3.2.4 Terrestrial Resources

This section discusses terrestrial resources potentially affected by the Project. The section is divided into five subsections. Section 3.2.4.1.1 discusses botanical resources which include vegetation types, plant species known to occur within the Project FERC Boundary, special-status plants[1], and non-native invasive plants (NNIP).[2] Section 3.2.4.1.2 discusses wildlife resources, including wildlife habitat. Section 3.2.4.1.3 discusses special-status wildlife.[3, 4] Section 3.2.4.1.4 discusses commercially-valuable wildlife species.[5] Section 3.2.4.1.5 discusses wetland, riparian and littoral habitats.

3.2.4.1 Affected Environment

3.2.4.1.1 Botanical Resources

This section describes the botanical resources that have been documented as present or the having the potential to be present within the FERC Project Boundary. Botanical resources discussed include vegetation communities/habitat types, NNIP, and special-status plant species.

Vegetation Communities

Vegetation communities in the FERC Project Boundary and adjacent 0.25 mile search buffer area were determined using *A Manual of California Vegetation* (Manual) (Sawyer et al. 2009). Communities were then assessed to see if any meet the definition of a special-status vegetation

[1] For the purpose of this document, a special-status botanical species is a species that has a reasonable possibility of being affected by Project O&M and meets one or more of the following criteria: 1) listed by the Sacramento, CA, USFWS as a Species of Concern (USFWS-S); 2) listed on CDFW's list of California Rare (SR) species under the Native Species Plant Protection Act; 3) listed as threatened or endangered under CESA; or 4) listed on the California Native Plant Society's (CNPS) Inventory of Rare and Endangered Plants as a California Rare Plant Rank (CRPR). Botanical species listed as threatened or endangered, or a candidate or proposed for listing, under the ESA are discussed in Section 3.2.5.

[2] For the purpose of this document, an NNIP is a plant species that has a reasonable possibility of being affected by Project O&M and meets one or more of the following criteria: 1) listed as a noxious weed by the California Department of Food and Agriculture (CDFA) with a rating of A or B; or 2) listed by the California Invasive Plant Council (Cal-IPC) as Cal-IPC status of High, Moderate, Limited, or Watch List. CDFA A-list species are mandated for eradication or control, B-list species are widespread plants that agricultural commissioners may designate for local control efforts. Cal-IPC defines High as species that have severe ecological impacts on the surrounding habitat; Moderate as species that have substantial and apparent, but generally not severe, ecological impacts on the surrounding habitat; and Limited as species that are invasive, but their ecological impacts are minor on a statewide level. These species may be locally persistent and problematic. Cal-IPC Watch List species are species predicted to become invasive if no further actions are taken. Distribution may range from limited to widespread in specific regions (CDFA 2020, Cal-IPC 2020).

[3] For the purpose of this document, a special-status wildlife species is a species that has a reasonable possibility of being affected by Project O&M and meets one or more of the following criteria: 1) protected under the Bald and Golden Eagle Protect Act; 2) designated by CDFW as a Species of Special Concern (SSC); 3) listed as threatened or endangered, or a candidate for listing under CESA; or 4) listed as Fully Protected under California law. Wildlife species listed as threatened or endangered, or a candidate or proposed for listing, under the ESA are discussed in Section 3.2.5.

[4] Aquatic reptiles, mollusks and snails are discussed in Section 3.2.3.

[5] For the purpose of this document, a commercially-valuable wildlife species is a species that has a reasonable possibility of being affected by Project O&M and is listed as a 'Harvest species' by CDFW, that is, "*game birds (Fish and Game Code § 3500); Game Mammals (Fish and Game Code § 3950) and Fur-bearing Mammals and Non-game animals as designated in the California Code of Regulations*" (CDFW 2016).

community, which CDFW ranks as S1,[6] S2,[7] or S3[8] per the NatureServe Heritage Program Status Ranking system (Faber-Langendoen et al. 2012). This combined area contains a mixture of blue oak woodland and interior coast live oak woodland with some areas comprised of an annual grassland with virtually no tree or shrub cover. These areas are dominated by non-native herbs and grasses, including ripgut grass (*Bromus diandrus*), red brome (*Bromus rubens*), smooth cat's-ear (*Hypochaeris glabra*), and tiny bedstraw (*Galium murale*). Some native species also occur, including wild hyacinth (*Dichelostemma multiflorum*), harvest brodiaea (*Brodiaea elegans* ssp. *elegans*), and peninsular onion (*Allium peninsulare* var. *peninsulare*).

Three vegetation communities, none of which are special-status vegetation communities, occur within the FERC Project Boundary. The most common vegetation communities are mixtures of blue oak woodland and interior coast live oak woodland with a moderately open canopy and an understory of annual grassland, or areas that are solely an annual grassland. The three Manual-described vegetation communities occur as a relatively continuous band and extend upstream to Englebright Dam and downstream to approximately 1,500 ft upstream of the confluence of the Yuba River and Deer Creek. The three Manual vegetation communities are:

- Annual Grassland/Rock Outcrop. This vegetation community is dominated by ripgut grass and red brome with some minor cover of herbs, including goldenback fern (*Pentagramma triangularis*) and elegant clarkia (*Clarkia unguiculata*) and scattered, isolated shrubs such as large-flowered orange monkeyflower (*Diplacus grandifloras*), California buckeye (*Aesculus californica*), and edible fig (*Ficus carica*). This habitat is co-dominated by non-native grasses and bare ground that constitute the majority of the habitat area. This vegetation community is located on a greater than 45 degree north facing slope with plants occurring on slope terraces between at the top (southern) end of the FERC Project Boundary and is 0.49 ac in size.
- Interior Coast Live Oak – Blue Oak – Foothill Pine Woodland/Grassland. This vegetation community is co-dominated by interior coast live oak (*Quercus wislizeni* var. *wislezeni*) and blue oak (*Quercus douglasii*), with marginally more cover of interior coast live oak and patchy cover of ghost pine (*Pinus sabiniana*) in the tree layer, and a closed to moderately open canopy. The shrub layer has isolated patches of California buckeye and large-flowered orange monkeyflower. The herb layer is primarily comprised of ripgut grass and red brome, with some cover of rose clover (*Trifolium hirtum*) and elegant clarkia. This vegetation community is located on a steep north facing slope with approximately a quarter of the area being bare rock, with terracing dominated by the plants mentioned above in the middle of the FERC Project Boundary and is 1.75 acres in size.

[6] CDFW defines a S1 special-status vegetation community as "*Critically imperiled and at a very high risk of extinction or elimination due to extreme rarity, very steep declines, or other factors.*"
[7] CDFW defines a S2 special-status vegetation community as "*Imperiled and at high risk of extinction or elimination due to a very restricted range, very few populations or occurrences, steep declines, or other factors.*"
[8] CDFW defines a S3 special-status vegetation community as "*Vulnerable and at moderate risk of extinction or elimination due to a restricted range, relatively few populations or occurrences, recent and widespread declines, or other factors.*"

- Interior Coast Live Oak – Blue Oak Woodland/Herbaceous Field. This vegetation community is co-dominated by interior coast live oak and blue oak, with occasional isolated ghost pines in the tree layer, and a closed to moderately open canopy. The shrub layer is largely absent, and the herb layer is dominated by non-native herbs and grasses, including ripgut grass, red brome, smooth cat's-ear, and two-corn false brome (*Brachypodium distachyon*). This vegetation community occurs on flatter slopes with less than a 45-degree angle, and bare ground is only marginally present at the southern portion of the FERC Project Boundary in between the annual grassland and the woodland described above and is 0.21 acre in size.

The remaining 0.47 ac within the FERC Project Boundary is composed of developed, open water and rock outgroup. The 0.16 ac of developed area includes buildings, concrete, and other impervious surfaces (e.g., Narrows 1 Powerhouse, tram, and associated buildings at the top and bottom of the FERC Project Boundary) with no cover of plant species. The 0.19 ac of open water are is comprised of the Yuba River extending from the Narrows 1 Powerhouse bulkhead to the county line in the center of the river. The 0.12 ac of rock outcrop includes exposed rock with no more than 1 percent cover of plant species and occurs in patches as an interface between the Yuba River and the adjacent cliffs just above and surrounding the Narrows 1 Powerhouse.

YCWA confirmed the results of its vegetation mapping exercise when qualified biologists conducted a botanical survey of the FERC Project Boundary, as described below. Further, during the survey, YCWA confirmed that soils in the FERC Project Boundary are generally within the Auburn-Sobrante-Rock outcrop complex, which are gypsum poor, slightly acidic, calcium carbonate poor, non-hydric, and with marginal clay content (NRCS 2020). These are essentially soils that are a semi-rocky to sandy with no special structural or chemical features, such as clay or mafic content, that usually provide a higher probability of hosting special-status plants.

Plant Species Found Within the Project FERC Boundary

YCWA qualified biologists conducted a botanical survey of the FERC Project Boundary on May 21, 2020, following *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (CDFW 2018). YCWA recorded 46 vascular plant species during the two site visits to the Project FERC Boundary. The plant species are listed and described in Attachment 3.2.4-1. None of the plant species are special-status.

Special-status Species with the Potential to Occur in the FERC Project Boundary

Prior to conducting the botanical survey, YCWA queried the online CNDDB and CNPS for special-status plants within the USGS 7.5-minute quadrangle that encompasses the FERC Project Boundary (Smartsville quadrangle), as well as, the surrounding 7.5-minute quadrangle maps (i.e., French Corral, Oregon House, and Rough and Ready). Three special status plant species have been documented to occur within the quandrangles: 1) Dwarf downingia (*Downingia pusilla*); 2) Chaparral sedge (*Carex xerophila*); and 3) Cantelow's lewisia (*Lewisia cantelovii*). However, YCWA's botanical survey of the FERC Project Boundary found that habitat for Dwarf

downingia and Chaparral sedge does not occur within the boundary, as described in Table 3.2.4-1.

Table 3.2.4-1. Special-status plant species determined to have no potential to occur in the proposed FERC Project Boundary.

Common Name/ *Scientific Name*	Status	Habitat Requirements	Potential for Occurrence in Project Boundary
Dwarf downingia / *Downingia pusilla*	CRPR 2B.2	Vernal pools and mesic grassland. Elevation: 0–1,460 feet. Blooming period: March–May	This species requires vernal pools, which do not occur on the Project.
Chaparral sedge / *Carex xerophila*	CRPR 1B.2	Serpentine and gabbro soils in chaparral, cismontane woodland, and lower montane coniferous forest. Elevation: 1,440–2,525 feet. Blooming period: March–June	Required soils are absent from the Project, and the Project is more than 500 feet below the known elevation range for this species.

Sources: CDFW 2020a; 2020b; CNPS 2020; USFWS 2020a

Status

CRPR 1B.2 = Plants rare, threatened, or endangered in California and elsewhere, moderately threatened in California

CRPR 2B.2 = Plants rare, threatened, or endangered in California, but more common elsewhere, moderately threatened in California

YCWA found that the FERC Project Boundary contains suitable habitat for Cantelow's lewisia. This species has a California Rare Plant Rank of 1B.2, meaning the species is rare everywhere in its range, but moderately rare in California. To assure that YCWA's botanist performing the survey within the FERC Project Boundary could identify this plant and that the plant was blooming during YCWA's survey, a known population of this species approximately 9 miles upstream of the Project Boundary on the Yuba River (CNDDB occurrence number 16) was visited on May 1, 2020. YCWA found individual Cantelow's lewisia in vegetative or budding condition at that location, indicating that it would be visible and identifiable when the survey at the FERC Project Boundary occurred.

Non-Native Invasive Plants

During YCWA's 2020 vegetation survey, 11 NNIP species with a Cal-IPC rating were located within the FERC Project Boundary. None has a rating under the CDFA. The only Cal-IPC High rated species is red brome. Eight are rated Moderate, including tall sock-destroyer (*Torilis arvensis*), rose clover, dissected geranium (*Geranium dissectum*), edible fig, wild oat (*Avena fatua*), two-corn false brome, ripgut grass, and bristly dogtail grass (*Cynosurus echinatus*). The two plants rated Limited are smooth-cat's ear and soft chess (*Bromus hordeaceus*).

3.2.4.1.2 Wildlife Habitat and Common Associated Species

YCWA crosswalked the three vegetation communities and other three land covers within the FERC Project Boundary (Section 3.2.4.1.1) into four California Wildlife Habitat Relationship (CWHR) habitat classifications, following the Manual. The CWHR classifications are: 1) annual grassland; 2) barren; 3) blue oak-foothill pine; and 4) and urban.[9] Life stages of terrestrial vertebrate wildlife potentially using these habitat classifications, based on a predictive model (CDFW 2014), were identified. Listed below are the 49 common wildlife species that associate

[9] Since such a small portion of the FERC Project Boundary consisted of urban, and there are few wildlife species associated with it, this CWHR vegetation classification was not run.

with and utilize annual grassland habitat, barren habitat, and blue oak-foothill pine habitat types, as identified by CWHR.

- **Annual grassland** – (19 common species) western fence lizard (*Sceloporus occidentalis*), western rattlesnake (*Crotalus oreganus*), western meadowlark (*Sturnella neglecta*), horned lark (*Eremophila alpestris*), American kestrel (*Falco sparverius*), killdeer (*Charadrius vociferus*), western bluebird (*Sialia mexicana*), American robin (*Turdus migratorius*), chipping sparrow (*Spizella passerina*), Yuma myotis (*Myotis yumanensis*), big brown bat (*Eptesicus fuscus*), bobcat (*Lynx rufus*), long-tailed weasel (*Mustela frenata*), black-tailed jacket rabbit (*Lepus californicus*), California ground squirrel (*Ostospermophilus beecheyi*), pocket gopher (*Thomomys talpoides*), western harvest mouse (*Reithrodontomys megalotis*), California vole (*Microtus californicus*), coyote (*Canis latrans*), and American badger (*Taxidea taxus*).
- **Barren –** (7 common species) western rattlesnake, turkey vulture (*Cathartes aura*), common raven (*Corvus corax*), white-tailed kite (*Elanus leucurus*), California ground squirrel, deer mouse (*Peromyscus maniculatus*), and coyote.
- **Blue oak-foothill pine and blue oak woodland** – (27 common species) northern alligator lizard (*Elgaria coerulea*), gophersnake (*Pituophis catenifer*), turkey vulture , sharp-shinned hawk (*Accipiter striatus*), cooper's hawk (*Accipiter cooperii*), red-tailed hawk (*Buteo jamaicensis*), wild turkey (*Meleagris gallopavo*), California quail (*Callipepla californica*), mourning dove (*Zenaida macroura*), great horned owl (*Strix nebulosa*), rufous hummingbird (*Selasphorus rufus*), acorn woodpecker (*Melanerpes formicivorus*), northern flicker (*Colaptes auratus*), western scrub jay (*Aphelocoma californica*), oak titmouse (*Baeolophus inornatus*), chestnut-backed chickadee (*Poecile rufescens*), Nashville warbler (*Oreothlypis ruficapilla*), yellow-rumped warbler (*Setophaga coronata*), fringed myotis (*Myotis thysanodes*), long-eared myotis (*Myotis volans*), silver-haired bat (*Lasionycteris noctivagans*), western gray squirrel (*Sciurus griseus*), striped skunk (*Mephitis mephitis*), black bear (*Ursus americanus*), gray fox (*Urocyon cinereoargenteus*), mountain lion (*Puma concolor*), and mule deer (*Odocoileus hemionus*).

3.2.4.1.3 Special-Status Wildlife

Based on review of YCWA documents (YCWA 2010, 2012a,b), CNDDB (CDFW 2020a), CWHR (CDFW 2014), the USFWS IPaC database (USFWS 2020a), and personal communications with YCWA O&M staff, two special-status wildlife species (American peregrine falcon, *Falco peregrinus anatum* and ring-tailed cat, *Bassariscus astutus*) are known to occur within the FERC Project Boundary.

A peregrine falcon nest occurs in an area where Project facilities are underground, and near to PG&E's Narrows Transmission Line, which is not part of the Narrows Hydroelectric Project. This nest is approximately 780 feet horizontally and 350 feet vertically from the Narrows 1 Powerhouse, in an area where no Project O&M activities occur. Figure 3.2.4-1 shows the location of the nest in relation to the FERC Project Boundary and Figure 3.2.4-2 shows the location of the nest from a view across the Yuba River. Both YCWA and CDFW have

documented American peregrine falcon in the area and use of the nests. On April 10, 2013, YCWA O&M staff observed a vocal adult American peregrine falcon in flight above the Narrows 2 Powerhouse, which is located about 1,000 upstream of the Narrows 1 Powerhouse. Shortly after the initial sighting, the individual was seen perched high on a cliff, located across the canyon from the Narrows 2 Powerhouse. The perch appeared to be a rock ledge with a few small shrubs (Figure 3.2.4-3). Whitewash was visible on the rock face immediately below the perch. Further, YCWA O&M staff said they had seen two adult American peregrine falcons, which had become increasingly vocal over the previous 2 weeks (T. Herman, pers comm., 2013). Prior to and following YCWA's December 2015 work, YCWA O&M staff observed an adult American peregrine falcon in flight vocalizing in the area, perching on both the high cliff across the canyon from the Narrows 2 Powerhouse as well as in the trees above the powerhouse. American peregrine falcons were observed vocalizing and flying near the Narrows 2 Powerhouse during YCWA's botanical surveys site surveys on May 21, 2020. In 2020, YCWA' O&M staff observed the American peregrine falcons on multiple occasions, including seeing courting behavior in February between two adult falcons, observing two chicks in the nest in late March and finally, seeing the chicks fledged from the nest in mid-June.

CDFW conducted breeding surveys at the known nest site in 2015 and 2016 and reported the nesting pair fledged two young (both males) in 2015 and three young (two males and one female) in 2016 (A. Milloy, pers. comm., 2017).

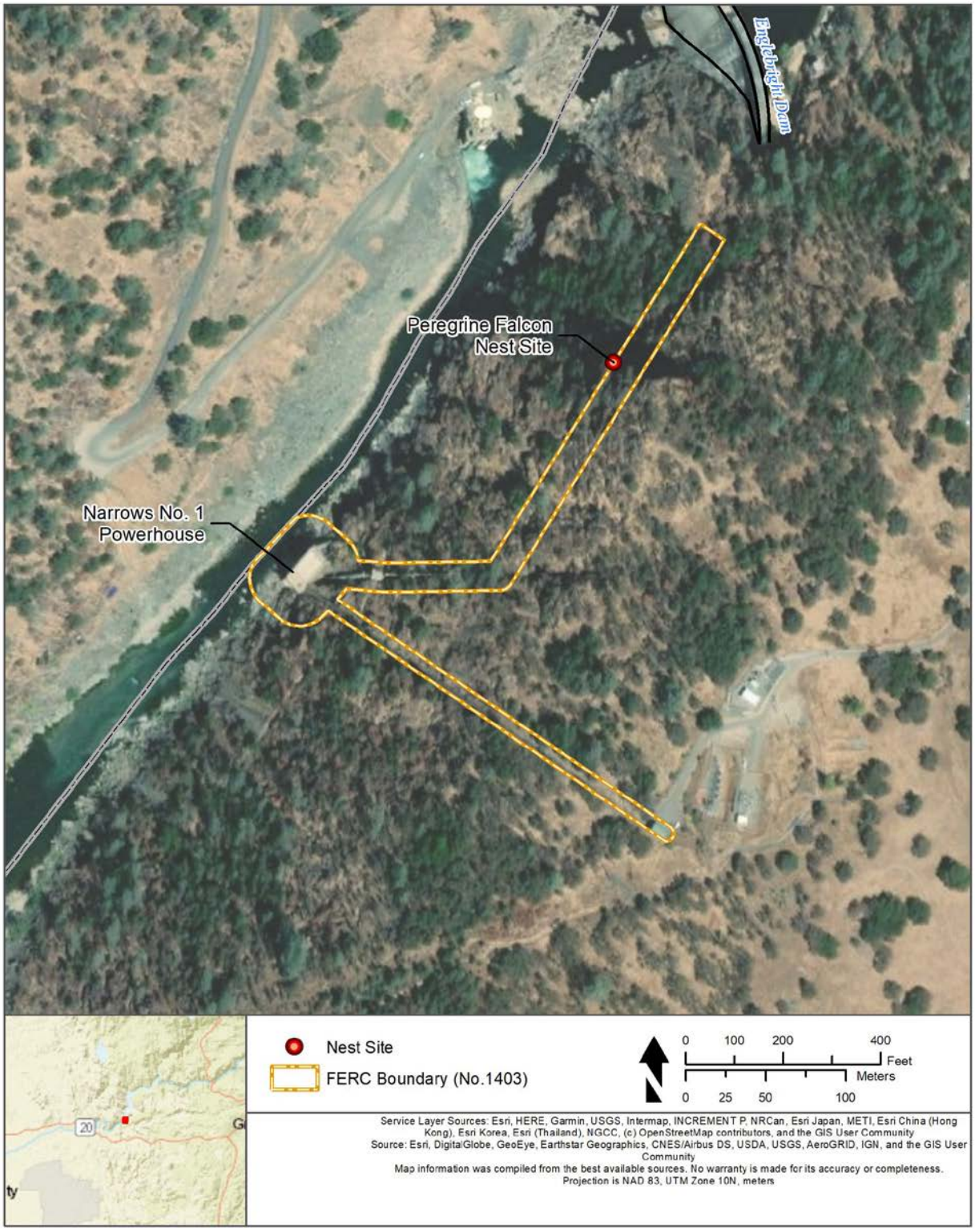

Figure 3.2.4-1. Location of American peregrine falcon nest within FERC Project Boundary (aerial background). There are no aboveground Project facilities in the area of the known nest.

Figure 3.2.4-2. Photograph of known American peregrine falcon nest adjacent to the Narrows 2 transmission line, within FERC Project Boundary (nest located in the crosshairs). Photograph taken from YCWA private access road to Narrows 2 Powerhouse near Englebright Dam across the Yuba River.

Ring-tailed cat is known to occur within the Project boundary, and YCWA is aware of their presence, especially around building structures such as powerhouses. In 2012, a documented sighting of a ring-tailed cat was observed by YCWA staff at the Narrows 2 Powerhouse and Switchyard on the opposite site of the Yuba River from Narrows 1 (P. Wade, pers comm. 2012). Another member of YCWA staff has observed ring-tailed cats on the premises of the Project and has also heard of three ring-tailed cat electrocutions at nearby, non-Project sites (J. Vander Meulen, pers comm. 2020). YCWA plans to incorporate the plans and mitigations in place for ring-tailed cats at Yuba River Development Project as part of the Narrows Hydroelectric Project.

While not documented to occur in the FERC Project Boundary, 15 special-status wildlife species have the potential to occur. These species include 12 birds and 3 mammals. Table 3.2.4-2 discusses each of these species.

Table 3.2.4-2 Special-status wildlife species with the potential to occur within the Project Boundary.

Common Name/ *Scientific Name*	Status	Habitat Requirements	Potential for Occurrence within the Project Boundary
BIRDS			
American white pelican / *Pelecanus erythrorhynchos*	SSC	Habitat includes rivers, lakes, reservoirs, estuaries, bays, and open marshes. Outside of nesting season (i.e., April to August), migrant flocks are often seen throughout California (NatureServe 2020).	Possible occurrence of this species would be as a summer transient.
Bald eagle/ *Haliaeetus leucocephalus*	SE	Requires large bodies of water containing populations of fish and waterfowl; nests usually located within one mile of key foraging areas; require large conifers in relatively secluded locations to build nests (NatureServe 2020).	May appear as a transient. Known from Englebright Reservoir (YCWA 2012, Cornell Lab 2020).
Black swift / *Cypseloides niger*	SSC	The black swift breeds locally in the Sierra Nevada and Cascade Range (Zeiner et al. 1988 – 1990). Nests are built of mud, mosses and algae in a cup-like structure in moist locations, behind or next to waterfalls, and wet cliffs with an unobstructed flight path (NatureServe 2020).	The Project does not contain waterfalls or wet cliffs. Possible occurrence of this species would be as a transient.
California black rail / *Laterallus jamaicensis coturniculus*	ST, SFP	Saline, brackish, and fresh emergent wetlands. Scarce, but true abundance difficult to determine due to small size and extremely secretive nature. Appears intermittently and sparingly at a few locations in the Sacramento Valley (CWHR 2014).	The Project does not contain wetlands. Possible occurrence of this species would be as a transient.
Golden eagle / *Aquila chrysaetos*	SFP	Sparse woodlands, grasslands, savannas, lower successional forest stages, and shrublands. Nesting occurs on rock ledges of cliffs, steep hillsides, or on the ground (NatureServe 2020)	No known nesting, but may be a transient species.
Grasshopper sparrow / *Ammodramus savannarum*	SSC	Prefers grassland habitat, but can also be found in old fields, savannas and shortgrass prairies. Breeding requires clumped vegetation of intermediate height, interspersed in grasslands (NatureServe 2020).	Possible transient, but not known to breed or nest.
Loggerhead shrike / *Lanius ludovicianus*	SSC	A common resident and winter visitor in lowland and foothills throughout California. This species prefers habitats that include open-canopied valley foothill hardwood, valley foothill hardwood-conifer, valley foothill riparian, pinyon-juniper (*Juniperus* spp.), juniper, desert riparian and Joshua tree (*Yucca brevifolia*) habitats (Zeiner et. al. 1988-1990).	Project provides marginal suitable habitat.
Northern harrier / *Circus cyaneus*	SSC	Suitable habitat for this species includes meadows, grasslands, open rangelands, desert sinks, and fresh and saltwater emergent wetlands (Zeiner et al. 1988 – 1990).	Some grassland habitat, but this species would most likely be a transient.
Purple martin/ *Progne subis*	SSC	Cavity nester in woodlands and mixed conifer forest habitat types near water (NatureServe 2020).	No occurrences of this species have been recorded, but possible transient.

Table 3.2.4-2. (continued)

Common Name/ *Scientific Name*	Status	Habitat Requirements	Potential for Occurrence within the Project Boundary
BIRDS (cont'd)			
Short-eared owl / *Asio flammeus*	SSC	Inhabits open areas nearly absent of trees, such as annual grasslands, prairies, dunes, meadows, irrigated lands, and saline and fresh emergent wetlands (Zeiner et al. 1988-1990).	This species is not known to breed or nest, but may appear as a transient species.
Swainson's hawk / *Buteo swainsoni*	ST	Large, flat, open landscapes such as agricultural fields for foraging with sparse trees for nesting (NatureServe 2020).	No known nesting but may be a transient species.
White-tailed kite / *Elanus leucurus*	SFP	Forage in undisturbed, open grasslands, meadows, farmlands, and emergent wetlands. Trees with dense canopies provide cover, and nests are usually placed near the top of dense oaks, willows, or other tree stands near foraging areas (Zeiner et al. 1988-1990).	Possible to occur as a transient species.
MAMMALS			
American badger/ *Taxidea taxus*	SSC	Open habitat types with friable soils (NatureServe 2020).	Grassland and blue oak woodlands support marginal foraging and denning habitat.
Townsend's big-eared bat / *Corynorhinus townsendii*	SSC	Roosts in buildings, mines, tunnels, and caves; feeds along habitat edges (0-10,365 feet) (CDFW 2020a).	Suitable habitat at Narrows 1 Powerhouse.
Western red bat/ *Lasiurus blossevillii*	SSC	Roosts in trees and sometimes woody shrubs. Forages over a wide variety of habitat types (NatureServe 2020).	Blue oak woodlands/foothill pine habitat types provide suitable roosting habitat.

Notes:
Status
SE = State endangered
ST = State threatened
SFP = State fully protected
SSC = State species of special concern

YCWA Bat Investigation

On May 21, 2020, YCWA conducted a bat roost assessment at the Narrows 1 Powerhouse and tram house, which consisted of an external building visual inspection and an internal roost inspection. For the external building visual inspection, surveyors looked for evidence of staining or grease marks, any defects (e.g., as holes, crack, and crevices) in the building's structure for possible bat entry and exit points, and any potential droppings or feeding remains. No evidence of bats or bat sign was observed during the external building visual inspection, however; one lower exterior area directly over the Yuba River, below ground level, is inaccessible for safe inspection. An internal roost inspection was performed in the interior of the buildings where each room on each floor was visually inspected for evidence of staining, defects in the building structure, potential droppings (visual and olfactory), feeding remains, and auditory bat noises. No evidence of bats or bat sign was observed during the internal roost inspections in the interior of the building.

3.2.4.1.4 Commercially-Valuable Wildlife Species

Game bird and mammal species are those regulated by California Fish and Game Code Sections 3500 and 3950, which provide recreational hunting opportunities. Geographic location, elevation, and available habitat were used to evaluate the potential for game animals to occur

within the FERC Project Boundary. Table 3.2.4-3 lists game species, their habitat requirements, and their potential seasonal distribution within the boundary. Of the 25 game species identified (8 birds and 17 mammals), American badger is the only special-status species (SSC) also listed as a commercially-valuable species (CDFW 2014, 2020b). No hunting occurs within the FERC Project Boundary or nearby due to the extreme slopes and private landownership.

Table 3.2.4-3. Commercially-valuable wildlife species potentially occurring within the FERC Project Boundary.

Common Name/ *Scientific Name*	Temporal and Spatial Distribution and General Habitat Requirement [1]
BIRDS	
Ring-necked pheasant / *Phasianus colchicus*	Yearlong – AGS, BOP
Sooty grouse / *Dendragapus fuliginosus*	Yearlong – AGS
Wild turkey / *Meleagris gallopavo*	Yearlong – AGS, BOP
California quail/*Callipepla californica*	Yearlong – AGS, BOP
Mountain quail / *Oreortyx pictus*	Yearlong – AGS; Winter – BOP
Band-tailed pigeon/*Patagioenas fasciata*	Winter –BOP
Mourning dove/*Zenaida macroura*	Yearlong – AGS, BOP
American crow/*Corvus brachyrhynchos*	Yearlong – AGS, BOP
MAMMALS	
Virginia opossum/ *Didelphis virginiana*	Yearlong – AGS, BOP
Brush rabbit/ *Sylvilagus bachmani*	Yearlong – AGS, BOP
Audubon's cottontail/*Sylvilagus audubonii*	Yearlong – AGS, BOP
Black-tailed jackrabbit/*Lepus californicus*	Yearlong – AGS, BOP
Western gray squirrel/ *Sciurus griseus*	Yearlong –BOP
Coyote/ *Canis latrans*	Yearlong – AGS, BAR, BOP
Gray fox/ *Urocyon cinereoargenteus*	Yearlong – AGS, BOP
Red fox / *Vulpes vulpes*	Yearlong – AGS, BAR
Black bear / *Ursus americanus*	Yearlong – AGS, BOP, BOW
Raccoon/ *Procyon lotor*	Yearlong – AGS, BOP
Long-tailed weasel/*Mustela frenata*	Yearlong – AGS, BOP
American badger/ *Taxidea taxus*	Yearlong – AGS, BAR, BOP
Western spotted skunk / *Spilogale gracilis*	Yearlong – AGS, BOP
Striped skunk/ *Mephitis mephitis*	Yearlong – AGS, BOP
Bobcat/ *Lynx rufus*	Yearlong – AGS, BOP
Wild pig/*Sus scrofa*	Yearlong – AGS, BOP
Mule deer/ *Odocoileus heminonus*	Yearlong – AGS, BOP

Source: CDFW 2014
Notes:
AGS = Annual grassland
BAR = Barren
BOP = Blue oak foothill pine
RIV = Riverine (Yuba River)
[1] Temporal and Spatial Distribution - California Wildlife Habitat Relationship habitat types

3.2.4.1.5 Wetlands, Riparian, and Littoral Habitats of the Project Area

The FERC Project Boundary does not include any wetlands or littoral habitat.
The FERC Project Boundary occurs along approximately 90 linear feet of riverine habitat on the Yuba River. The USFWS classified this habitat as "R3UBH", which is defined as riverine upper perennial habitat that has an unconsolidated bottom and is permanently flooded (USFWS 2020b). This portion of the Yuba River adjacent to the Project Boundary has a steep channel that consists of rapids, deep pools, and bedrock canyon (YCWA 2010), which limits the establishment of riparian habitat. YCWA's botanical survey in May 2020 found no wetland or riparian vegetation along the edge of the Yuba River in or along the FERC Project Boundary.

Wildlife species expected to use riverine habitat within the FERC Project Boundary include, but are not limited to, common merganser (*Mergus merganser*), California quail, American dipper (*Cinclus mexicanus*), osprey (*Pandion haliastus*) and belted kingfisher (*Megaceryle alcyon*). Other wildlife species that may occur include Northern river otter (*Lontra canadensis*), mule deer, black bear, bobcat, mountain lion, mink (*Mustela vison)*, raccoon, striped skunk, and western fence lizard (*Sceloporus occidentalis*). North American beaver (*Castor canadensis*) have also been documented in the Yuba River downstream of Englebright Reservoir and are considered to be well-established (YCWA 2013).

Section 3.2.3 discusses riparian habitats in the lower Yuba River potentially affected by the Project.

Attachment 3.2.4-1

Vascular Plant Species List