	Temporal and Spatial Distribution ²	Occurrence in Project Vicinity
MAMMALS			
Virginia opossum <i>Didelphis virginiana</i>	Very adaptable; may be found in most habitats. Prefers wooded riparian habitats. Also in suburban areas. Abandoned burrows, buildings, hollow logs, and tree cavities are generally used for den sites.	Yearlong-AGS, BOP, BOW, DFR, MCP, MHC, MHW, PPN, SMC	Potentially occur within suitable habitat.
Desert cottontail <i>Sylvilagus audubonii</i>	Various habitats; dry uplands as well as low valleys and canyons. May inhabit open grasslands, brushlands, edges of foothill woodlands, willow thickets, sometimes in cultivated fields or under buildings.	Yearlong-AGS, BOP, BOW. Summer-MCP	Potentially occur within suitable habitat.
Black-tailed jackrabbit ¹ <i>Lepus californicus bennettii</i>	Open plains, fields, and deserts; open country with scattered thickets or patches of shrubs.	Yearlong-AGS, BOP, BOW, MCH, MHW, CRC, URB. Summer-MRI	Potentially occur within suitable habitat.
American beaver <i>Castor canadensis</i>	Readily occupy artificial ponds, reservoirs, and canals if food is available.	Yearlong-AGS, BOW, MCP, MHC, SMC, WAT	Potentially occur within suitable habitat.
Common muskrat <i>Ondatra zibethicus</i>	Fresh or brackish marshes, lakes, ponds, swamps, and other bodies of slow-moving water. Rare or absent in artificial impoundments with fluctuating water levels.	Yearlong-WAT	Potentially occur within suitable habitat.
Coyote <i>Canis latrans</i>	Wide range of habitats in its extensive range, from open prairies of the west to the heavily forested areas of the Northeast; sometimes found in cities.	Yearlong-AGS, BAR, BOP, BOW, DFR, MCP, MHC, MHW, PPN, SMC	Potentially occur within suitable habitat.
Gray fox <i>Urocyon cinereoargenteus</i>	Often found in woodland and shrubland in rough, broken country.	Yearlong-AGS, BOP, BOW, DFR, MCP, MHC, MHW, PPN, SMC	Potentially occur within suitable habitat.
Raccoon <i>Procyon lotor</i>	Various habitats; usually in moist situations, often along streams and shorelines.	Yearlong-AGS, BOP, BOW, DFR, MCP, MHC, MHW, PPN, SMC, WAT	Potentially occur within suitable habitat.
Ermine <i>Mustela erminea</i>	Prefers wooded areas with thick understory near watercourses. Rarely occurs in heavily forested regions.	Yearlong-DFR, MCP, MHC, MHW, PPN, SMC	Potentially occur within suitable habitat.
Long-tailed weasel <i>Mustela frenata</i>	Wide variety of habitats, usually near water. Favored habitats include brushland and open woodlands, field edges, riparian grasslands, swamps, and marshes.	Yearlong-AGS, BOP, BOW, DFR, MCP, MHC, MHW, PPN, SMC	Potentially occur within suitable habitat.
American mink <i>Mustela vison</i>	Favors forested permanent or semi permanent wetlands with abundant cover, marshes, and riparian zones.	Yearlong-WAT	Potentially occur within suitable habitat.
Western spotted skunk <i>Spilogale gracilis</i>	Brushy canyons, rocky outcrops on hillsides and walls of canyons.	Yearlong-AGS, BOP, BOW, DFR, MCP, MHC, MHW, PPN, SMC	Potentially occur within suitable habitat.
Striped skunk <i>Mephitis mephitis</i>	Semi-open country with woodland and meadows interspersed, brushy areas, bottomland woods. Frequently found in suburban areas.	Yearlong-AGS, BOP, BOW, DFR, MCP, MHC, MHW, PPN, SMC	Potentially occur within suitable habitat.
Douglas' squirrel <i>Tamiasciurus douglasii</i>	Coniferous forests, in upper pine belt and in fir, spruce, and hemlock forests.	Yearlong-DFR, MHC, MHW, PPN, SMC	Potentially occur within suitable habitat.
Western gray squirrel <i>Sciurus griseus</i>	Dependent upon mature stands of mixed conifer and oak habitats, closely associated with oaks.	Yearlong-BOP, BOW, DFR, MCP, MHC, MHW, PPN, SMC	Potentially occur within suitable habitat.
Black bear <i>Ursus americanus</i>	Occur in fairly dense, mature stands of many forest habitats mostly above 3000 feet elevation, and feed in a variety of habitats including brushy stands of forest, valley foothill riparian and wet meadows.	Yearlong-AGS, BOP, DFR, MCP, MHC, MHW, PPN, SMC. Summer-WAT. Migrant-WAT	Potentially occur within suitable habitat.
American badger ¹ <i>Taxidea taxus</i>	Prefers open areas and may also frequent brushlands with little groundcover. When inactive, occupies underground burrow.	Yearlong-AGS, BAR, BOP, BOW, DFR, MCP, MHC, MHW, PPN, SMC	Potentially occur within suitable habitat.
Mule deer ¹ <i>Odocoileus hemionus</i>	Early to intermediate successional stages of most forest, woodland, and brush habitats interspersed with herbaceous openings, dense brush or tree thickets, riparian areas, and abundant edge.	Yearlong-AGS, BOP, BOW, DFR, MCP, MHC, MHW. Summer-PPN, SMC	Potentially occur within suitable habitat.

Table 7.4.4-1. (continued)

Common Name / Scientific Name	Suitable Habitat Type	Temporal and Spatial Distribution ²	Occurrence in Project Vicinity
MAMMALS (continued)			
Bobcat <i>Felis rufus</i>	Various habitats including deciduous-coniferous woodlands and forest edge, hardwood forests, swamps, forested river bottomlands, brushlands, deserts, mountains, and other areas with thick undergrowth.	Yearlong-AGS, BOP, BOW, DFR, MCP, MHC, MHW, PPN, SMC	Potentially occur within suitable habitat.
Wild pig <i>Sus scrofa</i>	Densely forested mountainous terrain, brushlands, dry ridges, swamps; sometimes in fields, marshes. Often in mixed hardwood forest with permanent water source. Seasonal changes in habitat use are linked to food availability.	Yearlong-AGS, BOP, BOW, DFR, MCP, MHC, MHW, PPN, SMC	Potentially occur within suitable habitat.

Sources: CDFG 2009b, c; NatureServe 2009

¹ Special-Status Species (see table 7.4.3-1)

² CWHR Habitat Types:

- AGS = Annual Grass
- BAR = Barren
- BOP = Blue Oak Foothill Pine
- BOW = Blue Oak Woodland
- DFR = Douglas Fir
- MCH = Mixed Chaparral
- MCP = Montane Chaparral
- MHC = Montane Hardwood Conifer
- MHW = Montane Hardwood
- PPN = Ponderosa Pine
- SMC = Sierran mixed Conifer
- URB = Urban
- WAT = Lacustrine and Riverine (Water)

Table 7.4.5-1. Special-status species identified in the Yuba Accord FEIR/EIS as having the potential to occur within, and be affected by the Yuba Accord Proposed Project/Action alternatives.

Common Name	Status	Habitat Associations ¹	Notes
American white pelican <i>Pelecanus erythrorhynchos</i>	CSC, CAL	FAL, FEW, SEW	Nests on lakes and reservoirs throughout California. Forages within lakes, rivers, reservoirs, and larger farm ponds.
American peregrine falcon <i>Falco peregrinus anatum</i>	D, CE, FP	All habitat types	Nests near water.
Bald eagle <i>Haliaeetus leucocephalus</i>	T, CE, CAL	FAL, FEW, SEW, FRF, CRF, ORF	Primary nesting near reservoirs; rivers utilized for foraging
Bank swallow <i>Riparia riparia</i>	CT	FRF, CRF, ORF	Found in sandy vertical bluffs or riverbanks
Black-crowned night heron <i>Nycticorax nycticorax</i>	CAL	FAL, FEW, SEW, FRF, CRF, ORF	Common year-round resident of the Sacramento Valley.
Black tern <i>Chlidonias niger</i>	CSC, CAL	FAL, FEW	Spring and summer visitor to fresh emergent wetlands.
California black rail <i>Laterallus jamaicensis coturniculus</i>	CT, FP, CAL	FAL, FEW, SEW	Inhabits saltwater, brackish, and freshwater marshes.
Cooper's hawk <i>Accipiter cooperii</i>	CSC	FAL, OAV, FEW, FRF, CRF, ORF, POW, BOW, NNG	Nesting and foraging typically occur near open water or riparian vegetation.
Double-crested cormorant <i>Phalacrocorax auritus</i>	CSC	FAL, FEW, SEW, FRF, CRF, ORF	Forages within reservoirs, lakes, and rivers.
Great blue heron <i>Ardea herodias</i>	CAL	FAL, FEW, SEW, FRF, CRF, ORF	Typically utilizes slow moving areas of rivers, lake edges, marshes, saltwater sea coasts and swamps.
Great egret <i>Ardea alba</i>	SB, CAL	FAL, FEW, SEW, FRF, CRF, ORF	Forages within marshes, lake margins, rivers, and streams.
Greater sandhill crane <i>Grus canadensis tabida</i>	CT, FP	FAL, FEW	Found in wet meadows interspersed with emergent marsh; nests in open habitats.
Long-eared owl <i>Asio otus</i>	CSC	FRF, CRF, ORF, POW, BOW	Uncommon winter visitor to the Central Valley. Nests in riparian areas.
Northern harrier <i>Circus cyaneus</i>	CSC	FAL, FEW, SEW, NNG	Nests in wetland and riparian areas.
Osprey <i>Pandion haliaetus</i>	CSC, SB	FEW, FRF, CRF, ORF	Requires open, clear waters for foraging.
Ringtail <i>Bassariscus astutus</i>	FP	FRF, CRF, ORF, POW, BOW, NNG, MIC, MOH, CHA	Occurs within riparian areas of Northern California and the Sierra Nevada foothills.
Snowy egret <i>Egretta thula</i>	SB, CAL	FAL, FEW, SEW, FRF, CRF, ORF	Forages within emergent wetlands, ponds, rivers, lakes, irrigation ditches, and areas of saturated soil, including rice fields.
Swainson's hawk <i>Buteo swainsoni</i>	CT	FAL, FEW, FRF, CRF, ORF, POW, BOW, NNG	Nests primarily in riparian forests adjacent to grasslands suitable for foraging.
Tri-colored blackbird <i>Agelaius tricolor</i>	No listing provided in FEIR/EIS, but species was included in document	FEW, FRF, CRF, ORF	Requires open water, protected nesting substrate, and foraging area with insect prey within a few kilometers of colony.
Western yellow-billed cuckoo <i>Coccyzus americanus occidentalis</i>	C, CE	OAV, FRF, CRF, ORF	Breeds primarily in mature cottonwoods and willows

Table 7.4.5-1. (continued)

Common Name	Status	Habitat Associations ¹	Notes
White-faced ibis <i>Plegadis chihi</i>	CSC, CAL	FAL, FEW	Nests and feeds in riparian areas.
White-tailed kite <i>Elanus leucurus</i>	SC, FP	FAL, NNG, FEW, FRF, CRF, ORF	Some foraging within wetland and riparian areas.
Yellow warbler <i>Dendroica petechia brewsteri</i>	CSC	FRF, CRF, ORF, POW, BOW	Nests and feeds in riparian areas.
Yellow-breasted chat <i>Icteria virens</i>	CSC	FEW, FRF, CRF, ORF	Uncommon summer resident in valley foothill riparian in the foothills of the Sierra Nevada
Yellow-headed blackbird ³ <i>Xanthocephalus xanthocephalus</i>	S3S4 ²	FEW	Nests and feeds in wetland areas.
INSECTS			
Valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	T	FRF, CRF, ORF	Exclusively inhabits elderberry shrubs; often found in riparian forests
MAMMALS			
Ringtail <i>Bassariscus astutus</i>	FP	FRF, CRF, ORF, POW, BOW, NNG, MIC, MOH, CHA	Occurs within riparian areas of Northern California and the Sierra Nevada foothills.
Yuma myotis bat <i>Myotis yumanensis</i>	SC, CAL	OAV, FRF, CRF, ORF, POW, BOW	Distribution is closely tied to bodies of water.

Source: Proposed Lower Yuba River Accord FEIR/EIS. Terrestrial Resources. pp 11-8, 11-9

¹ Habitat Associations Definitions:

- BOW Blue oak woodland
- CHA Chaparral
- CRF Great valley cottonwood riparian forest
- FAL Seasonally flooded agricultural lands
- FEW Freshwater emergent wetlands
- FRF Valley foothill riparian forest
- MIC Mixed conifer
- MOH Montane hardwood
- N/A Species does not occur within one of the primary vegetative communities found within the study area
- NNG Non-native grassland
- OAV Orchards and vineyards
- ORF Great valley oak riparian forest
- POW Foothill pine-oak woodland
- SEW Saline emergent wetlands
- VEP Vernal pools

² Status specified for this species was not included in the special-status species criterion of the Yuba Accord FEIR/EIS. The designation S3S4 refers to the CNDDDB ranking codes that are intended to provide information about the status or of the taxon throughout its range and within California.

³ As of June 9, 2009, the CDFG Special Animals list indicates that this species is designated as a CSC.