

**Appendix 12**

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**Revised Our House and Log Cabin Diversion Dams and New Bullards Bar  
Reservoir Large Woody Material Management Plan**



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

**Our House and Log Cabin Diversion Dams and  
New Bullards Bar Reservoir  
Woody Material Management Plan**

**Security Level: Public**

Yuba River Development Project  
FERC Project No. 2246

~~December 2016~~October 2017

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None.

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None.

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## GLOSSARY – DEFINITIONS OF TERMS, ACRONYMS AND ABBREVIATIONS

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ac	acres
Cal Fish and Wildlife	California Department of Fish and Wildlife
CRLF	California red-legged frog
cu yds	cubic yards
ESA	Federal Endangered Species Act
ft	feet
FERC or Commission	Federal Energy Regulatory Commission
Forest Service	United States Department of Agriculture, Forest Service
LOP	Limited Operating Period
mi	mile
NFS	National Forest System (used in association with land ownership, such as NFS lands)
Plan	Our House and Log Cabin Diversion Dams and New Bullards Bar Reservoir Woody Material Management Plan
PNF	Plumas National Forest
Project	Yuba River Development Project, FERC Project No. 2246
TNF	Tahoe National Forest
USACE	United States Army Corps of Engineers
USFWS	United States Department of Interior, Fish and Wildlife Service
WPT	Western pond turtle
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~~ an Our House and Log Cabin Diversion Dams and New Bullards Bar Reservoir Woody Material Management Plan (~~Plan~~) in its December 2016 Amended Application for a New License. YCWA further amended the Our House and Log Cabin Diversion Dams and New Bullards Bar Reservoir Woody Material Management Plan (Plan) and filed the Plan in its October 2017 Response of the Yuba County Water Agency to Comments, Recommendations, Preliminary Terms and Conditions, and Preliminary Fishway Prescriptions.

The United States Department of Agriculture, Forest Service’s (Forest Service) Federal Power Act Section 4(e) authority only applies in this Plan to Project facilities on National Forest System (NFS) lands. The Forest Service administers the Plumas National Forest (PNF) in conformance with the PNF Land and Resource Management Plan (Forest Service 1988), as subsequently amended, and administers the Tahoe National Forest (TNF) in conformance with TNF Land and Resource Management Plan (Forest Service 1990), as subsequently amended. 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 feet (ft) to 2,049 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 lands 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 2010 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 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 (USGS) 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 Amended Application for New License, and may be changed by FERC with cause from time to time during the term of the new license.

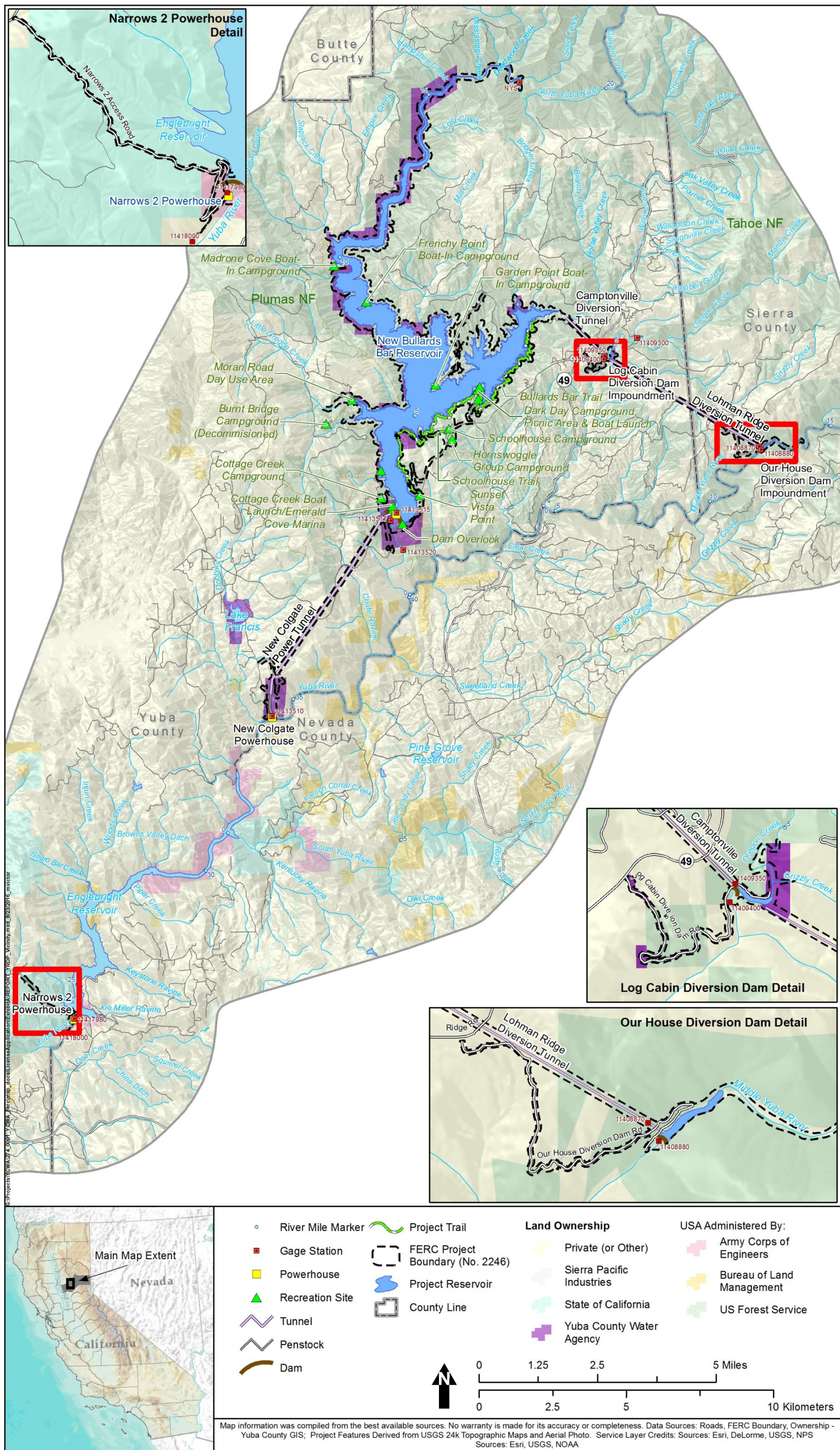


Figure 1.1-1. Yuba County Water Agency's Yuba River Development Project and Project Vicinity.

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## **1.2 Purpose of the Our House and Log Cabin Diversion Dams and New Bullards Bar Reservoir Woody Material Management Plan**

This Plan is intended to provide guidance, including coordination with the Forest Service, for YCWA's passage of woody material at Our House Diversion Dam on the Middle Yuba River and at Log Cabin Diversion Dam on Oregon Creek, and for YCWA's annual collection, storage and disposal of woody material on New Bullards Bar Reservoir on the North Yuba River. The majority of these activities occur on NFS lands within the TNF and PNF.

For the purpose of this Plan, woody material at Our House and Log Cabin diversion dams is all sizes of natural (i.e., derived from upstream and upslope riparian and upland areas) woody material greater than 8 inches (in.) in diameter and up to 36 ft in length; and woody material at New Bullards Bar Reservoir is any untreated floating wood.

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 Our House and Log Cabin Diversion Dams and New Bullards Bar Reservoir Woody Material Management Plan**

The goal of the Plan is to ensure that YCWA's passage of woody material at Our House and Log Cabin diversion dams and annual collection, storage and disposal of woody material on New Bullards Bar Reservoir is protective of environmental and recreational resources. With regards to Our House and Log Cabin diversion dams, the management of woody material as described in this Plan is expected to provide downstream habitat benefits for aquatic and riparian species while ensuring public safety.

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

## **1.4 Contents of the Our House and Log Cabin Diversion Dams and New Bullards Bar Reservoir Woody Material Management Plan**

This Plan includes the following:

- Section 1.0. Introduction. This section includes the purpose, goals and other introductory information for the Plan.



- Section 2.0. History of Woody Material Management at Our House and Log Cabin Diversion Dams and at New Bullards Bar Reservoir. This section provides for context the historic management of woody material at Our House and Log Cabin diversion dams and at New Bullards Bar Reservoir.
- Section 3.0. Woody Material Management Guidelines at Our House and Log Cabin Diversion Dams and at New Bullards Bar Reservoir. The section describes management guidelines for YCWA's management of woody material at Our House and Log Cabin diversion dams and at New Bullards Bar Reservoir.
- Section 4. Special-Status Wildlife Species Protection. The section describes special-status species protection measures that shall be adhered to when YCWA performs woody material management described in this Plan.
- Section 5.0. Reporting, Consultation and Plan Review. This section describes reporting, consultation and other requirements of this Plan.
- Section 6.0. References Cited. This section provides a list of the references cited in the Plan.

## SECTION 2.0

# HISTORY OF WOODY MATERIAL MANAGEMENT AT OUR HOUSE AND LOG CABIN DIVERSION DAMS AND AT NEW BULLARDS BAR RESERVOIR

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The section describes, for context, the history of floating material management at Our House and Log Cabin diversion dams and at New Bullards Bar Reservoir.

## 2.1 Our House and Log Cabin Diversion Dams

Woody material enters Our House and Log Cabin diversion dam impoundments from upstream primarily during high spring flows in April and May, and the material either passes downstream over the spillway or accumulates on the trash rack to the diversion tunnels. Historically, large pieces of woody material on the trash rack are moved into the impoundment so they may pass over the spillway. Smaller pieces are collected using a rake and piled on the impoundment bank where they are either removed by YCWA and disposed of off site, or burnt in the fall after all necessary permits are obtained. The amount of woody material varies by year, with the most material occurring in wet years following a series of dry years.

## 2.2 New Bullards Bar Reservoir

Historically, woody material begins to accumulate on the surface of New Bullards Bar Reservoir during spring runoff in April and May when the reservoir is filling. The source of this material is primarily from the North Yuba River and smaller tributaries to the reservoir. The material accumulates at the upper end of the reservoir or in coves, but can disperse throughout the reservoir based on wind direction and speed, and the dispersal pattern may change from week to week.

The amount of woody material varies by year, with the most material occurring in wet years following a series of dry years. As described later in this Plan, from 2005 through 2015 YCWA used two sites to store and dispose of woody material.<sup>6</sup> Each site had a capacity of about 3,000 cubic yards (cu yds). From 2005 through 2015, YCWA used the same site each year, and used the second site only once for overflow from the first site. Therefore, 2,500 cu yds is a reasonable estimate for the amount of woody material collected on average each year in New Bullards Bar Reservoir. However, larger amounts of woody material have been observed in high flow years. The United States Army Corps of Engineers (USACE) estimated based on aerial photographs that 34,400 cu yds of woody material was floating on the reservoir surface in 1998 and 110,000

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<sup>6</sup> Prior to 2005, YCWA used a portion of Moran Cove as its primary location for the storage of woody material. The cove, which is on NFS lands, is relatively flat and encloses an area of approximately 5.0 acres. Use of the cove was discontinued in 2005 due to the potential effect on California red-legged frog (*Rana draytonii*) (CRLF), which is protected under the Endangered Species Act (ESA). An area of documented occurrences of CRLF occurs approximately 0.7-miles west of Moran Cove, and the cove is within designated CRLF Critical Habitat Unit YUB-1 (75 Federal Register 12815).

cu yds in 2006 (USACE 2011). In 2017, a very wet year following three years of drought, YCWA removed approximately 70,000 cu yds of floating wood from the reservoir. In contrast, in some years the amount of woody material is so low that YCWA does not need to collect and dispose of it.

Woody material poses a potential hazard to the public, particularly boaters, jet skiers and water-skiers. To provide for public safety, YCWA historically removed woody material annually from the reservoir surface. From 2005 through 2015, this involved YCWA collecting the woody material by capturing portions of the material in enclosed floating log booms stretched across small coves on the east side of New Bullards Reservoir on Garden Valley peninsula within the TNF and dragging the material by boat to the one or more sites where the woody material was stored behind log booms. Once the reservoir recedes, YCWA stockpiled the material that settled at the site and burned it after obtaining a burn permit from the Forest Service. In addition, in some years, the USACE, after obtaining Forest Service approval, removed some of the stockpiled material from the site.

The sites in which YCWA stockpiled woody material from 2005 through 2015 were identified in a February 4, 2004, United States Department of Interior, Fish and Wildlife Service (USFWS) *Biological Opinion for the New Bullards Bar Reservoir Safety and Annual Maintenance Project* (BiOp) (USFWS 2004). The BiOp was in response to a TNF October 21, 2002, request to the USFWS for informal consultation under Section 7 of the Endangered Species Act (ESA) regarding: 1) disposal of woody material accumulated on New Bullards Bar Reservoir by piling and burning the material; 2) removal of hazard trees along the shoreline of the reservoir; and 3) reducing ladder fuels within recreation areas and Forest Service administrative sites around the reservoir (i.e., the Proposed Action for the BiOp). The species of concern in the BiOp were California red-legged frog (*Rana draytonii*) (CRLF), bald eagle (*Haliaeetus leucocephalus*), Lahonton cutthroat trout (*Oncorhynchus clarkii*) and valley elderberry longhorn beetle (*Desmocerus californicus*), all of which were listed as threatened under the ESA in 2002.<sup>7,8,9</sup>

According to the BiOp, four physical requirements for woody material disposal sites are needed to stockpile and dispose of the material. These include:

- Have a low-gradient slope at the water's edge so that the material can be floated onto the shoreline.
- Possess a cove-like shape, to facilitate effective booming of the woody material while water levels are high.

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<sup>7</sup> Bald eagle is no longer listed under the ESA.

<sup>8</sup> Prior to this Forest Service consultation with the USFWS, on April 4, 2000, in response to the Pendola Fire, the Forest Service sent a letter to YCWA and Yuba County requesting assistance on the implementation of a seasonal closure from January 1 through August 31 of Garden Valley Road and Tractor Cove, which is located on Garden Valley peninsula in New Bullards Bar Reservoir, with the goal of minimizing disturbances from people and boats during the bald eagle nesting season. YCWA agreed to assist the Forest Service, and a closure of Garden Valley Road and Tractor Cove from January 1 through August 31 has been in place each year since 2001.

<sup>9</sup> With regards to relicensing, on January 4, 2011, FERC initiated informal consultation with the USFWS as required under Section 7 of the ESA and the interagency cooperation regulations in 50 C.F.R. Code of Federal Regulations Part 402, and designated YCWA as FERC's non-federal representative for purposes of informal consultation with regards to relicensing.

- Have nearby road access for heavy equipment, needed to pile the material for burning once it has settled.
- Be large enough to accommodate estimated yearly woody material volumes, including periodic years with medium to high water flows.

The Forest Service, USFWS and YCWA surveyed New Bullards Bar Reservoir and selected three locations (referred to in the BiOp as the Primary, Secondary and Tertiary burn sites, and shown on Figure 2.1-1) on the west bank of Garden Point peninsula for woody material disposal that would meet the following wildlife objectives:

- Minimize the risk of adversely affecting CRLF
- Protect bald eagle breeding at the reservoir
- Protect wintering eagles
- Reduce adverse effects to fish and wildlife habitat

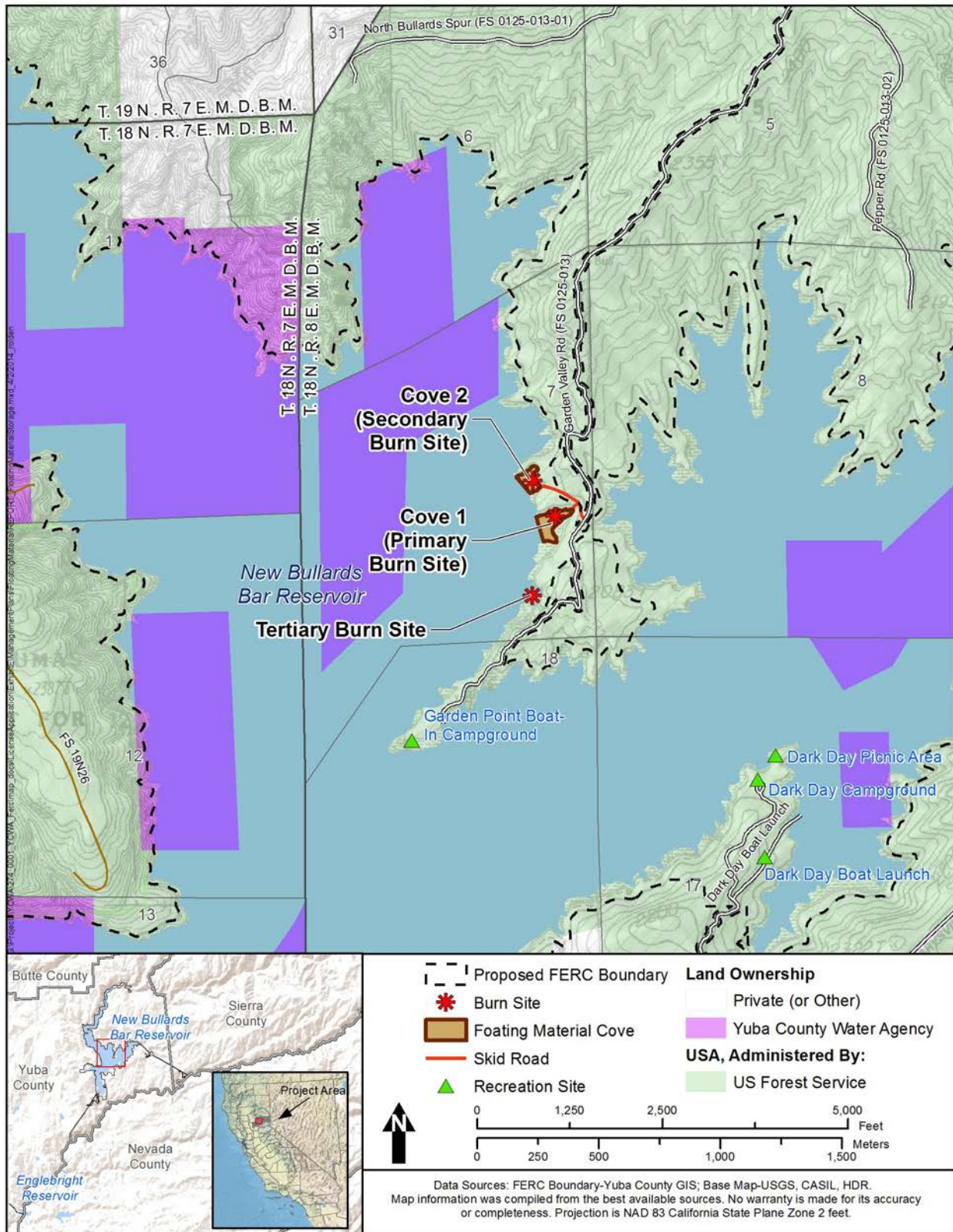


Figure 2.2-1. Location of Primary, Secondary and Tertiary sites identified in USFWS' 2004 BiOp.

USFWS determined in the BiOp that the Proposed Action, using the burn sites, was not likely to adversely affect CRLF, Lahonton cutthroat trout and valley elderberry longhorn beetle. With regards to bald eagle and the Proposed Action, the BiOp specified the following conservation measures that would protect bald eagles:

- Implement a Limited Operating Period (LOP) from January 1 through August 31 (or one month past fledging) within 0.25-mile (mi) of the Garden Point bald eagle breeding territory. If monitoring identifies the nest tree being used that year, the area for the LOP may be adjusted to within 0.25-mi of the nest trees. If a tree, other than the current Garden Point bald eagle nest tree is used, all activities will be re-evaluated based on their proximity to the new nest.
- Implement a LOP from January 1 through August 31 for burning debris and stockpiling wood at the Primary, Secondary and Tertiary burn sites (Figure 2.2-1). The season may be shortened from January 1 to June 30, if sufficient monitoring can determine that bald eagles are not nesting within 0.25-mi of the proposed activities. Wood gathering from the water surface may still occur within 0.25-mi of breeding territory.
- Apply a LOP from November 15 through March 15 to activities within 0.25-mi of the normal maximum water surface elevation to protect wintering bald eagles. Extend the LOP from November 1 through March 15 for areas within 0.25-mi of the dam and identified bald eagle winter night roost.

With these conditions, the BiOp concluded the Proposed Action was not likely to jeopardize the continued existence of the bald eagle.

All three sites identified in the BiOp are located on NFS lands on the east side of New Bullards Reservoir on Garden Valley peninsula within the TNF.

The Primary Burn Site is relatively flat and encloses an area of approximately 2.4 acres (ac). YCWA expects that the Primary Site can accommodate approximately 3,000 cu yds of debris. The Secondary Burn Site is relatively flat and encloses an area of approximately 1.3 ac. YCWA expects that the Secondary Burn Site can store approximately 3,000 cu yds of material. Figure 2.2-2 shows a photograph of the Primary and Secondary burn sites with the log boom in place and material stored in the Primary Site. In this figure, no material is stored in the Secondary Burn Site and the log boom has not been installed in that cove. The figure also shows access roads to the Primary and Secondary burn sites.



**Figure 2.2-2. Primary and Secondary sites with the log booms in place and material stored in the Primary Site.**

The Primary and Secondary burn sites are accessed by traveling 2.5 mi from County Road 158 along Garden Valley Road (USFS Road 0125-013), which is gated by the Forest Service at two locations and is closed from January 1 through August 31. The first gate is located near the end of County Road 125, and the second gate is located on Garden Valley Road at its intersection with Forest Service Road 125-13-02. From Garden Valley Road, the Primary Burn Site is accessed over a 0.1-mi long skid road, which is opened and put to bed by YCWA each year it uses the skid road. The skid roads do not have a Forest Service road designation. The Secondary Burn Site is accessed by a 0.1-mi long skid road from the skid road that accesses the Primary Burn Site (Figure 2.2-2).

The nearest sensitive area to the Primary Site is a bald eagle nest at Tractor Cove, which is located approximately 0.25-mi southeast of the Primary Burn Site. YCWA's relicensing studies found one cultural resources site 0.2-mi away from the site, and not along the skid road. YCWA's relicensing studies did not identify any other sensitive areas along, within or adjacent to the skid road and Primary Burn Site.

The nearest sensitive area to the Secondary Burn Site is also the bald eagle nest at Tractor Cove described above, which is located approximately 0.3-mi southeast of the Secondary Burn Site. YCWA's relicensing studies found one cultural resources site 0.3-mi away from the Secondary Burn Site, and not along the skid road. YCWA's relicensing studies did not identify any other sensitive areas along, within or adjacent to the skid road and the Secondary Burn Site.

YCWA has found that the Tertiary Burn Site is not a suitable site to dispose of woody material due to steep terrain at the site.

In 2017, due to the unusually large amount of wood floating on New Bullards Bar Reservoir, YCWA, with the approval of FERC, Forest Service, USFWS and California Department of Fish and Wildlife (Cal Fish and Wildlife), gathered the material in floating booms on the reservoir; moved it to YCWA's closed, small work area on YCWA land just upstream of the Cottage Creek Boat Ramp (Figure 2.2-3); and then, using an excavator placed on dry land, loaded the material from the water onto trucks. The material was then hauled off site where it was stockpiled on the contractor's private property and later chipped and delivered to a biomass plant.





Figure 2.2-3. Location where YCWA removed woody material form New Bullards Bar Reservoir in 2017.

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## SECTION 3.0

# WOODY MATERIAL MANAGEMENT GUIDELINES AT OUR HOUSE AND LOG CABIN DIVERSION DAMS AND AT NEW BULLARDS BAR RESERVOIR

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The section describes management guidelines for YCWA's passage of woody material at Our House and Log Cabin diversion dams and for YCWA's annual collection, storage and disposal of woody material on New Bullards Bar Reservoir. YCWA will implement these management guidelines consistent with all applicable LOPs, regulations and terms and conditions in the new license.

### 3.1 Our House and Log Cabin Diversion Dams

YCWA shall allow, provided conditions permit safe and reasonable access and working conditions, mobile instream woody material to pass the Our House and Log Cabin diversion dams into downstream reaches. All sizes of large woody material greater than 8 ~~inches~~ in. in diameter and up to 36 ~~feet~~ in length shall be allowed to pass downstream past the dams. If it is reasonably necessary to decrease the length of woody material to allow handling to implement this condition, then YCWA may cut such woody material to the minimal extent necessary to allow safe passage over the dam. Smaller sized woody material will also be allowed to pass beyond the dams. All root wads will be allowed to pass downstream unless YCWA determines that a root wad presents a risk to the safety of the dam.

Notwithstanding this requirement, if the Commission or the California Division of Safety of Dams requires YCWA to remove woody material from the dams or dam spillways, then YCWA shall do so; and if a federal or state agency or Yuba County expresses a concern about the potential effects of this condition on the safety or maintenance of downstream bridges, then YCWA shall discuss alternatives to this measure that will achieve large woody material passage at Our House and Log Cabin diversion dams while maintaining the safety of downstream bridges.

### 3.2 New Bullards Bar Reservoir When Floating Material Is Expected to be 3,000 Cu Yds or Less

#### 3.2.1 Collection Procedures

No earlier than March 16 and if the amount of woody material floating on New Bullards Bar Reservoir is significant enough to warrant collection and disposal to ensure public safety, YCWA will begin to collect floating woody material by capturing portions of the material in enclosed floating log booms and dragging the woody material by boat to the storage areas described in Section 3.2.2.

The boats used for the collection of woody material will be moored at or placed on the reservoir at Cottage Creek Boat Launch, moored there during the work, and may be removed or moored there when the work is complete.

If boats or log booms have been removed from the reservoir, prior to launching the boats and using the log booms each year, YCWA will inspect the boats and booms for aquatic invasive species and, if any signs of aquatic invasive species are found, the boats and booms will be cleaned to remove those species.

The boats dragging the material will fly flags that will advise recreation boaters of unsafe conditions in the vicinity of YCWA's boats.

To the extent possible, YCWA will make a good faith effort to assure that New Bullards Bar Reservoir is substantially free from floating woody material by the beginning of each recreation season (i.e., by the Memorial Day holiday weekend). However, it is understood that in some years, the collection and removal of floating woody material will continue into the recreation season.

Woody material that naturally settles on the shoreline as New Bullards Bar Reservoir lowers prior to collection shall remain on the shoreline – YCWA is not required to collect, store or dispose of this woody material. Nor is YCWA required to collect woody material that enters the reservoir and sinks.

### **3.2.2 Storage Locations**

The preferred area to store woody material is the Primary Burn Site, with the Secondary Burn Site used when the Primary Burn Site is full (described in Section 2.2, and shown in Figure 2.2-1).

Prior to storing woody material in the Primary or Secondary burn sites, YCWA will invite the TNF to inspect the skid roads and sites with YCWA.

YCWA will place a log boom across the entrance to each burn site if YCWA anticipates the site will be needed that year to store material.

YCWA will open the skid road and a tractor will place the woody material in the cove into piles that are roughly 30 ft in diameter and 20 ft high. YCWA anticipates that the Primary and Secondary burn sites can each accommodate approximately 20 such piles.

YCWA will then invite the TNF to inspect the piles, which will remain in place until they are burned or otherwise disposed of, as described in Section 3.2.3.

In the event that the Primary and Secondary burn sites are not adequate to store all the woody material, YCWA may temporarily store woody material in enclosed log booms on the reservoir

surface, as long as precautions are taken to prevent recreational hazards and the log booms are on YCWA land along the reservoir shoreline.

### **3.2.3 Disposal of Material**

The Forest Service may allow the USACE or other parties to remove some or all of the woody material at the Primary or Secondary burn sites. In such cases, the third party will be responsible to repair any damage it may cause to the skid roads and will re-pile the stockpiled material that may have been disturbed due to the third parties' activities. YCWA does not have the authority to grant permission to a third party to remove woody material from the burn sites.

YCWA will dispose of the woody material stockpiled at the Primary and Secondary burn sites by burning in place, removing by truck, or other methods agreed on by YCWA and the Forest Service. The relative amount of woody material to be disposed of by each method will be discussed with the Forest Service each year prior to disposal, and the selected method will be based on the amount of material to be disposed of, current fire risk, air quality considerations, aquatic invasive species concerns, and other issues.

If material is to be burned, YCWA will coordinate with the Forest Service to plan and manage burning of the woody material in place no earlier than September 1 and no later than November 14.

~~In years when woody material exceeds the storage capacity of the Primary and Secondary burn sites, the woody material may be burned on the surface of the reservoir in cooperation with the Forest Service and after YCWA has obtained all necessary permits and approvals.~~

If woody material is to be removed from NFS lands by truck via locations other than the Dark Day Boat Ramp, YCWA will work with the Forest Service to determine the appropriate route for removal. If woody material will be removed via the Dark Day Boat Ramp, YCWA will adhere to the following procedures: 1) wood will be removed outside of the primary recreation season (i.e., the boat ramp may be used for woody material removal from September 15 through May 15 only); 2) on weekdays only; 3) notice will be provided to the public prior to the day(s) the ramp will be closed for woody material removal; 4) appropriate public safety signage will be placed at Marysville Road and on the Dark Day access road; and 5) appropriate equipment will be used and load weight limitations will be followed to avoid damage to the boat ramp, Dark Day road, and associated public parking areas. YCWA will dispose of the material in accordance with appropriate regulations off NFS lands.

When the woody material has been burned or otherwise removed from the Primary and Secondary burn sites and the sites and associated skid road(s) have been put to bed, YCWA will invite the TNF to inspect the Primary and Secondary burn sites and associated skid roads that were used that year.

### **3.3 New Bullards Bar Reservoir When Floating Material Is Expected to be More Than 3,000 Cu Yds**

#### **3.3.1 Collection Procedures**

The collection procedures are the same as those described in Section 3.2.1, with the exception that the log booms enclosing the floating woody material will be dragged to YCWA's work area just upstream of the Cottage Creek Boat Launch shown in Figure 2.2-3 or to other non-NFS lands along the reservoir shoreline.

#### **3.3.2 Storage Locations**

The floating woody material will be stored within the floating log booms until the material is pulled from within the log booms to be placed in trucks, with the exception that YCWA may store wood on YCWA land at the work area land for no more than 1 day. The amount of stored wood on land will not exceed YCWA's work area, which is less than 1 ac. The floating log booms with enclosed floating material will be located so as not to impede public boating on the reservoir. YCWA will post appropriate signs to notify the public of YCWA's activities. YCWA anticipates that the storage and removal of woody material at this site will not require closure of the Cottage Creek Boat Launch or otherwise adversely impact reservoir recreation.

#### **3.3.3 Disposal of Material**

Prior to disposal of the floating material, YCWA will enter into the necessary timber sales agreement with the Forest Service.

YCWA will dispose the woody material using an excavator placed on dry land with all necessary spill prevention measures in place at YCWA's work site shown in Figure 2.2-3. The excavator work will occur only during normal daylight working hours. The excavator will remove the material from within the floating log booms placing the material directly into trucks that will immediately haul the material off site. No wood will be cut on-site (i.e., at the excavation area) unless necessary for loading into the trucks and no wood will be stored on NFS lands. YCWA may then dispose of the material in an appropriate way, including chipping, after obtaining any necessary permits for the disposal.

When the woody material has been removed, YCWA will restore all disturbed areas, if there are any, within the FERC Project Boundary in conformance with the license requirements.

#### **3.3.4 Availability of Wood to Agencies**

Within 14 calendar days of commencing woody material removal (i.e., excavator work) as described in Section 3.3.3, YCWA will contact via e-mail the Forest Service, USACE, USFWS and Cal Fish and Wildlife to notify them to contact YCWA in writing (e-mail acceptable) if the

agency is interested in acquiring, at its own expense, some of the larger pieces of wood to be removed. YCWA will work with any agency that so notifies YCWA as long as the agency's acquisition of pieces does not result in YCWA incurring additional costs (i.e., the interested agency would be responsible for storing, hauling and delivering the wood it wants to its own location, and for coordinating with the Forest Service and other agencies, as needed) or delay YCWA in implementing the clearing and disposal work.

### **3.3.5 Alternative**

As an alternate to the method described above, YCWA may burn woody material on barges on the surface of New Bullards Bar Reservoir in cooperation with the Forest Service and after YCWA has obtained all necessary permits and approvals.



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## SECTION 4.0

# **SPECIAL-STATUS WILDLIFE SPECIES PROTECTION**

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The section describes special-status species (Federally endangered, threatened, candidate, and proposed species, California endangered, threatened, and candidate species, California Species of Special Concern, California Fully Protected, and Forest Service Sensitive Species) protection measures that shall be adhered to when YCWA performs woody material management described in this Plan.

YCWA will implement protection measures, including LOPs and work buffers, to reduce or avoid impacts to special-status wildlife species, while conducting woody material management activities described in this Plan unless otherwise approved by the Forest Service, ~~California Department of Fish and Wildlife~~ (Cal Fish and Wildlife) and USFWS. Protection measures are described for each special-status wildlife species below. Some Project activities may be exempt from the restrictions imposed by the protection measures (e.g., emergency work that includes, but is not limited to, dam failure, employee injury, powerhouse goes off-line, and repairs to facilities caused by storms). However, YCWA will notify the Forest Service, USFWS, and Cal Fish and Wildlife within 48 hours of commencement of Project activities that require suspension of the protection measures described below.

During woody material management activities described in this Plan, YCWA will implement the following special-status wildlife species protection measures:

- **Bald eagle.** The measures below, which are from the previous BiOp (see Section 2.2, above), in combination with the license's *Bald Eagle and Peregrine Falcon Management Plan*, are anticipated to provide protection for bald eagles on New Bullards Bar Reservoir in relation to large woody material management activities:
  - Implement a LOP from January 1 through August 31 (or one month past fledging) within 0.25-mi of the Garden Point bald eagle breeding territory. If monitoring identifies the nest tree being used that year, the area for the LOP may be adjusted to within 0.25-mi of the nest trees. If a tree, other than the current Garden Point bald eagle nest tree is used, all activities will be re-evaluated based on their proximity to the new nest.
  - Implement a LOP from January 1 through August 31 for burning debris and stockpiling wood at the Primary, Secondary and Tertiary burn sites (Figure 2.2-1). The season may be shortened from January 1 to June 30, if sufficient monitoring can determine that bald eagles are not nesting within 0.25-mi of the proposed activities. Wood gathering from the water surface may still occur within 0.25-mi of breeding territory.
  - Implement a LOP from November 15 through March 15 to activities within 0.25-mi of the NMWSE to protect wintering bald eagles. Extend the LOP from November 1 through March 15 for areas within 0.25-mi of the dam and winter night roost.

- Great blue heron. To protect great blue heron (*Ardea herodias*) rookeries during the breeding season, YCWA will avoid woody material management activities from March 15 to July 31 within a buffer of 0.25-mile around rookeries. YCWA will identify rookeries based on information from the Forest Service and Cal Fish and Wildlife's California Natural Diversity Data Base (CNDDDB).
- Other nesting bird species. If woody material piling (i.e., tractors moving woody material that has settled in a storage area into piles) or burning activities are scheduled to occur during the general breeding bird season of February 1 through August 31, YCWA will conduct a survey for active bird nests within a 500-ft buffer of the area where activities are planned to occur within 5 days of commencement of activities. If no nesting special-status bird species are found within 500 ft of the activity area, the piling or burning activities may proceed. If any special-status bird species nests are found within the survey areas described above, YCWA will consult with the Forest Service on NFS lands, Cal Fish and Wildlife, and USFWS, prior to commencing the activities. Nesting bird survey results will be submitted to the above agencies for review via electronic mail within 5 days of completion and prior to commencing of the activities.
- California red-legged frog. To protect breeding CRLF, YCWA will not conduct woody material management activities within 300 ft of CRLF critical habitat or habitat occupied by CRLFs without prior coordination with the Forest Service on NFS lands and Cal Fish and Wildlife and ESA consultation with the USFWS, as appropriate. YCWA will identify CRLF critical habitat and occupied habitat based on information from the Forest Service, USFWS and Cal Fish and Wildlife's CNDDB.
- Western pond turtle. Western pond turtle (*Actinemys marmorata*, or WPT) is known to occur in portions of the Project area; however, WPT nesting sites have not been identified to date. Should these sites be identified in the future, YCWA will coordinate with the Forest Service and Cal Fish and Wildlife to determine appropriate protection measures during woody material management activities.

## SECTION 5.0

# **REPORTING, CONSULTATION AND PLAN REVISION**

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## **5.1 Reporting and Consultation**

No reporting to or consultation with the Forest Service or other agencies in addition to that described in Section 3 and 4 of this Plan is required.

## **5.2 Plan Revisions**

YCWA, in consultation with the Forest Service will review, update, and revise the Plan, as needed, when significant changes in the existing conditions occur. Any updates to the Plan will be prepared in coordination and consultation with the Forest Service, USFWS and Cal Fish and Wildlife. Sixty days will be allowed for the Forest Service, USFWS and Cal Fish and Wildlife 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 the Forest Service, USFWS or Cal Fish and Wildlife, 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>10</sup>

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<sup>10</sup> The Plan will not be considered revised until FERC issues its approval.

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## SECTION 6.0

# REFERENCES CITED

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- United States Army Corps of Engineers (USACE). 2011. Lower Yuba River large woody material management plan. Sacramento District, Sacramento, CA. [http://www.spk.usace.army.mil/Portals/12/documents/usace\\_project\\_public\\_notices/Public%20LWMMP%20Signed%20EA%20.pdf](http://www.spk.usace.army.mil/Portals/12/documents/usace_project_public_notices/Public%20LWMMP%20Signed%20EA%20.pdf)
- United States Department of Agriculture, Tahoe National Forest (TNF). 1990. Tahoe National Forest Land and Resource Management Plan. Department of Agriculture. Nevada City, California. 687 pp. and appendices.
- \_\_\_\_\_. 1988. Plumas National Forest Land and Resource Management Plan. Department of Agriculture. Quincy, California. Available online:  
< [http://www.fs.usda.gov/detail/plumas/landmanagement/?cid=fsm9\\_034925](http://www.fs.usda.gov/detail/plumas/landmanagement/?cid=fsm9_034925)>.
- United States Fish and Wildlife Service (USFWS). 2004. *Biological Opinion for the New Bullards Bar Reservoir Safety and Annual Maintenance Project*.



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