



**Application for a New License**  
**Major Project – Existing Dam**

**Bat Management Plan**

**Security Level: Public**

**Yuba River Development Project**  
**FERC Project No. 2246**

December 2016

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None.

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# GLOSSARY – DEFINITIONS OF TERMS, ACRONYMS AND ABBREVIATIONS

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Cal Fish and Wildlife	California Department of Fish and Wildlife (formerly California Department of Fish and Game)
FERC	Federal Energy Regulatory Commission
Forest Service	United States Department of Agriculture, Forest Service
ft	feet
g	grams
in	inch
NFS	National Forest System (used in association with land ownership, such as NFS land)
Plan	Bat Management Plan
PNF	Plumas National Forest
Project	Yuba River Development Project, FERC Project No. 2246
TNF	Tahoe National Forest
USACE	United States Army Corp of Engineers
USFWS	United States Fish and Wildlife Service
YCWA	Yuba County Water Agency

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## SECTION 1.0

# INTRODUCTION

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In April 2014, the Yuba County Water Agency (YCWA), pursuant to Section (§) 5.18 of Title 18 of the Code of Federal Regulations (C.F.R.), filed with the Federal Energy Regulatory Commission (FERC) an Application for a New License for Major Project – Existing Dam - for YCWA’s 361.9 megawatt Yuba River Development Project, FERC No. 2246 (Project). In December 2016, YCWA amended its April 2014 Application for a New License. The initial license for the Project was issued by the Federal Power Commission (FERC’s predecessor) to YCWA on May 16, 1963, effective on May 1, 1963. The Federal Power Commission’s May 6, 1966, Order Amending License changed the license’s effective date to May 1, 1966, for a term ending on April 30, 2016.

YCWA included this Bat Management Plan (Plan) in its December 2016 Amended Application for a New License.

The United States Department of Agriculture, Forest Service’s (Forest Service) Federal Power Act (FPA) Section 4(e) authority only applies in this Plan to Project facilities on National Forest System (NFS) land, and the United States Army Corps of Engineers’ (USACE) FPA Section 4(e) authority only applies in this Plan to Project facilities on federal land administered by the USACE. The Forest Service administers the Plumas National Forest (PNF) in conformance with the PNF Land and Resource Management Plan (USDA Forest Service 1988), as subsequently amended, and administers the Tahoe National Forest (TNF) in conformance with TNF Land and Resource Management Plan (USDA Forest Service 1990), as subsequently amended. Both the PNF and TNF are further managed under the Sierra Nevada Forest Plan Amendment (USDA 2004), and the Sierra Nevada Forest Management Indicator Species Amendment (USDA 2007). When the TNF or PNF Forest Plan revisions occur, those revised plans will supersede the 1990 TNF and 1988 PNF plans.

## **1.1            Background**

### **1.1.1        Yuba River Development Project**

The Project is located in Yuba, Sierra and Nevada counties, California, on the main stems of the Yuba River, the North Yuba River and the Middle Yuba River, and on Oregon Creek, a tributary to the Middle Yuba River. Major Project facilities, which range in elevation from 280 to 2,049 feet (ft), include: 1) New Bullards Bar Dam and Reservoir; 2) Our House and Log Cabin diversion dams; 3) Lohman Ridge and Camptonville diversion tunnels; 4) New Colgate and Narrows 2 power tunnels and penstocks; 5) New Colgate, New Bullards Minimum Flow and Narrows 2 powerhouses; and 6) appurtenant facilities and features (e.g., administrative buildings, switchyards, roads, trails and gages). The existing Project does not include any aboveground open water conduits (e.g., canals or flumes) or any transmission lines.

In addition, the Project includes 16 developed recreation facilities. These include: 1) Hornswoggle Group Campground; 2) Schoolhouse Campground; 3) Dark Day Campground; 4) Cottage Creek Campground;<sup>1</sup> 5) Garden Point Boat-in Campground; 6) Madrone Cove Boat-in Campground; 7) Frenchy Point Boat-in Campground; 8) Dark Day Picnic Area; 9) Sunset Vista Point; 10) Dam Overlook; 11) Moran Road Day Use Area; 12) Cottage Creek Boat Launch;<sup>2</sup> 13) Dark Day Boat Launch, including the Overflow Parking Area; 14) Schoolhouse Trail; 15) Bullards Bar Trail; and 16) floating comfort stations.<sup>3</sup> All of the recreation facilities are located on NFS land, with the exception of the Dam Overlook, Cottage Creek Boat Launch and small portions of the Bullards Bar Trail, which are located on land owned by YCWA. All of the developed recreation facilities are located within the existing FERC Project Boundary, except for a few short segments of the Bullards Bar Trail to the east of the Dark Day Boat Launch. In addition, the Project includes two undeveloped recreation sites at Our House and Log Cabin diversion dams, both located on NFS land and within the existing FERC Project Boundary.

Figure 1.1-1 shows the Project Vicinity,<sup>4</sup> proposed Project, and proposed FERC Project Boundary.<sup>5</sup>

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<sup>1</sup> Cottage Creek Campground was burned in 2011 and has not been rebuilt. YCWA is in discussions with the Forest Service regarding rebuilding the burned campground.

<sup>2</sup> Emerald Cove Marina provides visitor services at Cottage Creek Boat Launch, including houseboat and boat rentals, boat slips and moorings, fuel, parking, restrooms and a general store. The marina is operated under a lease from YCWA by a private company.

<sup>3</sup> The Project recreation facilities included one campground that is no longer part of the Project. Burnt Bridge Campground was closed initially by the Forest Service in 1979 due to low use levels. FERC, in an August 19, 1993 Order, which approved YCWA's Revised Recreation Plan, directed YCWA to remove all improvements and restore the Burnt Bridge Campground to the condition it was in prior to development of the facility. YCWA consulted with the Forest Service and all that remains of Burnt Bridge Campground today is the circulation road and vehicle spurs; all other facilities were removed.

<sup>4</sup> For the purpose of this Plan, "Project Vicinity" refers to the area surrounding the proposed Project on the order of United States Geological Survey 1:24,000 quadrangles.

<sup>5</sup> The FERC Project Boundary is the area that YCWA uses for normal Project operations and maintenance. The Boundary is shown in Exhibit G of YCWA's Application for New License, and may be changed by FERC with cause from time to time during the term of the new license.



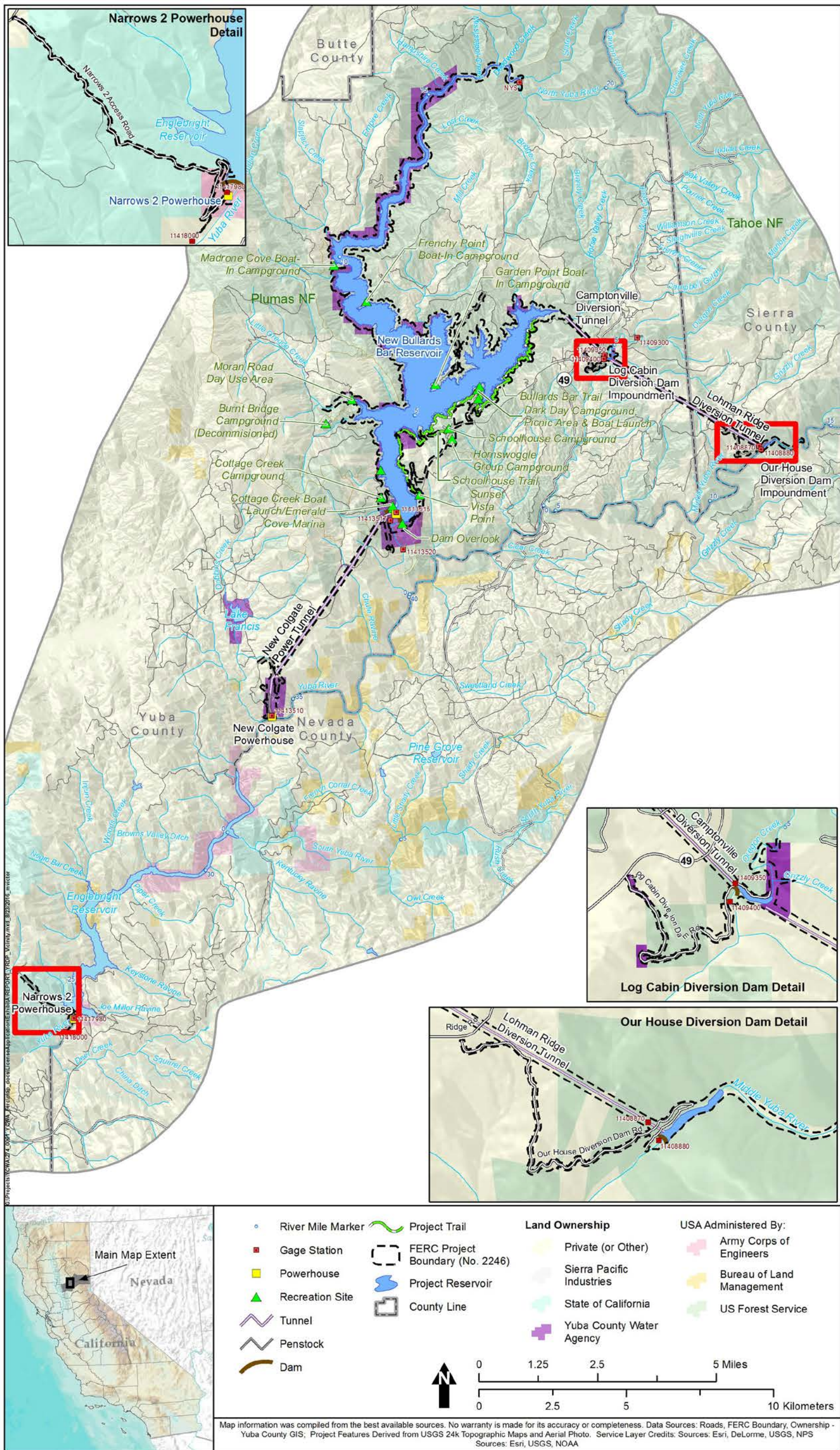


Figure 1.1-1. Yuba County Water Agency's Yuba River Development Project and Project Vicinity.



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## 1.1.2 Special-Status Bats

According to California Department of Fish and Wildlife (Cal Fish and Wildlife) there are 27 species of bats found in California (CDFW 2008). Only the lesser long-nosed bat (*Leptonycteris yerbabuenae*) is listed as endangered under the Endangered Species Act (53 FR 38456) (ESA); and the Townsend's big-eared bat (*Corynorhinus townsendii*) is a candidate for listing as threatened or endangered under the California Endangered Species Act (CESA).<sup>6,7</sup> Of the remaining 25 bat species in California, 15 are designated as special-status species by the Cal Fish and Wildlife, Forest Service, or United States Department of Interior, Bureau of Land Management (Cal Fish and Wildlife 2011 and USDA 2013).

## 1.2 Purpose of the Bat Management Plan

This Plan is intended to provide guidance for the protection of bats at Project structures (e.g., powerhouses, storage buildings, valve houses, and dams), recreation facilities, or other structures where YCWA staff has a routine presence that may be used as a roosting structure by bats.

YCWA will coordinate, to the extent appropriate, the efforts required under this Plan with other Project resource efforts, including implementation of other resource management plans and measures included in the new license.

## 1.3 Goals and Objectives of the Bat Management Plan

The goal of the Plan is to ensure that Project operations and maintenance do not disturb roosting bats.

The objective of the Plan is to provide necessary guidelines to meet the Plan goal.

## 1.4 Contents of the Bat Management Plan

This Plan includes the following:

- Section 1. Introduction. This section includes the purpose, goals and other introductory information for the Plan.
- Section 2. Bat Distribution and Life History. This section provides a physical description of bats known to occur in the Project area, and the life history of special-status bats known to occur at Project facilities.
- Section 3. Bat Protection. This section describes bat protection measures for the Project.

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<sup>6</sup> On June 26, 2013, the Fish and Game Commission (Commission) designated the Townsend's big-eared bat as a candidate species pursuant to Fish and Game Code Section 2074.2. On December 11, 2013 the Commission adopted findings for this action, which were published in the California Regulatory Notice Register on December 27, 2013, which initiated a one-year candidacy period.

<sup>7</sup> Townsend's big-eared bat is also designated as a Bureau of Land Management Sensitive Species, California Species of Special Concern, and Forest Service Sensitive Species.

- Section 4. Reporting, and Plan Review. This section describes reporting, consultation and other requirements regarding bats between YCWA and the Cal Fish and Wildlife, Forest Service, and U.S. Fish and Wildlife Service (USFWS).
- Section 5. References Cited. This section provides a list of the references cited in the Plan.

SECTION 2.0

# BAT DISTRIBUTION AND LIFE HISTORY

## 2.1 Presence and Distribution

### 2.1.1 Species documented at Project Facilities

In 2012, YCWA performed acoustic and mist net surveys to determine the presence and distribution of bats in the Project area. The results of this study are summarized in Table 2.1-1.

**Table 2.1-1. Bat species documented in the Project area.**

Species		Status <sup>1</sup>	Occurrence Information
Common Name	Scientific Name		
Pallid bat	<i>Antrozous pallidus</i>	FSS-P, FSS-T & SSC	Camptonville Tunnel, <sup>2</sup> below New Bullards Bar Dam, <sup>2</sup> Colgate Powerhouse <sup>2</sup> (YCWA 2012)
Townsend's big-eared bat	<i>Corynorhinus townsendii</i>	FSS-P, FSS-T & SSC, SC	Camptonville Tunnel, <sup>2</sup> below New Bullards Bar Dam, <sup>2</sup> Colgate Powerhouse, and Narrows 2 Powerhouse <sup>2</sup> (YCWA 2012)
Big brown bat	<i>Eptesicus fuscus</i>	--	Log Cabin Diversion Dam, Schoolhouse Family Campground (YCWA 2012)
Spotted bat	<i>Euderma maculatum</i>	SSC	Camptonville Tunnel, below New Bullards Bar Dam, Colgate Powerhouse, and Narrows 2 Powerhouse (YCWA 2012)
Western red bat	<i>Lasiurus blossevillii</i>	SSC	Our House Diversion Dam, Log Cabin Diversion Dam, Camptonville Tunnel, Dark Day Campground and Boat Ramp, below New Bullards Bar Dam, Colgate Powerhouse, and Narrows 2 Powerhouse (YCWA 2012), two occurrences at Slate Creek inflow to New Bullards Bar Reservoir (USDA 2013)
Hoary bat	<i>Lasiurus cinereus</i>	--	Our House Diversion Dam, Camptonville Tunnel, Dark Day Campground and Boat Ramp, below New Bullards Bar Dam, <sup>2</sup> New Colgate Powerhouse, Narrows 2 Powerhouse (YCWA 2012)
Western Long-eared myotis	<i>Myotis evotis</i>	--	Camptonville Tunnel, Schoolhouse Family Campground, below New Bullards Bar Dam, New Colgate Powerhouse, Narrows 2 Powerhouse (YCWA 2012)
Yuma myotis	<i>Myotis yumanensis</i>	--	Log Cabin Diversion Dam, Dark Day Campground and Boat Ramp, Schoolhouse Family Campground, below New Bullards Bar Dam, New Colgate Powerhouse (YCWA 2012)
Fringed myotis	<i>Myotis thysanodes</i>	FSS-P, FSS-T	Our House Diversion Dam (YCWA 2012)
Canyon bat	<i>Parastrellus hesperus</i>	--	Our House Diversion Dam, Log Cabin Diversion Dam, below New Bullards Bar Dam, New Colgate Powerhouse, Narrows 2 Powerhouse

Source: YCWA 2012, Cal Fish and Wildlife 2011, and USDA 2013

<sup>1</sup> Status

SC: Candidate species for state listing under California Endangered Species Act as Endangered or Threatened

FSS-P: Forest Service Sensitive Species, Plumas National Forest

FSS-T: Forest Service Sensitive Species, Tahoe National Forest

SSC: California Species of Concern

<sup>2</sup> Acoustic detection is suggestive of species occurrence, but due to clutter, presence of other species or call fragmentation, identification is not absolute.

## 2.1.2 Roosts

Bats often roost on or within man-made structures. These structures include, but are not limited to, storage sheds, attics, woodpiles, bridges, mines and tunnels. With the exception of mines and some tunnels, man-made structures that provide suitable roosting habitat are composed of concrete or wood materials, or a combination of both. The extent to which bats utilize man-made structures depends upon many variables, including size of the structure, internal and external temperature, proximity to foraging opportunities, protection from predators, and the species occupying the roost. The presence of bat signs, such as guano, and staining, and sightings or reports of bats themselves help to determine the extent of use (infrequent or continuous), as well as the type of roost. Types of roost include day, night, maternity, or winter; each are described below:

- **Night Roosts.** A night roost is a feature that allows for rest between foraging bouts, digestion of prey, escape from predators, and shelter from the weather. Night roosts may also have social purposes. Night roosts are typically sites or structures that retain a higher than ambient temperature. The elevated temperatures associated with night roosts aid in maintaining higher metabolism necessary for digestion.
- **Day Roosts.** A day roost is a feature where bats spend the non-active period of the day, resting or in torpor, depending on weather conditions. Day roosts provide shelter from the elements and safety from predators.
- **Maternity Roosts.** A maternity roost is a feature that provides protection from the elements and predators, while providing the correct thermal environment for rearing of young. Maternity roosts tend to be warmer in temperature because breeding females need to maintain a high metabolism to aid in lactation. According to Tuttle and Taylor (1998), maternity roost thermal requirements are species dependent, but generally remain between 70 degrees Fahrenheit (°F) and 90°F. However, Townsend's big-eared bat maternity roosts have been discovered in sites where ambient temperatures are as low as 60°F. Species that form large colonies can be found raising young in mines with ambient temperatures as low as 56°F, but prefer 66°F or higher.
- **Winter Hibernacula.** A winter hibernacula is an area used by bats during colder winter months. During this time, bats enter torpor, receiving nourishment from fat storage gained during summer months. Many species will awaken for brief periods of time to stretch, but will resume torpor. Bats, such as the Townsend's big-eared bat, will hibernate for short periods of time and often resume feeding behavior during warm winter spells (Tuttle and Taylor 1998). Airflow and temperature are key determinants in use of structures, such as tunnels and adits, as hibernacula. Temperatures within these roost sites are generally below 53°F at the onset of hibernation and remain between 34°F and 50°F by midwinter. Structures that have a varying temperature regime allow bats to find suitable temperatures during warm or cold winters (Tuttle and Taylor 1998).

In 2012, YCWA inspected all Project facilities, including buildings associated with recreation facilities (kiosks, and restrooms) for evidence of bat use. Table 2.1-1 provides the results of the inspection.

**Table 2.1-2. YCWA’s 2012 roost inspection results.**

Facility	Roost Type <sup>1</sup>	Notes
<b>NEW COLGATE DEVELOPMENT</b>		
Our House Diversion Dam	--	--
Lohman Ridge Diversion Tunnel	--	--
Log Cabin Diversion Dam	--	--
Camptonville Diversion Tunnel	NR, DR	Night roost under concrete road deck above entrance to tunnel (Yuma myotis, big brown bats). Day roost in tunnel interior during low flow.
New Bullards Bar Dam	--	--
New Colgate Power Tunnel	--	--
New Colgate Powerhouse	--	--
New Colgate Administrative <sup>2</sup> and Shop Building	NR, DR, MR	Yuma myotis night roost and day roost within exterior concrete structure on south side of Shop Building (outflow gates for old powerhouse). Reproductive Yuma myotis captured, maternity roost suspected to occupy exterior concrete structure.
New Bullards Bar – Dark Day Boat Ramp	NR	One restroom (Yuma myotis, big brown bats)
New Bullards Bar – Dark Day Campground	NR	Three Restrooms (Yuma myotis, big brown bats)
New Bullards Bar – Schoolhouse Family Campground	NR	Four Restrooms (big brown bats)
New Bullards Bar – Hornswoggle Group Campground	NR	Three restrooms (guano on interior and exterior of restrooms, species unknown)
New Bullards Bar – Moran Road Boat Launch	--	--
New Bullards Bar – Dam Overlook	--	--
New Bullards Bar – Emerald Cove Marina Boat Ramp	NR, DR	Night Roost at restroom. Day roost found in eaves of Emerald Cove Marina General Store ( <i>Myotis</i> spp.).
<b>NEW BULLARDS FISH RELEASE DEVELOPMENT</b>		
New Bullards Minimum Flow Powerhouse	--	--
<b>NARROWS 2 DEVELOPMENT</b>		
Narrows 2 Powerhouse <sup>2</sup>	--	--

Source: YCWA 2012

<sup>1</sup> Roost Type

- NR = Night Roost
- DR = Day Roost
- MR = Maternity Roost
- = No Roost

<sup>2</sup> YCWA staff reports any evidence of use by bats suggests occasional or accidental use as a roost (i.e., one or two bats observed in the last five years, or less than five pieces of guano found on wall or floor of structure).

## 2.2 Life Histories of Special-Status Bats Documented in the Project Area

### Pallid bat (FSS-P, FSS-T & SSC)<sup>8</sup>



The pallid bat is a medium sized bat, with adults weighing between 13 and 28 g and having a forearm length between 1.7 and 2.3 in. Distinguishing characteristics include large ears that measure about 1.0 in long, a pale pelage, and a skunk-like odor (WBWG 2014).

The range of pallid bat includes western North America, between the southern interior of British Columbia and the Mexican states of Queretaro and Jalisco, and as far east as Texas. Preferred habitats include low

<sup>8</sup> All photos sourced from: [http://www.batcon.org/index.php/all-about-bats/species-profiles.html?country=43&state=all&family=all&sort=species\\_asc](http://www.batcon.org/index.php/all-about-bats/species-profiles.html?country=43&state=all&family=all&sort=species_asc)

elevation (<6,000 ft) rocky arid deserts and canyonlands, shrub-steppe grasslands, karst formations and coniferous forests above 7,000 ft. Common roosts include crevices in rocky outcrops and cliffs, caves, mines, trees and various human structures, such as bridges, barns, porches and attics. Roosts may be occupied by one or hundreds of pallid bats. Pallid bats are opportunistic generalists that primarily glean insects from surfaces, but will also capture insects in flight. Mating occurs from October to February; one or two pups are born between late April and July and weaned in August (WBWG 2014).

### **Townsend's big-eared bat (FSS-P, FSS-T & SSC, SC)**



The Townsend's big-eared bat is a medium sized bat, with adults weighing between 9 and 11 g and hanging a forearm length between 1.5 and 1.8 in. Distinguishing characteristics include a prominent, bilateral nose lump and large ears that measure more than 1.0 in long (WBWG 2014).

This species is distributed from southern British Columbia south to central Mexico. Within the United States, Townsend's big-eared bats are found from the Great Plains west through the Rocky Mountains to the Pacific Coast. Preferred habitats include coniferous forests, mixed mesophytic forests, deserts, native prairies, riparian communities, active agricultural areas and coastal habitat types. Foraging occurs along edge habitats associated with streams and wooded habitats. Townsend's big-eared bats forage almost exclusively on moths, with lepidopterans making up more than 90 percent of its diet. This species is known to travel long distances while foraging and has been reported to move more than 93 miles in a single evening. Caves and abandoned mines are primary roosting habitat, but roosts in buildings, bridges, rock crevices and hollow trees have been reported. Maternity colonies vary in size and can have a few individuals or several hundred. Mating occurs between October and February, and a single pup is born between May and June (WBWG 2014).

### **Spotted bat (SSC)**



The spotted bat is a medium-sized bat, with adults weighing between 13 and 20 g and having a forearm length ranging from 1.8 to 2.0 in. They have a unique coloration that includes dorsal black fur with three white spots, a white ventral surface, and pink ears that can be almost 2 in long (WBWG 2014).

This species is found throughout the western United States, including California. Habitats include: desert-scrub, pinyon-juniper woodland, ponderosa pine, mixed conifer forest, canyon bottoms, canyon rims, riparian areas, fields and open pastures. Foraging often occurs within 32 ft of the ground, but can occur as high as 164 ft and as low as 6 ft. Moths are the primary prey of spotted bats. Spotted bats are capable of long distance flight and in Arizona, are known to travel up to 50 mile in order to feed. Preferred roosts include cracks, crevices and caves that are often located high in prominent rock features. Generally, spotted bats are solitary, but occasionally,



are found roosting or hibernating in small groups. Information regarding migration is lacking, but in Arizona, they are known to be active year-round. Breeding is thought to occur in late summer, and a single pup is born the following May or June (WBWG 2014).

### **Western red bat (SSC)**



The western red bat is small to medium sized bat that weigh between 10 and 15 grams (g), has a forearm length between 1.5 and 1.6 inches (in) and an ear length that is less than 0.5 in. Pelage is red with white patches at the shoulders, elbows and thumbs (WBWG 2014).

A widely distributed species, western red bat can be found in southern British Columbia, much of the western United States, Mexico, Central America, Argentina and Chile. Western red bats are often solitary and roost primarily among foliage of trees or shrubs adjacent to streams, open fields, and occasionally, in urban areas. Cave roosting has been documented at Carlsbad Caverns in southeastern New Mexico. This species migrates in groups and forages in close proximity with one another. Males and females appear to occupy different summer ranges, and also may differ in the timing of migration. Winter behavior is poorly understood, but it is believed that red bats occasionally wake from hibernation on warm days to feed. Mating occurs in late summer or early fall, and females postpone pregnancy until spring. Gestation is about 80-90 days, and up to five pups may be born (WBWG 2014).

### **Fringed myotis (FSS-P, FSS-T)**



Fringed myotis is a small bat, but when compared against other myotis in California, is rather large. Adults weigh between 6-11 g and have a forearm length of 1.5-1.8 in long. Fringed myotis may be distinguished from other myotis by a conspicuous fringe of hair along the posterior edge of its interfemoral membrane (WBWG 2014).

The range of fringed myotis includes much of western North America between southern British Columbia, Canada and Chiapas, Mexico; and from Santa Cruz Island in California, east to the Black Hills of South Dakota. Fringed myotis appear to be most common in drier woodlands, but do inhabit a wide variety of habitats between sea-level and 9,350 ft. These habitats include desert scrub, mesic coniferous forest, grassland, and sage-grass steppe. Common roosts include caves, mines, rock crevices, buildings, large decadent trees and snags, and other protected sites. Maternity colonies occur in caves, mines and sometimes buildings. Maternity roosts have between 10-2,000 individuals. While little is known about hibernation, structures such as caves, mines and buildings are used. Mating occurs in the fall, and a single pup is born in late June. The pup is capable of flight at 16 days and fully volant at 20 days (WBWG 2014).

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## SECTION 3.0

# BAT PROTECTION

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## 3.1 Bat Protection Guidelines

YCWA will, in the first full calendar year after license issuance, conduct one day of surveys consisting of a daytime visual assessment and a nighttime emergence survey at all Project buildings (e.g., powerhouses, storage buildings and valve houses), recreation facilities, dams, or other structures (collectively “Project facilities”) for bats and/or signs of bats roosting. The surveys will occur during the peak of the bat maternity season, which is July 1 through August 31. A brief report summarizing the results of the surveys and a list of Project facilities in which exclusion devices and screens that YCWA proposes to be installed will be provided to Cal Fish and Wildlife and to the Forest Service, if the facility is located on NFS lands, within 30 days of completion of surveys. The report will include a table with the list of Project facilities surveyed and identify the facilities at which bats and/or signs of bat roosting were found, a map showing the locations of the facilities, photographs of the facilities showing the bats and/or signs of bat roosting, and the bat exclusion materials YCWA proposes to use at each facility. Cal Fish and Wildlife and the Forest Service will have 30 days to review the report and provide comments. If YCWA does not receive comments from Cal Fish and Wildlife and the Forest Service within 30 days, YCWA will proceed with exclusion measures proposed in the report. It is the goal of this Plan that, where feasible, humane bat exclusion devices are installed in the same calendar year that surveys occur.

As guidance, YCWA will not recommend the placement of exclusion devices from roosts discovered on the exterior of Project facilities or Project facilities where human presence is infrequent or non-existent. Examples of these facilities include the Camptonville Diversion Tunnel, the concrete structure located on southern exterior of the New Colgate administrative and shop building, and the eaves of buildings. However, YCWA will install screens on vents and windows of Project buildings to prevent entry of bats in these facilities regardless if bats and/or signs of roosting are found during the surveys. Humane exclusion devices and screens will only be installed when bats are less likely to occupy the facilities, which is generally between November 1 and February 28. Foam sealant shall not be utilized as an exclusion device.

Prior to installation of the humane exclusion devices, YCWA will perform an additional inspection of the facility to ensure that overwintering bats will not be trapped. If overwintering bats are present during that inspection, installation of humane exclusion measures will be delayed, and YCWA will consult with the Cal Fish and Wildlife, and the Forest Service if the facility is located on NFS lands, to identify future dates that would be suitable for installation of humane exclusion devices at that facility.

YCWA will maintain all bat exclusion devices and screens in properly functioning condition. All bat exclusion devices and screens will be inspected 6 months following installation to confirm effectiveness (i.e., no evidence of bat presence) and repaired or replaced if necessary. Thereafter, all exclusion devices and screens will be inspected on an annual basis and repaired or

replaced if necessary. The annual inspection of recreation facilities restrooms will occur during the fall, post-recreation season inspection performed by YCWA and the Forest Service. If bats are found to be present in the restroom facilities, appropriate exclusion methods will be used prior to closing the restroom facility.

Project facilities will be reevaluated for roosting bats every 2 years after the initial exclusion devices and screens are installed to insure that no new roosts or entry points have been established. YCWA will maintain a map that identifies the locations of all installed bat exclusion devices and screens.

### **3.2 Annual Employee Awareness Training**

Each year during the term of the license YCWA shall, as part of its Annual Employee Awareness training described in YCWA's proposed Condition GEN3, review this Plan with Operations staff, focusing on: 1) the locations and purpose of bat exclusionary measures; 2) potential signs (e.g., guano, staining or bats) that new bat roosts have been established within a Project facility; and 3) the reporting of any newly discovered bat roosts.

## SECTION 4.0

# REPORTING AND PLAN REVISION

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## 4.1 Reporting

By December 31 of each year, YCWA will provide to the Cal Fish and Wildlife, Forest Service, and USFWS, via e-mail, a brief report describing bat protection activities completed in the calendar year, and planned for the next calendar year. For the calendar year, the report will describe: 1) any Project facilities, including the location in the facility, where evidence of roosting bats was found; 2) a description and photographs of evidence that was found (e.g., guano, staining or bats); 3) a description and photographs of expected bat roost access point; 4) a description and photographs of the exclusion devices and screens installed, including material used; 5) results of the first exclusion device inspection (6 months after installation) if it has occurred in that calendar year; 6) results of annual exclusion device inspection; 7) a description of any repairs to exclusion devices and screens deemed necessary; 8) incidental reports by YCWA operations staff of roosting bats or evidence thereof, or the condition of exclusion devices. The report will also include photographs of facilities with a map that identifies the locations of all installed exclusion devices and screens.

## 4.2 Plan Revisions

YCWA, in consultation with the Cal Fish and Wildlife, Forest Service, and USFWS, will review, update, and/or revise the Plan, as needed, when significant changes in the existing conditions occur. Significant changes in existing conditions may include, but are not limited to: changes in the State and/or Federal listing statuses of bats; changes in State and/or Federal laws or management plans; changes in Project operations and maintenance activities; and repairs to or demolition of existing or new construction of Project facilities. Any updates to the Plan will be prepared in coordination and consultation with Cal Fish and Wildlife, Forest Service, and USFWS. Sixty days will be allowed for the Cal Fish and Wildlife, Forest Service, and USFWS to provide written comments and recommendations before YCWA files the updated plan with FERC for FERC's approval. YCWA will include all relevant documentation of coordination/consultation with the updated Plan filed with FERC. If YCWA does not adopt a particular recommendation by Cal Fish and Wildlife, Forest Service, and/or USFWS, the filing will include the reasons for not doing so, based on Project-specific information. YCWA will implement the Plan as approved by FERC.<sup>9</sup>

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<sup>9</sup> The Plan will not be considered revised until FERC issues its approval.

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## SECTION 5.0

# REFERENCES CITED

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