

# **Errata to Amended Final License Application**

## **Attachment 2**

### **Recreation Facilities Plan**

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

July 2017

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

**Recreation Facilities Plan**

**Security Level: Public**

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

June 2017

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Attachment B	Annual Pre- and Post-season Facility Condition Assessment Form
Attachment C	Site Plans for the Existing Facilities
Attachment D	As-Built Drawings for New or Rehabilitated Facilities <sup>1</sup>
Attachment E	Project Recreation Facilities Map example

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<sup>1</sup> Currently, Attachment D does not contain any drawings, but is included as a placeholder for future as-built drawings from work completed as part of this Plan.

# GLOSSARY – DEFINITIONS OF TERMS, ACRONYMS AND ABBREVIATIONS

Term	Definition
ABAAS	Architectural Barriers Act Accessibility Standards
ADASAD	Americans with Disabilities Act Standards for Accessible Design
AIS	Aquatic Invasive Species
BAOT	Boats-at-one-time
Cal Fish and Wildlife	California Department of Fish and Wildlife
C.F.R.	Code of Federal Regulations
DBW	California Division of Boating and Waterways
Day-use facility	A recreation site for day-use only, including picnic sites, observation sites, fishing sites, boating sites, etc.
dispersed shoreline camping	Informal, user-created camping below the 1,941 ft elevation that contains no formally managed recreation facilities or improvements along the shoreline of New Bullards Bar Reservoir. It is typified by user-created bare and compacted ground areas and trails and, in some locations, rock fire rings.
EIS	Environmental Impact Statement
Facilities or Project recreation facilities	Project recreation facilities including existing facilities and new facilities that are or will be part of the Project and within the FERC Project license, as proposed in this Plan. The Facilities include features attached to the land or otherwise integral to the asset (e.g., restrooms, fire rings, and picnic tables). Facilities do not include equipment, vehicles, supplies, etc. used to operate and maintain the Facilities.
FERC	Federal Energy Regulatory Commission
floating comfort station (FCS)	A floating restroom building that provides only toilet stalls for reservoir-based visitors.
Forest Service	United States Department of Agriculture, Forest Service
FSORAG	Forest Service Outdoor Recreation Accessibility Guidelines
FSTAG	Forest Service Trail Accessibility Guidelines
ft	Feet
hazard tree	For the purpose of this Plan, a “hazard tree” is a tree near a Project facility that YCWA or the Forest Service proposes to fall because the tree is likely to fall under natural conditions within the foreseeable future, and when it falls under natural conditions will pose a risk to a nearby Project facility, members of the public using the Project facility, or Project Operations staff maintaining the facility. Potential hazard trees may or may not be within the FERC Project Boundary.
improvement  -major -minor	<p>The construction, installation, or assembly of a new fixed asset, or the significant alteration, expansion, or extension of an existing fixed asset to accommodate a change of purpose or level of use. Improvement is also used synonymously with “enhancement”.</p> <p><u>Major</u> recreation improvements require significant planning and implementation (generally over a 3 to 5-year periods that include, survey, design, implementation planning and permitting), that results in the construction/installation of a new facility that did not previously exist or work that changes the site layout or footprint of an existing facility.</p> <p><u>Minor</u> recreation improvements do not require significant planning and implementation timeframes, and generally enhance an existing facility without altering the site layout/footprint or involves construction or installation of a new basic fixed asset that does not require survey or design work (e.g., bear-proof lockers, signs, vehicle barriers, auto-shutoff water hydrants, etc.).</p>
License Year 1	First full calendar year after license issuance
mi	mile
NFS	National Forest System
NMWSE	Normal Maximum Water Surface Elevation
non-peak season	Non-peak season extends from January 1 up to the Memorial Day holiday weekend; and after the Labor Day holiday weekend through December 31.
NRRS	National Recreation Reservation Service
O&M	Operations and maintenance
open season	The open season refers to the season when Facilities are generally open; and varies by type of facility.
Operating Staff	Staff who operate the Facilities on a daily or regular basis
ORAR	outdoor recreation access route – A continuous, unobstructed path designated for pedestrian use that connects pedestrian elements within a recreation site, such as a picnic area, camping area, or trailhead.
peak season	Peak season extends from Memorial Day to Labor Day holiday weekends.

## Glossary (continued)

Term	Definition
PAOT	People-at-one-time
Plan	Recreation Facilities Plan
PNF	Plumas National Forest
Project	Yuba River Development Project, FERC Project No. 2246
Recreation Day (RD)	Each visit by a person to a development for recreation purposes during any portion of a 24-hour period.
RV	recreational vehicle
rehabilitation  -major -minor	<p><u>Major Rehabilitation</u> - Reconstructing or replacing an existing fixed asset or any of its fundamental components in order to restore the functionality or life of the asset. Replacement is the substitution or exchange of an existing fixed asset or component with one having essentially the same capacity and purpose. The decision to replace a fixed asset or component is usually reached when replacement is more cost effective or more environmentally sound than repairing the existing asset. Replacement of an asset or component usually occurs when it nears or has exceeded its useful life. Examples include: replacing a restroom building, enlarging vehicle spurs, increasing a road turning radius, etc. Major rehabilitation is also used synonymously with “reconstruction” and “replacement”.</p> <p><u>Minor Rehabilitation</u> - repair and replacement of parts that result in fewer breakdowns and fewer premature replacements, and helps achieve the expected life of the fixed asset at a minimum. Minor rehabilitation does not include construction of new Facilities or the replacement of an existing fixed asset. Minor rehabilitation activities will arrest deterioration and may appreciably prolong the life of an asset. Examples include: installing a new roof, new floor, or new siding, replacing electrical wiring or heating systems, repairing or replacing pipes, pumps and motors, repairing the paths, walks, or walls of recreation facilities, painting, replacing a broken window, replacing a toilet seat, replacing a fire ring, table or food locker, etc. Minor rehabilitation activities are categorically exempt from permitting or the three-step Site Development Planning process described in this Plan.</p>
ROS	<u>Recreation Opportunity Spectrum</u>
routine maintenance	Keeping fixed assets in acceptable condition, including minor repairs, painting, replacement of minor parts and minor structural components. Routine maintenance neither materially adds to the value of the property nor appreciably prolongs its life. The work serves only to keep the facility in an ordinary, safe and efficient operating condition. Examples include interior painting, repair of broken amenities (tables, doors, fire rings, risers, etc.), light bulb replacement, cleaning, greasing, servicing, inspecting, oiling, adjusting, tightening, aligning, sweeping, hazard tree removal, picking up trash, shoveling out fire rings, raking pine needles, etc.
site concept plan	This plan presents a preliminary graphic illustration of proposed facilities and utilities in relationship to existing site features, facilities, and utilities. The Site Concept Plan will communicate proposed development ideas or alternatives. The Site Concept Plan may include enlargements of the area that indicate placement and orientation of the proposed facilities. This may include the use of aerial photography or topographic maps.
site development plan	This plan presents a comprehensive graphic illustration of the facilities and utilities (both existing and proposed) to be built. The development plan is based on an accurate survey, usually drawn to a scale ranging from 1” = 20’ or 1” = 100’, with appropriate contour information, and may also include descriptions or lists of features. The plan developed is to be consistent with the Site Concept Plan. This plan also identifies the site design details (i.e., picnic tables, fire rings, restrooms, signage, road surface materials, etc.).
SUP	Special use permit
TNF	Tahoe National Forest
trail	A route that is designed, constructed, or designated for recreational pedestrian use or provided as a pedestrian alternative to vehicular routes within a transportation system.
undeveloped recreation site	An informal, user created recreation site that contains no formally managed recreation facilities or improvements. It is typified by user-created bare and compacted ground areas and trails and, in some locations, rock fire rings.
water hydrant	A water outlet that allows for distribution of potable drinking water within a recreation facility.
YCWA	Yuba County Water Agency

## 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 June 2017, 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 Recreation Facilities Plan (Plan) in its June 2017 Amended Application for a New License.

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) land, and the United States Army Corps of Engineers’ (USACE) Federal Power Act § 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 (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.

Subject to obtaining the necessary Special Use Permit (SUP) consistent with this Plan from the Forest Service, YCWA will implement the portions of this Plan involving Project recreation facilities (Facilities) that are owned, or will be owned, by the United States (U.S.) on NFS lands.

## **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 existing Project includes 15 developed Facilities, all at New Bullards Bar Reservoir. These include: 1) Hornswoggle Group Campground; 2) Schoolhouse Campground; 3) Dark Day Campground; 4) Cottage Creek Campground; 5) Garden Point Boat-in Campground; 6) Madrone Cove Boat-in Campground; 7) Frenchy Point Boat-in Campground; 8) Dark Day Picnic Site; 9) Sunset Vista Observation Site; 10) Dam Overlook Observation Site; 11) Moran Road Boating Site; 12) Cottage Creek Boat Launch;<sup>2</sup> 13) Dark Day Boat Launch, including the Overflow Parking Area; 14) Schoolhouse Trail; and 15) Bullards Bar Trail. In addition to these developed Facilities, there is supporting infrastructure including a potable water supply system and floating comfort stations (FCS) on New Bullards Bar Reservoir.<sup>3</sup>

Notably, Cottage Creek Campground was burned in 2010. YCWA and the Forest Service have reached agreement on a two-phase reconstruction of this campground as a small group campground. The first phase of the reconstruction is proposed on the western portion of the site that was less impacted by the fire (most trees providing shading survived) and is expected to be completed by December 2017. The first phase consists of 5 double campsites, 1 host site, 1 two-unit vault restroom, a potable water system, trash facilities and paved roads and camping spurs. The second phase of the reconstruction is proposed on the eastern portion of the site that was significantly impacted by the fire and requires replanting of trees for shading and screening; and will consist of 4 campsites (2 doubles and 2 triples), 1 two-unit vault restroom, expansion of the potable water system, trash facilities, paved camping spurs and a paved road. The second phase construction will begin when a trigger condition is reached, based on an average tree height of 20 ft of the trees in the replanted area, and may be 10 or more years out from when this Plan was developed in 2016. For the purposes of this Plan, Phase 1 of Cottage Creek Campground is considered an existing facility and is described as such in Section 2 of this Plan; and the second phase of development is described in Section 3.3.2.1.

All of the existing Facilities are located on NFS land, with the exception of the Dam Overlook Observation Site, Cottage Creek Boat Launch and small portions of the Bullards Bar Trail, which are located on land owned by YCWA. All of the 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. The Project also includes an undeveloped recreation site at Our House Diversion Dam located on NFS lands within the existing FERC Project Boundary.

All existing Facilities on NFS lands as described in this Plan and shown in Attachment C to this Plan are owned by the U.S. For clarity, these are: 1) Hornswoggle Group Campground; 2) Schoolhouse Campground; 3) Dark Day Campground; 4) Garden Point Boat-in Campground; 5)

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<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 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.



Madrone Cove Boat-in Campground; 6) Frenchy Point Boat-in Campground; 7) Dark Day Picnic Site; 8) Sunset Vista Observation Site; 9) Moran Road Boating Site; 10) Dark Day Boat Launch, including the Overflow Parking Area; and 11) Cottage Creek Campground (under construction). In addition, the portions of the water treatment system, the Schoolhouse Trail and trailhead, and the Bullards Bar Trail and trailheads on NFS lands as described in this Plan and shown in Attachment C to this Plan are owned by the U.S. All existing Facilities not on NFS lands are owned by YCWA.<sup>4</sup>

Figure 1.1-1 shows the Project Vicinity,<sup>5</sup> proposed Project, and proposed FERC Project Boundary.<sup>6</sup>

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<sup>4</sup> Emerald Cove Marina facilities, which are owned by the Emerald Cove Marina, Inc., are not part of the Project recreation facilities.

<sup>5</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>6</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.

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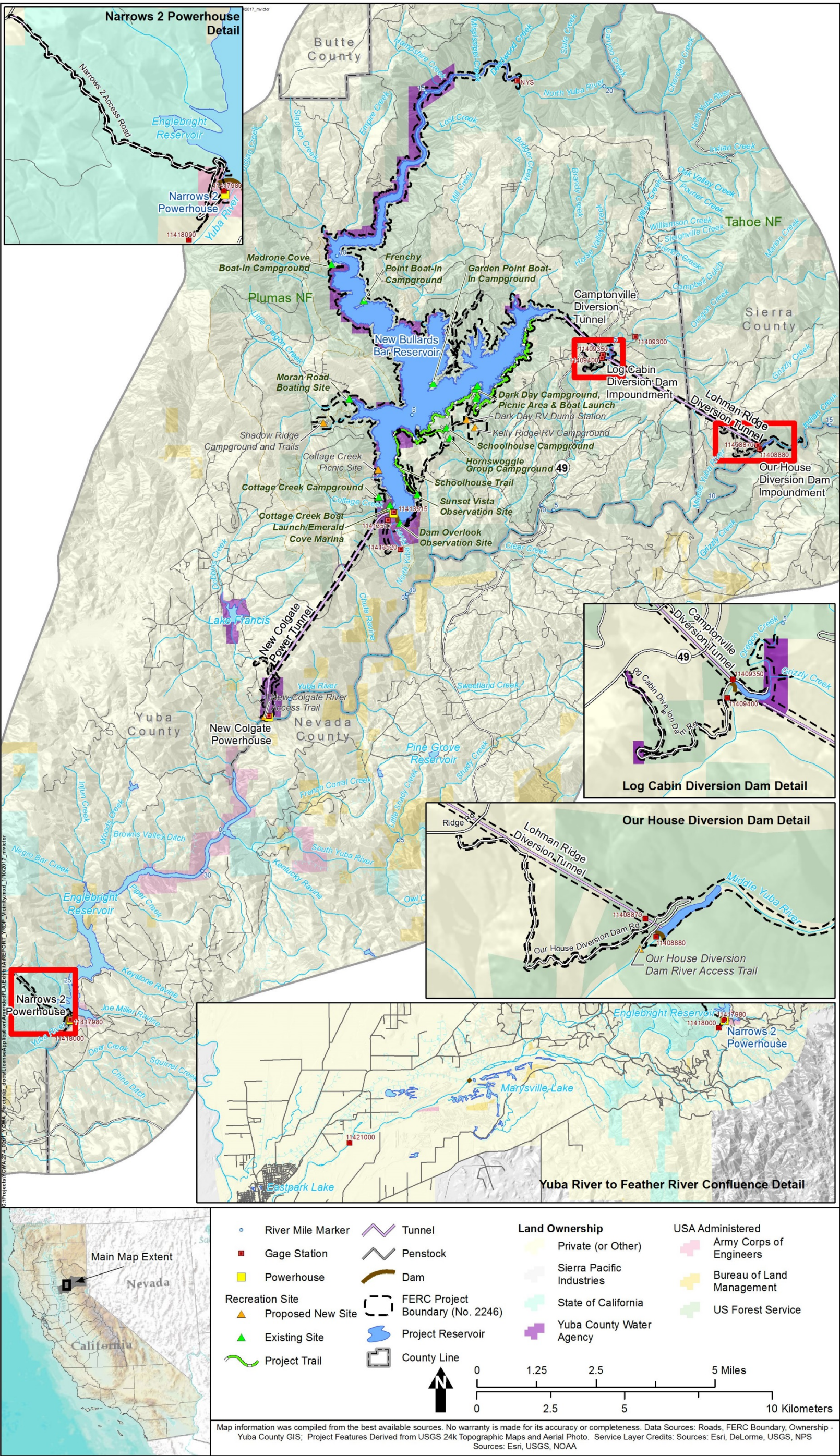


Figure 1.1-1. Yuba County Water Agency's Yuba River Development Project and Project Vicinity.



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## **1.2 Purpose of the Recreation Facilities Plan**

The overall purpose of the Plan is to provide appropriate protection, mitigation, and enhancement recreation measures for the Project by incorporating the information from YCWA's relicensing *Recreation Use and Visitor Survey Study* (Technical Memorandum 8-1) into a Recreation Facilities Plan. This plan addresses both existing Facilities, including improvements and new Facilities, to be constructed as part of the new license.

YCWA will implement this Plan in coordination with implementation of the conditions in the new license, including resource management plans. YCWA expects to coordinate with the following resource management plans, at a minimum: 1) *Aquatic Invasive Species Management Plan*; 2) *Integrated Vegetation Management Plan*; 3) *Transportation System Management Plan*; and 4) *Visual Resources Management Plan*.

## **1.3 Goals and Objectives of the Recreation Facilities Plan**

The primary goal of the Plan is to guide management of public recreation use of the Project's existing and new Facilities over the term of the new license, and minimize recreation use impacts to natural, historic, and cultural resources within the Project area. The plan includes the following objectives to help achieve this goal:

- To provide high quality Facilities that meet the needs of Project recreation users and that are consistent with federal, state, and local legal requirements and guidelines.
- To monitor recreation use over the term of the license to help ensure Project recreation users achieve high quality recreation experiences and that recreation use impacts are minimized and remain within acceptable limits.
- To describe YCWA's responsibilities regarding operation, maintenance and rehabilitation of the Facilities under the new license.

## **1.4 Contents of the Recreation Facilities Plan**

The Plan includes the following:

- Section 1. Introduction. This section includes this introductory information, including the purpose and objectives of the Plan.
- Section 2. Existing Project Recreation Resources. This section describes existing Project recreation resources, facilities, land ownership, condition, accessibility and current and projected use levels.
- Section 3. Recreation Facility Measures. This section describes the Project's proposed recreation improvement measures, including development of Facilities and rehabilitation of existing Facilities and the Project's proposed recreation operation and maintenance (O&M) program.

- Section 4. Recreation Monitoring Program. This section describes the Project's proposed recreation monitoring program that defines how the Facilities' condition, use, needs, and potential associated impacts will be monitored and addressed over the license term.
- Section 5. Annual Forest Service Coordination and Consultation. This section describes the annual coordination and consultation required as part of this Plan.
- Section 6. Plan Revision. This section describes when and why the Plan will be revised over the term of the new license.
- Section 7. References Cited. This Section identifies the references cited in this Plan.

## SECTION 2.0

# EXISTING PROJECT RECREATION RESOURCES

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## 2.1 Background

The Project provides a variety of recreation facilities and opportunities, including family campgrounds, group campgrounds, boat-in campgrounds, day-use facilities, boat ramps, vistas and overlooks, recreational trails, and dispersed shoreline camping. The existing Facilities are identified in Table 2.1-1 and shown in Figure 1.1-1, with respect to land ownership and to the FERC Project Boundary.

In 2012, YCWA conducted a qualitative condition assessment of each developed recreation facility as part of the FERC-approved Study 8.1, *Recreation Use and Visitor Surveys*. The assessment categories for each site feature within the facility were poor, fair, good, and excellent condition. Based on the number of features present at each facility and the rating of each facility feature, YCWA calculated an overall facility evaluation score by summing the total of ratings for each of the facility feature categories at each facility. Notably, the FERC-approved study methods for assessing the condition of the Facilities did not specifically account for the exact age of each facility or identify that many of the Facilities have exceeded their normal lifespan, or assessment replacement needs. While age is an underlying consideration in the evaluation process, most of the Facilities have gone through varying degrees of minor rehabilitation since the original construction or reconstruction of the facility or site amenity, which can adjust the influence of the original construction date (and subsequent age) of the facility or amenity. One specific example is the restroom buildings, which were constructed as part of the original recreation facility construction and are more than 40 years old. While the restroom buildings have undergone some minor rehabilitation (e.g., replacement or repairs to roof, exterior siding, windows, interior walls/partitions, and interior amenities), the underlying infrastructure elements (concrete foundation, plumbing and septic systems) are original construction with only some minor rehabilitation.

During the relicensing process, YCWA completed a facility inventory and condition assessment at each of the existing Facilities, and estimated recreational use. These efforts were conducted in accordance with the collaboratively-developed and FERC-approved Study 8.1, *Recreation Use and Visitor Surveys*. The methods and study results, including detailed descriptions of the Facilities, visitor survey data, and recreation use and facility capacity data, are documented in detail in YCWA's Technical Memorandum 8-1, *Recreation Use and Visitor Surveys* (YCWA 2013). The section below summarizes the key results from Study 8.1. This section also includes references to the defined Forest Service development scales for recreation sites. For clarity, these development scales are defined in Table 2.1-2 below. Note that not all the Facilities are located on NFS lands (some are on YCWA-owned land); however, for these non-NFS lands sites, the text indicates what the equivalent Forest Service classification is.

**Table 2.1-1. Existing Facilities and undeveloped recreation sites.**

Recreation Facility	Fee	Manager	Land	Campsites							Picnic Sites	Boat Ramp		Parking Spaces			Restroom Buildings			Trail-head
				Type	Host	Total	Single	Double	Triple	Group		No.	Lanes	Total	Single	Double	Total	Vault	Flush	
Schoolhouse Campground	yes	Forest Service	NFS	tent/RV	yes	56	43	13	0	0	0	0	0	20 <sup>1</sup>	20 <sup>1</sup>	0	5	1	4	yes
Hornswoggle Group Campground	yes	Forest Service	NFS	tent/RV	no	6	0	0	0	6	0	0	0	0	0	0	4	2	2	no
Dark Day Campground	yes	Forest Service	NFS	tent	no	10	6	3	1	0	0	0	0	0	0	0	2	2	0	yes
Cottage Creek Campground <sup>2</sup>	yes	Forest Service	NFS	tent/RV	yes	5	0	5	0	0	0	0	0	0	0	0	1	1	0	no
Garden Point Boat-In Campground	yes	Forest Service	NFS	tent	no	16	12	4	0	0	0	0	0	0	0	0	3	3	0	no
Madrone Cove Boat-In Campground	yes	Forest Service	NFS	tent	no	10	10	0	0	0	0	0	0	0	0	0	1	1	0	no
Frenchy Point Boat-In Campground <sup>3</sup>	no	Forest Service	NFS	tent	no	7	6	1	0	0	0	0	0	0	0	0	0	0	0	no
Dark Day Boat Launch	Main	no	Forest Service	NFS	n/a	n/a	n/a	n/a	n/a	n/a	0	1	3	103	39	64	1	1	0	yes
	Overflow				n/a	n/a	n/a	n/a	n/a	n/a	0	0	0	73	18	55	1	1	0	no
Cottage Creek Boat Launch	no	YCWA	YCWA	n/a	n/a	n/a	n/a	n/a	n/a	n/a	1	1	2	209	130	79	2	2	0	no
Dark Day Picnic Site	no	USFS	NFS	n/a	n/a	n/a	n/a	n/a	n/a	n/a	13	0	0	14	14	0	1	1	0	no
Sunset Vista Observation Site	no	USFS	NFS	n/a	n/a	n/a	n/a	n/a	n/a	n/a	1	0	0	60 <sup>1</sup>	60 <sup>1</sup>	0	1	1	0	yes
Dam Overlook Observation Site	no	USFS	YCWA	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0	0	0	24 <sup>1</sup>	24 <sup>1</sup>	0	0	0	0	no
Moran Road Boating Site	no	USFS	NFS	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0	1	1	8 <sup>2</sup>	8 <sup>2</sup>	0	1	1	0	no
Bullards Bar Trail	no	USFS	NFS/ YCWA	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0	0	0	n/a <sup>3</sup>	n/a <sup>3</sup>	n/a <sup>3</sup>	0	0	0	yes
Schoolhouse Trail	no	USFS	NFS	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0	0	0	n/a <sup>3</sup>	n/a <sup>3</sup>	n/a <sup>3</sup>	0	0	0	yes
Floating Comfort Stations	no	YCWA	N/A	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0	0	0	0	0	0	7	7	0	no
Our House Diversion	no	n/a	NFS	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0	0	0	25 <sup>1</sup>	25 <sup>1</sup>	0	0	0	0	no
Log Cabin Diversion <sup>4</sup>	no	n/a	NFS	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	no
<b>Total</b>	--	--	--	--	<b>2</b>	<b>110</b>	<b>78</b>	<b>26</b>	<b>1</b>	<b>6</b>	<b>15</b>	<b>3</b>	<b>6</b>	<b>536</b>	<b>338</b>	<b>198</b>	<b>30</b>	<b>24</b>	<b>6</b>	<b>--</b>

<sup>1</sup> The total number of spaces is estimated since the parking area does not have striped spaces.

<sup>2</sup> Cottage Creek Campground was burned in a fire in 2010 and is being reconstructed (Phase 1 of 2) with 5 double campsites and a host site (refer to Section 1.1.1 for more detail).

<sup>3</sup> Frenchy Point Boat-in Campground is no longer managed as a developed campground, but rather for dispersed shoreline camping. The restroom facility has been removed and only the campsite amenities remain, including the picnic tables, fire rings and Klamath stoves.

<sup>3</sup> Trailhead parking is available where the trail intersects other existing facility parking areas, including at the Schoolhouse Campground overflow parking area (20 spaces), Sunset Vista Observation Site (20 spaces), Dark Day Picnic Site (16 spaces) and Dark Day Boat Launch (39 single spaces).

<sup>4</sup> No recreation facilities or vehicle access.



**Table 2.1-2. Recreation Opportunity Spectrum (ROS) Classifications and the associated Development Scales and Level of Site Modification.**

ROS Class	Development Scale	Level of Site Modification
Primitive	1	Minimum site modification. Rustic or rudimentary improvements designed for protection of the site rather than comfort of the users. Use of synthetic materials excluded. Minimum controls are subtle. No obvious regimentation. Spacing informal and extended to minimize contacts between users. Motorized access not provided or permitted.
Semi-Primitive Motorized; and Semi-Primitive Non-Motorized	2	Little site modification. Rustic or rudimentary improvements designed primarily for protection of the site rather than the comfort of the users. Use of synthetic materials avoided. Minimum controls are subtle. Little obvious regimentation. Spacing informal and extended to minimize contacts between users. Motorized access provided or permitted in the Motorized class. Primary access over primitive roads. Interpretive services informal.
Roaded Natural	3	Site modification moderate. Facilities about equal for protection of natural site and comfort of users. Contemporary/rustic design of improvements is usually based on use of native materials. Inconspicuous vehicular traffic controls usually provided. Roads may be hard-surfaced and trails formalized. Development density about 3 family units per acre. Primary access may be over high standard roads. Interpretive services informal, but generally direct.
Rural	4	Site heavily modified. Some facilities designed strictly for comfort and convenience of users. Luxury facilities not provided. Facility design may incorporate synthetic materials. Extensive use of artificial surfacing of roads and trails. Vehicular traffic control usually obvious. Primary access usually over paved roads. Development density 3-5 family units per acre. Plant materials usually native. Interpretive services often formal or structured.
Urban	5	High degree of site modification. Facilities mostly designed for comfort and convenience of users and usually include flush toilets; may include showers, bathhouses, laundry facilities, and electrical hookups. Synthetic materials commonly used. Formal walks or surfaced trails. Regimentation of users is obvious. Access usually by high-speed highways. Development density about five or more family units per acre. Plant materials may be foreign to the environment. Formal interpretive services usually available. Designs formalized and architecture may be contemporary. Mowed lawns and clipped shrubs not unusual.

Source: Forest Service Manual 2300 – Recreation, Wilderness, and Related Resource Management, Chapter 2330 – Public Managed Recreation Management (Forest Service 2006).

## 2.1.1 New Bullards Bar Reservoir

### 2.1.1.1 Campgrounds

#### Schoolhouse Campground (NFS Lands)

Schoolhouse Campground is located between New Bullards Bar Reservoir and Marysville Road, across from the Hornswoggle Group Campground. The campground is approximately 0.5-mile (mi) from the reservoir shoreline on NFS lands. The campground is a Forest Service Development Scale 4 facility with 57 campsites, including 43 single sites, 13 double sites and 1 host site. The single sites amenities include a picnic table, cooking grill/fire ring, food locker, site marker and vehicle parking spur with a design capacity of five people<sup>7</sup> and one vehicle. The double sites amenities include two picnic tables, a cooking grill/fire ring, two food lockers, site marker and vehicle parking spur with a design capacity of 10 people and two vehicles. The campground has five restrooms buildings (4 four-unit flush and 1 two-unit vault), a potable water

<sup>7</sup> Forest Service design standards for single campground units specify five PAOT (Forest Service (2013a) Handbook 2309.13, Recreation Site Handbook, Ch. 30, pages 6-9; December 2013). However, the Forest Service allows up to six PAOT at single units, 12 PAOT at double units and 18 PAOT at triple units.

system and an undeveloped overflow parking area for 20 vehicles. The campground does not have any recreation vehicle (RV) hookups or a dump station. The campground has one facility identification sign at the entrance; five information boards (one 3-panel board at the entrance station and four 1-panel information boards at each restroom); 12 directional signs along the circulation roads; and 29 information/regulation signs throughout the facility.

The campground also has a trailhead for the 1.0-mi-long Schoolhouse Trail (Project trail), which connects to the 14.0-mi-long Bullards Bar Trail (Project trail); and includes two trail signs, where the trail intersects the campground. In addition, the 8 Ball Trail (non-Project trail paralleling Marysville Road) passes through the campground and leads to Dark Day Campground.

In 2012, the campground was in good overall condition. Most of the campground facilities were in good or excellent condition, including the campsite amenities (tables, fire rings, food lockers, vehicle barriers, etc.), water hydrants, circulation roads and camping spurs. In contrast, the six restroom buildings were in fair-to-good condition with well-maintained exteriors (walls and roof) but deteriorating interiors and substructures. The campground does not meet current accessible standards for NFS lands - *Forest Service Outdoor Recreation Accessibility Guidelines* (FSORAG) or *Architectural Barriers Act Accessibility Standards* (ABAAS) (YCWA 2013).

### **Dark Day Campground (NFS Lands)**

Dark Day Campground is located approximately 4 mi from the New Bullards Bar Dam via Marysville Road and Dark Day Road on the southeast shoreline of the Willow Creek arm of the reservoir. The facility is approximately 0.2-mi from the reservoir shoreline. The campground is a Forest Service Development Scale 4 facility with 10 campsites for tent camping only, including six single sites, three double sites and one triple site. The single sites amenities include a picnic table, cooking grill/fire ring, food locker, and a vehicle parking spur with a design capacity of five people and one vehicle. The double sites amenities include two picnic tables, a cooking grill/fire ring, two food lockers and a vehicle parking spur with a design capacity of 10 people and two vehicles. The triple site amenities include three picnic tables, a cooking grill/fire ring, three food lockers and a vehicle parking spur with a design capacity of 15 people and three vehicles. The campground has 2 two-unit vault restroom buildings and a potable water system. The campground has two information boards (a 3-panel and 1-panel board), nine information/regulation signs throughout the facility; and three campsite marker signs – one for each cluster of campsites (Sites 1-3, 4 and 5-10).

In 2012, the campground was in good overall condition. Most of the campground facilities were in good or excellent condition, including the campsite amenities, circulation roads and camping spurs. In contrast, the two restroom buildings and water hydrants were in fair condition. The campground does not meet current FSORAG or ABAAS accessibility standards and guidelines for NFS lands (YCWA 2013).

### **Hornswoggle Group Campground (NFS Lands)**

Hornswoggle Group Campground is located on Marysville Road, 2.5 mi northeast of the New Bullards Bar Dam, and 3.3 mi southwest of the Highway 49 junction. The facility is approximately 0.6-mi from the southeast shoreline of the reservoir on NFS lands. The facility is a Forest Service Development Scale 4 facility with six group campsites, including five campsites with a design capacity of 25 people-at-one-time (PAOT), and one campsite with a design capacity of 50 PAOT. The group site amenities include tables, food lockers, site marker and a group fire ring/grill. The campground has four restrooms (2 four-unit flush and 2 two-unit vault), a potable water system, and parking areas at each campsite. The campground has one facility identification sign at the entrance; six 1-panel information boards; three directional signs along the circulation road; and seven information/regulation signs throughout the facility.

In 2012, the campground was in good overall condition. Most of the campground facilities were in good condition, including the campsite amenities, circulation roads, camping spurs and parking areas. In contrast, the four restroom buildings and most of the water hydrants were in fair condition. The campground does not meet current FSORAG or ABAAS accessibility standards and guidelines for NFS lands (YCWA 2013).

### **Cottage Creek Campground (NFS Lands)**

Cottage Creek Campground is located off of County Road 169, approximately 0.5-mi from its intersection with Marysville Road near the dam. The campground is a Forest Service Development Scale 4 facility with five double campsites (design capacity of 10 people per site), each with a large group fire ring, two picnic tables, two food lockers, and a paved vehicle parking spur (2 single vehicle spaces and 2 RV spaces). The campground also has a host site with a holding tank and water hookup, a two-unit vault restroom building, a potable water system, overflow parking area (9 single spaces) and trash receptacles. The campground is newly constructed; is in excellent condition; and meets current FSORAG or ABAAS accessibility standards and guidelines for NFS lands.

### **Garden Point Boat-in Campground (NFS Lands)**

The Garden Point Boat-in Campground is accessed by boat only and is located on a peninsula on the north side of the reservoir, at the junction between the North Yuba River and Willow Creek arms of the reservoir on NFS lands. The campground is approximately 3.0 mi by boat from the Cottage Creek Boat Launch, and 1.5 mi from the Dark Day Boat Launch. The campground is a Forest Service Development Scale 3 facility with 16 campsites, which includes 12 single sites and four double sites. The single sites amenities include a picnic table, a fire ring, Klamath stove and site marker with a design capacity of five people. The double site amenities include two picnic tables, a fire ring, Klamath stove and site marker with a design capacity of 10 people. The campground has three vault restroom buildings (2 one-unit and 1 two-unit vault) and does not have a potable water system. The campground has one facility identification sign; one 2-panel information board; one information/regulation sign and 16 campsite marker signs.

In 2012, the campground was in good overall condition. Most of the campground facilities were in good condition, namely the campsite amenities. In contrast, the restroom buildings and the Klamath stoves were in fair condition. The campground does not meet current FSORAG or ABAAS accessibility standards and guidelines for NFS lands (YCWA 2013).

### **Madrone Cove Boat-in Campground (NFS Lands)**

The Madrone Cove Campground is accessed by boat only and is located along the west shore of the North Yuba River arm of the reservoir on NFS lands. By boat, the campground is approximately 7.5 mi from the Cottage Creek Boat Launch and 6.0 mi from the Dark Day Boat Launch. The campground is a Forest Service Development Scale 3 facility with 10 single campsites. Each site's amenities include a picnic table, fire ring, Klamath stove and site marker with a design capacity of five people. The campground has 1 two-unit vault restroom building and does not have a potable water system. The campground has one facility identification sign; one 2-panel information board; two information/regulation signs and 10 campsite marker signs.

In 2012, the campground was in fair overall condition. Most of the campground facilities were in fair condition, namely the campsite amenities. However, all the restroom buildings, retaining walls (at each site) and Klamath stoves as well as some of the tables were in poor condition. The campground does not meet current FSORAG or ABAAS accessibility standards and guidelines for NFS lands (YCWA 2013).

### **Frenchy Point Boat-in Campground (NFS Lands)**

Frenchy Point Boat-in Campground is a developed boat-in campground facility (Forest Service Development Scale 3 facility). Due to very low use due to difficult access terrain<sup>8</sup>, the facility is now alternatively used as a camping area through the dispersed shoreline camping permit system. The site is accessed by boat only and is located along the west facing shore of the North Yuba River arm of the reservoir on NFS lands. By boat, the campground is approximately 6.0 mi from the Cottage Creek Boat Launch and 4.5 mi from the Dark Day Boat Launch. The facilities include seven campsites (6 single and 1 double). The single site amenities each include a picnic table, fire ring, Klamath stove and site marker with a design capacity of five people; and the double site amenities include a picnic table, fire ring, two Klamath stoves and a site marker with a design capacity of 10 people. The site has one site identification sign, two 1-panel information boards, and one information/regulation sign. The site does not have a restroom

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<sup>8</sup> This facility was converted to a shoreline camping area due to low use. The location of the facility is not ideal for visitor use, as the shoreline access is very steep, particularly below the normal maximum water surface elevation (NMWSE). As the reservoir elevation recedes early in the peak recreation season, the access issue results in a very short period of use. Historically, the use of this facility only occurred within 15 vertical ft of the NMWSE, or roughly one month, typically in the June-July period (YCWA 1993).

facility<sup>9</sup> or potable water system. A FCS is usually moored in the cove near the access to the campground.

In 2012, the remnant facilities and amenities were in fair-to-poor overall condition. The site does not meet current accessibility standards and guidelines for NFS lands (FSORAG or ABAAS) (YCWA 2013).

### **Burnt Bridge Campground (NFS Lands)**

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.

#### **2.1.1.2 Day-use Facilities**

### **Dark Day Picnic Site (NFS Lands)**

The Dark Day Picnic Site is located adjacent to Dark Day Campground on NFS lands. The picnic site is a Forest Service Development Scale 3 facility with 13 picnic sites, each with a picnic table and cooking grill/fire ring. The picnic site also has 1 four-unit vault restroom building, a potable water system, and a paved and striped parking area for 14 vehicles. Trailhead access for the Bullards Bar Trail (Project trail) is located near the parking area. The facility has one facility identification sign, two 1-panel information boards, 14 information/regulation signs, two directional signs on the road, and one trailhead sign.

In 2012, the facility was in good overall condition, but the individual facilities' condition varied widely. The parking area was in excellent condition; however, the site amenities (tables and Klamath stoves) and the restroom were in fair condition. The facility does not meet current FSORAG or ABAAS accessibility standards and guidelines for NFS lands (YCWA 2013).

### **Sunset Vista Observation Site (NFS Lands)**

This scenic overlook is located near the southeast corner of the reservoir, approximately 1.0 mi east of New Bullards Bar Dam via Marysville Road and Vista Point Road. The facility is a Forest Service Development Scale 3 facility with 1 four-unit vault restroom building, one picnic table, animal-resistant trash receptacle, and a gravel parking area for approximately 60 vehicles. The facility also serves as a trailhead parking area for the Bullards Bar Trail (Project trail). The

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<sup>9</sup> A pit restroom was installed during the original construction of the facility, but was removed due to low campground use and high maintenance of the restroom. Currently, a floating comfort station is moored in the cove next to the campground.

facility has one facility identification sign, a single 1-panel information board, four information/regulation signs, and an interpretive panel. In addition, the Bullards Bar Trailhead also has three signs including a trailhead sign and two informational signs.

In 2012, the facility was in good overall condition, but the individual facilities' condition varied widely. The parking area was in good condition; however, the site amenities (table and interpretive displays) and the restroom were in fair condition. The facility does not meet current FSORAG or ABAAS accessibility standards and guidelines for NFS lands (YCWA 2013).

### **Dam Overlook Observation Site (YCWA Land)**

The Dam Overlook Observation Site is located at the southeast corner of New Bullards Bar Dam on Marysville Road on YCWA-owned land. The facility provides a place to park a vehicle with an unobstructed view of the dam and reservoir and consists of a gravel parking area for approximately 24 vehicles and an interpretive plaque related to the construction of New Bullards Bar Dam and the Project. The facility does not have any signs other than the interpretive plaque. The facility equates to a Forest Service Development Scale 2 facility.

In 2012, the facility was in excellent overall condition, with the limited facilities (parking and interpretive display) in good to excellent condition. The facility does not meet current accessible standards for private land (2010 Americans with Disabilities Standards for Accessible Design or ADASAD) (YCWA 2013).

### **2.1.1.3 Boat Launch Facilities**

#### **Cottage Creek Boat Launch (YCWA Land)**

Cottage Creek Boat Launch is located on YCWA-owned land along the southwest corner of the reservoir off Cottage Creek Campground Access Road approximately 0.1-mi from its intersection with Marysville Road. The launch ramp facility consists of a 900-ft long 2-lane concrete launch ramp, 2 two-unit vault restroom buildings, 1 picnic site and a paved and striped parking area for approximately 199 single spaces (3 accessible) and 112 vehicle plus trailer spaces (2 accessible). The facility has two facility identification signs and 33 information/regulation signs. The facility equates to a Forest Service Development Scale 4 facility.

In 2012, the Cottage Creek Boat Launch was in excellent overall condition as most of the facilities and amenities were constructed or installed in 2005, including the parking area, restroom buildings and circulation roads. The concrete boat ramp is in good overall condition with the majority of the concrete ramp (upper portion) in good condition compared to the lower and recently extended portion that is in excellent condition. The parking area and restroom buildings all met 2010 ADASAD. There are no standards for accessibility within the boat ramp.

## **Dark Day Boat Launch (NFS Lands)**

The Dark Day Boat Launch facility is located on Dark Day Road. The facility is a Forest Service Development Scale 4 facility with a main facility (original construction) and an overflow parking area (constructed in 2004).

### Main Facility (Parking Area and Boat Ramp)

The main facility has a 3-lane concrete boat ramp (decreases to 2 lanes and then 1 lane at the bottom) with a floating courtesy dock, boat loading platform, 1 four-unit vault restroom building and a paved and striped parking area for approximately 34 single spaces and 84 vehicle plus trailer spaces. Exterior, solar-powered lights are provided at the restroom and at the top of the boat ramp.

In 2012, the main facility amenities were generally in fair condition, including the concrete boat ramp, parking area and restroom. The main facility did not meet current FSORAG or ABAAS accessibility standards and guidelines at that time due to the steep slope of the entire parking area (YCWA 2013).

Notably, the concrete Dark Day boat ramp has experienced a functionality issue at an approximate elevation of 1,856 ft due to slope instability in the upslope side of the ramp. In most years, the slope erodes depositing sediment on the boat ramp, where the sediment buildup impacts the function of the boat ramp by: 1) making the boat ramp impassable by vehicles backing down with boat trailers; and/or 2) impeding or damaging the function of the boat dock rail and roller system. Intermittently, this scenario combined with the turns in the boat dock rail and roller system makes the ramp unusable once the water surface elevation (WSE) reaches an elevation of 1,856 ft. As a result, the sediment must be removed occasionally to alleviate this situation. YCWA and the Forest Service have attempted to stabilize the slope in the past, but the impact continues to arise periodically and slope instability continues to contribute additional sediment into the boat ramp area.<sup>10</sup>

### Overflow Parking Area

The overflow parking area facility, named Dark Day Boat Launch Overflow Parking Area, has a paved and striped parking area for approximately 37 single spaces (3 accessible spaces) and 55 vehicle plus trailer spaces, and 1 two-unit vault restroom building. Overall, the facility has two facility identification signs, one 2-panel information board, 45 information/regulation signs, and five directional signs on the access and circulation roads off Marysville Road.

In 2012, the overflow facility (reconstructed in 2004) was in excellent condition and meets ABAAS (YCWA 2013).

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<sup>10</sup> In 2014, after consultation with the Forest Service, YCWA applied for but did not receive a Repair and Modification DBW grant at Dark Day Boat Launch grant of \$1,370,268, which included stabilizing the slope uphill of the ramp, replacing the boarding float and the boarding float rail system.

### Entrance Station Building

An entrance station building is located along Dark Day Road approximately 0.24-mi from the intersection with Marysville Road en route to the Dark Day Boat Launch, Campground and Picnic Area facilities. This structure is used to support operation and administration of the Dark Day recreation facilities.

### **Moran Road Boating Site (NFS Lands)**

The Moran Road Boating Site is located on the west shoreline of New Bullards Bar Reservoir at Moran Cove on NFS lands. The boating site is accessed by vehicle 6.4 mi from the Town of Challenge via Oregon Hill Road and Moran Road. The site is a Forest Service Development Scale 3 facility with a gravel parking area for eight vehicles, 1 one-unit vault restroom, animal-resistant trash receptacle, and an informal car top boat ramp with a gravel surface. The facility has a single 1-panel information board and four information/regulation signs.

In 2012, the facility was in good overall condition with most of the facilities (parking area, trash receptacles and boat ramp) in good condition. In contrast, the restroom was in excellent condition<sup>11</sup> and the signs and access road were in poor condition. The facility does not meet current FSORAG or ABAAS accessibility standards and guidelines for NFS lands (YCWA 2013).

### **Marina (YCWA Lease)**

The marina, which is not a Project recreation facility, is provided as a service to Project visitors through a YCWA lease of YCWA land to a private concessionaire. Currently, the marina is called Emerald Cove Marina and is located on New Bullards Bar Reservoir at the end of Cottage Creek Boat Launch ramp. Emerald Cove Marina consists of a marina with boat slips, a floating general store and a floating restroom building. The marina provides overnight boat slips and mooring buoys, gasoline pumps, and a floating dump station for houseboat sanitation systems. In addition, the marina provides marine-related repair and maintenance services for nearly any watercraft from complete engine overhauls to cosmetic repairs, including 24-hour emergency watercraft calls/service. The marina has a variety of boat rentals including luxury houseboats, powerboats, pontoon boats, and personal watercraft/wave runners. The general store provides groceries and general supplies to the public.

#### **2.1.1.4 Recreational Water Supply System**

A schematic of the existing recreational water supply system for the Facilities is provided in Figure 2.1-1. The system consists of a water treatment facility with distribution piping that sends potable water to Facilities on the west side of the dam (Segment 1) and on the east side of the dam (Segment 2).

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<sup>11</sup> The restroom building is a modern, prefabricated concrete CXT Inc. vault model that was installed in 2004.



## Water Treatment Facility

The water treatment facility<sup>12</sup> is located on the north side of New Bullards Bar Dam at the west end of the Cottage Creek Boat Launch facility on YCWA land. The water treatment facility consists of the following primary elements: 1) a water treatment building, containing filters, valves, gages, electronics, office, pumps and equipment; 2) two 10,000 gallon storage tanks; 3) concrete dechlorination basin; and 4) separate piping for raw water and treated water. The system has a storage capacity of 20,000 gallons and a filter rate of 30 gallons per minute or 43,200 gallons per day. The system provides water to the Facilities described above and to non-Project facilities, including the marina and the Forest Service's administrative site buildings<sup>13</sup> located near the Sunset Vista Observation Site.

## Water Storage Tanks

Besides the two storage tanks at the water treatment plant, the water system includes two water storage tanks along the water distribution system that provide a total of 33,000 gallons of storage. These include a 5,000-gallon steel tank near the Cottage Creek Boat Launch maintenance yard and 1 tank near the Sunset Vista Observation Site, including a 28,000-gallon concrete storage tank (installed in 1966) and a valve station.

## Water Distribution

### Segment 1: Water Treatment Facility to Cottage Creek Campground

#### *Water Treatment Facility to Cottage Creek Boat Launch*

The treated water leaves the water treatment facility and is piped underground directly to the Cottage Creek Boat Launch facility along the northern boundary of the facility parking area (Figure 2.1-1). Roughly halfway along the parking area, there is a "T" junction in the piping, where the piping emerges above ground and water may either be pumped up the hill to a storage tank near the Cottage Creek Boat Launch maintenance yard north of the boat launch parking area (off Cottage Creek Campground Access Road), or continue down to the marina. This segment is entirely on YCWA land.

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<sup>12</sup> The source for the recreational facility water system is raw water from New Bullards Bar Reservoir at the low level outlet of New Bullards Bar Dam. YCWA pumps and pipes the raw water up the downstream side (north side) of New Bullards Bar Dam and under Cottage Creek Campground Access Road at the entrance to the Cottage Creek Boat Launch facility, where the source water enters the water treatment facility.

<sup>13</sup> The Forest Service administrative site is a non-Project facility used by the Forest Service for a variety of Forest Service needs, and is not open to the public. It includes a Forest Service operational headquarters, barracks and residences for Forest Service fire response, as well as a single YCWA residence. FERC, in an August 19, 1993 Order that approved YCWA's Revised Recreation Plan, directed YCWA to remove the administrative site from the Project facilities, and redraw the FERC Project boundary to exclude the administrative site.

### *Cottage Creek Boat Launch to Cottage Creek Campground*

The treated water piping emerges above ground and is pumped uphill to a storage tank near the Cottage Creek Boat Launch maintenance yard and then goes back underground along the shoulder of Cottage Creek Campground Access Road, where it connects with the Cottage Creek Campground water system. This segment is mostly on YCWA land, except for a short segment on NFS lands at the entrance to the campground.

### Segment 2: Water Treatment Facility to Dark Day Picnic Area

#### *Water Treatment Facility to Sunset Vista Observation Site/Water Storage Tank Segment*

Treated water serving the Facilities on the south side of New Bullards Bar Reservoir along Marysville Road leaves the water treatment facility and is conveyed underground across the Cottage Creek Boat Launch parking area entrance road to the upstream face of New Bullards Bar Dam (near crest), where a 2-inch pipe carries it to the south side of the dam (Figure 2.1-1). Here, the pipe goes underground near the Dam Overlook Observation Site (no water facilities) along the north side of Marysville Road until it reaches the south side of the Forest Service administration site (non-project) near Sunset Vista Observation Site. A water meter is located in the underground piping at Sunset Vista Observation Site facility. It travels through the Forest Service's administrative site, mostly between the administrative site road and the reservoir, until the 2-inch pipe connects to the top of both water storage tanks at the north side of the Forest Service administrative site. This segment is on YCWA and NFS lands.

The primary storage of treated water occurs near the Sunset Vista Observation Site at the 28,000-gallon concrete tank (Figure 2.1-1).

### Sunset Vista Observation Site/Water Storage Tanks to Schoolhouse and Hornswoggle Group Campground Segment

The treated water leaves the storage tanks near the Sunset Vista Observation Site via the underground delivery system (8-inch pipe) to the Facilities along Marysville Road (Hornswoggle Group Campground, Schoolhouse Campground, and the Dark Day complex) (Figure 2.1-1). The 8-inch mainline pipe then turns and follows Marysville Road north, and delivers the water to the Facilities along Marysville Road.

The connection to Hornswoggle Group Campground occurs at a "T" junction in the main distribution line several hundred ft before the Schoolhouse Campground access road (Figure 2.1-1). The treated water is diverted off the main distribution line underneath Marysville Road to the south to Hornswoggle Group Campground, where water is piped underground to the campground water facilities (e.g., flush restroom buildings, water hydrants and fire hydrant). A water meter is located after the "T" junction, where the underground piping enters the facility.

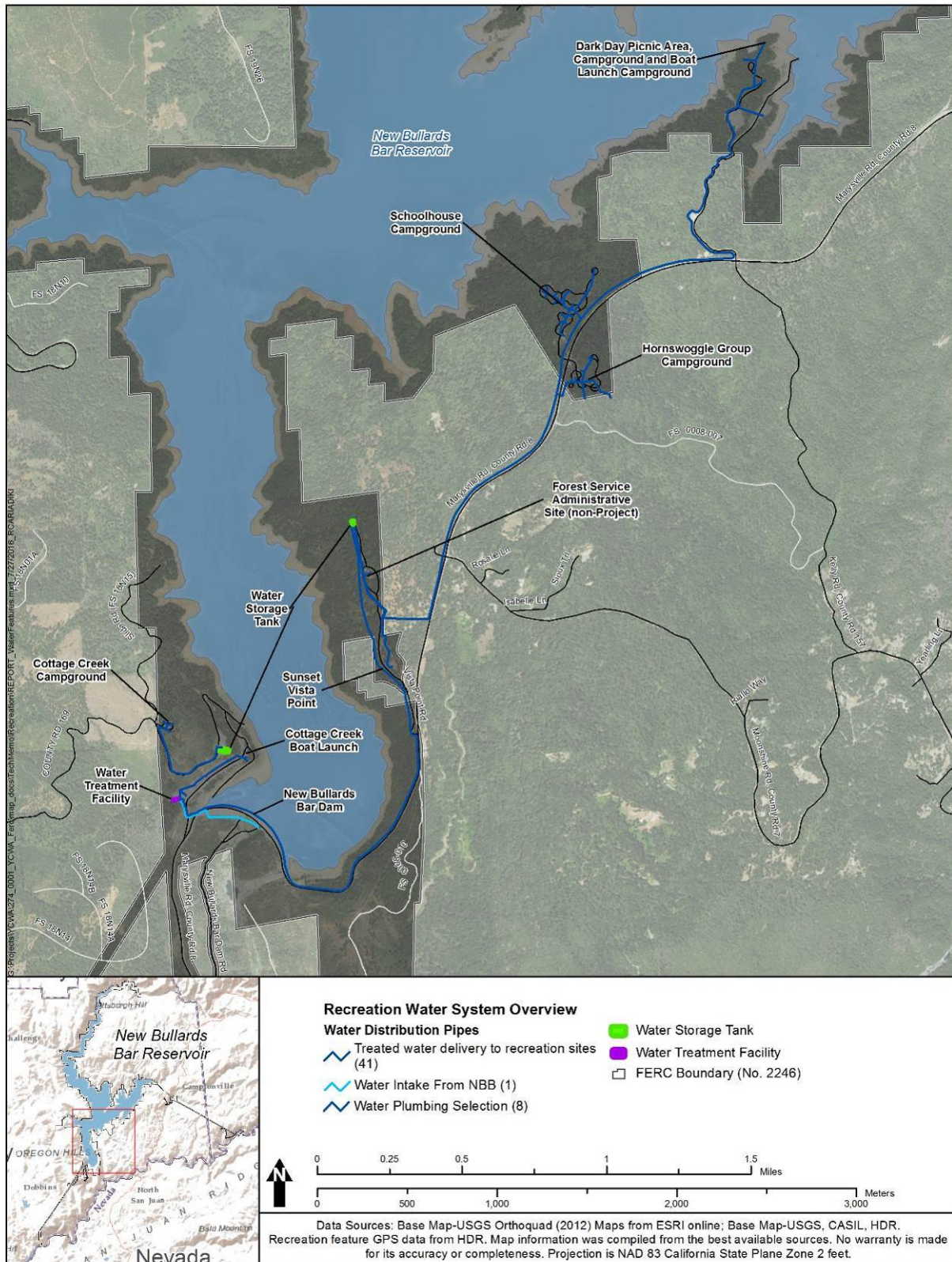


Figure 2.1-1. Schematic of the recreational water supply system.

The connection to Schoolhouse Campground occurs at a “T” junction in the main distribution line several hundred feet past the Schoolhouse Campground access road, near the middle of the facility complex (Figure 2.1-1). The treated water is connected underground to the campground water facilities (e.g., flush restroom buildings and water hydrants). A water meter is located after the “T” junction, where the underground piping enters the facility. This segment is on YCWA and NFS lands.

#### Schoolhouse and Hornswoggle Group Campgrounds to Dark Day Complex Segment

The connection to the Dark Day recreation complex occurs at a “T” junction in the main distribution line just before the Dark Day access road (Figure 2.1-1). The main distribution line then follows the west side of Dark Day Road, where it connects to the Dark Day Overflow Boat Ramp Parking Area, Dark Day Campground, Dark Day Picnic Site and Dark Day Boat Launch. The main distribution line runs along the western edge of the road that accesses Dark Day Campground and Picnic Area with several “T” junctions to run treated water to the campsites and picnic site along the road; as well as east to the water hydrant at Dark Day Boat Launch facility.

### **2012 Condition Summary**

The primary below-ground infrastructure of the water system is more than 40 years old. Based on incidental information from both YCWA staff (who operate the water treatment facility and occasionally maintains aspects of the water system), and Forest Service staff (who regularly maintains the above-ground and some segments of the below-ground facilities), YCWA understands that the infrastructure is showing its age. Further, the above-ground facilities (i.e., primarily water hydrants) at Facilities are generally in fair condition and categorically do not meet accessible guidelines. The water treatment plant is in good condition. The facility has been routinely maintained and has undergone regular minor rehabilitation of all the facility components, including the water treatment building; treatment system (filters, valves, gages, electronics, office, pumps and other equipment); steel storage tanks; the concrete de-chlorination basin; and the raw water and treated water piping. Most recently in 2012, the two steel 10,000-gallon storage tanks were recoated and the integrity of the steel was satisfactory.

#### **2.1.1.5 Project Recreational Trails**

##### **Bullards Bar Trail (NFS and YCWA Land)**

The Bullards Bar Trail is a 14-mi-long Class 3, non-motorized, multi-use trail offering an easy, relatively-level, and scenic route along the shoreline of the reservoir, from the Sunset Vista Observation Site near the dam up to Old Camptonville Road, near the Willow Creek arm of the reservoir. The trail has a native material surface, an average width of 24 in. to 48 in, and a trail slope varying based on terrain. The non-motorized, multi-use trail is located within the existing FERC Project Boundary, except for the eastern end of the trail (approximately 1.5 mi) which extends beyond the FERC Project Boundary along Willow Creek, ending at Old Camptonville Road. The trailheads, including parking, are located at the Sunset Vista Observation Site day-use facility, Dark Day Picnic Site and Dark Day Boat Launch. The trail is located on NFS and

YCWA-owned lands and is managed by the Forest Service. The trail was constructed without accessible technical requirements prior to development of FSTAG.

### **Schoolhouse Trail (NFS Lands)**

The Schoolhouse Trail is a 0.7-mi-long Class 3, non-motorized, multi-use trail that descends approximately 250 ft steeply from Schoolhouse Campground to the Bullards Bar Trail. The trail has a native material surface and an average width of 5 ft. to 10 ft. The trailhead, including parking (nearby in the campground overflow parking area), is located at the Schoolhouse Campground. The entire trail is located on NFS lands within the existing FERC Project Boundary and is managed by the Forest Service. The trail was constructed without accessible technical requirements prior to development of FSTAG.

#### **2.1.1.6 Dispersed Shoreline Camping**

Due to potential fire hazard at New Bullards Bar Reservoir, the Forest Service allows dispersed shoreline camping when the reservoir water elevation is at or below 1,941 ft (15 ft below the NMWSE of 1,956 ft) at undesignated locations by permit only through YCWA's lessee operating the Marina. Only 44 permits are available on any one day for dispersed shoreline camping. Private portable chemical toilets are required as part of the permit and can be rented from the Marina.

#### **2.1.1.7 Floating Comfort Stations**

New Bullards Bar Reservoir has seven floating comfort stations (FCS), moored at dispersed locations throughout the reservoir. Each floating FCS consists of two toilet stalls on a floating dock with cleats (for boats to approach and tie off to) and informational signs. Overall in 2012, the FCS were in excellent condition as all of the facilities were new or recently constructed and installed. The FCS did not meet current ABAAS (YCWA 2013).

### **2.1.2 Undeveloped Recreation Sites at the Diversion Dam Impoundments**

The Project's Our House and Log Cabin Diversion Dam impoundments do not include developed recreation facilities, but offer undeveloped recreation opportunities along the Middle Yuba River and Oregon Creek, respectively. A description of the undeveloped recreation opportunities at each impoundment is provided below.

#### **2.1.2.1 Our House Diversion Dam**

The Our House Diversion Dam impoundment provides undeveloped day-use recreation opportunities. The site is located on NFS lands along the Middle Yuba River (river mile, or RM, 12.6) and does not have any developed recreation facilities (Forest Service Development Scale 2 facility). Vehicle access to the diversion dam occurs via Highway 49 to Ridge Road and then 1.8 mi along the paved Our House Dam Road. Informal parking for approximately 25 vehicles is

available at the end of the Our House Dam Road, where visitors have foot access to the shoreline. In 2012, the impoundment area was in good condition; use impact was low (YCWA 2013).

### 2.1.2.2 Log Cabin Diversion Dam

The Log Cabin Diversion Dam impoundment is located on NFS lands along Oregon Creek (RM 4.3) and does not have any developed recreation facilities. YCWA, with the permission of the Forest Service, has installed and currently keeps a locked vehicular gate on NFS lands at the start of Log Cabin Road at Highway 49. Vehicle access to the diversion dam is restricted. In 2012, the impoundment area was in good condition, use impact was low, and accessibility was not addressed at this undeveloped area (YCWA 2013).

## 2.2 Current and Projected Recreation Use and Occupancy

### 2.2.1 Use Estimates

The current recreation use estimate is based on the 2012 relicensing study use data collection and methods.<sup>14</sup> In 2012, the total Project recreation use was 116,700 Recreation Days (RDs) with the majority of that use occurring in the peak season (82% or 95,900 RDs) compared to the non-peak season (18% or 20,800 RDs) (Table 2.2-1). The peak season is from Memorial Day to Labor Day holiday weekends and the non-peak season is from January 1 up to Memorial Day holiday weekend and after Labor Day holiday weekend to December 31. An RD is each visit by a person to a development for recreation purposes during any portion of a 24-hour period.

When comparing use by day type overall, total use was highest on the weekends followed by weekdays and holidays. By 2050, use is projected to increase by 51 percent or 59,400 RDs. Use is projected to reach 176,100 RDs overall, 144,700 RDs during the peak season and 31,400 RDs during the non-peak season. Projecting the future is a speculative activity, especially over a 40-year period. These projections may be useful for general planning purposes to identify potential management issues that may occur in the future.

**Table 2.2-1. Current and projected use estimates by type of use and season in Recreation Days.<sup>1</sup>**

Use Season	Day Type	2012 Use Estimate (RDs)	Projected Recreation Use (RDs)			
			2020	2030	2040	2050
Annual	Overall	116,700	128,800	143,700	159,400	176,100
	Weekday	47,100	51,900	57,900	64,300	70,900
	Weekend	53,900	59,400	66,400	73,600	81,300
	Holiday	15,900	17,500	19,600	21,700	24,000

<sup>14</sup> Refer to Technical Memorandum 8-1, *Recreation Use and Visitor Survey Study*, for details on the methods and calculations.

**Table 2.2-1. (continued)**

Use Season	Day Type	2012 Use Estimate (RDs)	Projected Recreation Use (RDs)			
			2020	2030	2040	2050
Peak Season	<b>Overall</b>	<b>95,900</b>	<b>105,800</b>	<b>118,000</b>	<b>131,000</b>	<b>144,700</b>
	Weekday	38,400	42,300	47,200	52,400	57,800
	Weekend	41,700	46,000	51,400	57,000	63,000
	Holiday	15,900	17,500	19,600	21,700	24,000
Non-Peak Season	<b>Overall</b>	<b>20,800</b>	<b>23,000</b>	<b>25,700</b>	<b>28,400</b>	<b>31,400</b>
	Weekday	8,700	9,600	10,700	11,900	13,100
	Weekend	12,200	13,400	15,000	16,600	18,300
	Holiday	N/A <sup>2</sup>	N/A <sup>2</sup>	N/A <sup>2</sup>	N/A <sup>2</sup>	N/A <sup>2</sup>

<sup>1</sup> Rounded to the nearest hundred.

<sup>2</sup> N/A = not applicable. Only peak season holiday weekends (Memorial Day, Independence Day and Labor Day) are considered for these estimates.

## 2.2.2 Facility Occupancy

The following section details the projected increase in campground, picnic site and parking area occupancy rates for the peak season when recreation use is most concentrated and capacity issues are most likely to occur. Importantly, the projections are based on specific activity projections developed by Bowker et al. (2012) for each decade from 2020 through 2060.<sup>15</sup>

### 2.2.2.1 Campgrounds

The overall average occupancy at the five Project developed campgrounds ranged between 37.0 and 61.7 percent; and is projected to be between 59.7 percent and 99.5 percent by 2060 (Table 2.2-2). Dark Day Campground is the first campground projected to reach full capacity on average on weekends by 2020 followed by Schoolhouse, Hornswoggle Group and Garden Point Boat-in campgrounds by 2030. Madrone Cove Boat-in Campground is not projected to reach full capacity on average on weekends through 2060.

**Table 2.2-2. Projected peak season occupancy, by day type, for the Project campgrounds through 2060.**

Facility	Day Type	Average Peak Season Occupancy (%)					
		2012	Projections				
			2020	2030	2040	2050	
Schoolhouse Campground	<b>Overall</b>	<b>49.6</b>	<b>56.8</b>	<b>63.3</b>	<b>74.1</b>	<b>74.5</b>	<b>80.0</b>
	Weekday	30.9	35.4	39.4	46.2	46.4	49.9
	Weekend	85.3	97.6	108.8	127.4	128.1	137.6
	Holiday	89.5	102.4	114.2	133.7	134.4	144.3

<sup>15</sup> For details on the methods and indices used to project occupancy, refer to Technical Memorandum 8-1 – Recreation Use and Visitor Survey Study.



**Table 2.2-2. (continued)**

Facility	Day Type	Average Peak Season Occupancy (%)					
		2012	Projections				
			2020	2030	2040	2050	2060
Dark Day Campground	<b>Overall</b>	<b>61.7</b>	<b>70.6</b>	<b>78.7</b>	<b>92.2</b>	<b>92.6</b>	<b>99.5</b>
	Weekday	46.1	52.8	58.8	68.9	69.3	74.4
	Weekend	92.8	106.3	118.4	138.6	139.4	149.7
	Holiday	91.1	104.3	116.3	136.1	136.8	147.0
Hornswoggle Group Campground	<b>Overall</b>	<b>50.3</b>	<b>57.6</b>	<b>64.2</b>	<b>75.2</b>	<b>75.6</b>	<b>81.2</b>
	Weekday	33.1	37.9	42.2	49.4	49.7	53.4
	Weekend	86.7	99.2	110.6	129.5	130.2	139.8
	Holiday	77.8	89.0	99.2	116.2	116.8	125.4
Garden Point Boat-in Campground	<b>Overall</b>	<b>53.4</b>	<b>61.2</b>	<b>68.2</b>	<b>79.8</b>	<b>80.2</b>	<b>86.2</b>
	Weekday	36.5	41.8	46.6	54.5	54.8	58.9
	Weekend	85.5	97.9	109.1	127.8	128.5	138.0
	Holiday	90.3	103.4	115.2	134.9	135.6	145.7
Madrone Cove Boat-in Campground	<b>Overall</b>	<b>37.0</b>	<b>42.4</b>	<b>47.2</b>	<b>55.3</b>	<b>55.6</b>	<b>59.7</b>
	Weekday	22.4	25.6	28.6	33.4	33.6	36.1
	Weekend	61.2	70.1	78.1	91.4	91.9	98.7
	Holiday	78.9	90.3	100.7	117.9	118.5	127.2

### Schoolhouse Campground

The overall occupancy was at 49.6 percent in 2012 and is projected to reach 80.0 percent by 2060 (Table 2.2-2). On weekends, occupancy was 85.3 percent in 2012 and is projected to reach 137.6 percent by 2060. The campground is projected to reach full capacity on weekends by 2030.

### Dark Day Campground

The overall occupancy was at 61.7 percent in 2012 and is projected to reach 99.5 percent by 2060 (Table 2.2-2). On weekends, occupancy was 92.8 percent in 2012 and is projected to reach 149.7 percent by 2060. The campground is projected to reach full capacity on weekends by 2020.

### Hornswoggle Group Campground

The overall occupancy was at 50.3 percent in 2012 and is projected to reach 81.2 percent by 2060 (Table 2.2-2). On weekends, occupancy was 86.7 percent in 2012 and is projected to reach 139.8 percent by 2060. The campground is projected to reach full capacity on weekends by 2030.

### Garden Point Boat-in Campground

The overall occupancy was at 53.4 percent in 2012 and is projected to reach 86.2 percent by 2060 (Table 2.2-2). On weekends, occupancy was 85.5 percent in 2012 and is projected to reach 138.0 percent by 2060. The campground is projected to reach full capacity on weekends by 2030.



## Madrone Cove Boat-in Campground

The overall occupancy was at 37.0 percent in 2012 and is projected to reach 59.7 percent by 2060 (Table 2.2-2). On weekends, occupancy was 61.2 percent in 2012 and is projected to reach 98.7 percent by 2060. The campground is not projected to reach full capacity on weekends through 2060.

### 2.2.2.2 Developed Picnic Sites

In 2012, the overall picnic site occupancy rates for two picnic facilities were very low. At Dark Day Picnic Site, the overall occupancy was at 4.9 percent in 2012 and is only projected to reach 7.9 percent by 2060 (Table 2.2-3). On weekends, occupancy was 11.9 percent in 2012 and is projected to reach only 19.2 percent by 2060. The picnic facility is not projected to reach full capacity overall or on weekends by 2060. At Sunset Vista Observation Site, YCWA did not observe any utilization of the single picnic site in 2012. Thus, projections are not feasible.

**Table 2.2-3. Projected peak season picnic site occupancy through 2060 by day type at Project picnic Facilities.**

Facility	Day Type	Average Peak Season Occupancy (%)					
		2012	Projections				
			2020	2030	2040	2050	2060
Dark Day Picnic Site (14 units)	Overall	4.9	5.6	6.3	7.3	7.4	7.9
	Weekday	0.0	0.0	0.0	0.0	0.0	0.0
	Weekend	11.9	13.6	15.2	17.8	17.9	19.2
	Holiday	2.4	2.7	3.0	3.6	3.6	3.8
Sunset Vista <sup>2</sup> (1 unit)	Overall	0.0	N/A	N/A	N/A	N/A	N/A
	Weekday	0.0	N/A	N/A	N/A	N/A	N/A
	Weekend	0.0	N/A	N/A	N/A	N/A	N/A
	Holiday	0.0	N/A	N/A	N/A	N/A	N/A

### 2.2.2.3 Parking Areas

#### Boat Launches

##### Dark Day Boat Launch

The overall parking area occupancy was 52.0 percent in 2012 and is projected to reach 94.3 percent by 2060 (Table 2.2-4). On weekends, occupancy was 74.4 percent in 2012 and is projected to reach 135.0 percent by 2060. The facility is projected to reach full capacity on weekends by 2040.

The overall parking area occupancy was 15.0 percent in 2012 and is projected to reach 27.2 percent by 2060 (Table 2.2-4). On weekends, occupancy was 30.1 percent in 2012 and is projected to reach only 54.7 percent by 2060. The facility is not projected to reach full capacity overall or on weekends.

### Cottage Creek Boat Launch

The overall parking area occupancy was 47.2 percent in 2012 and is projected to reach 85.7 percent by 2060 (Table 2.2-4). On weekends, occupancy was 61.9 percent in 2012 and is projected to reach 112.3 percent by 2060. The facility is projected to reach full capacity on weekends by 2050.

### Moran Road Boating Site

The overall parking area occupancy was 10.2 percent in 2012 and is projected to reach 16.1 percent by 2060 (Table 2.2-4). On weekends, occupancy was 18.8 percent in 2012 and is projected to reach only 29.6 percent by 2060. The facility is not projected to reach full capacity overall or on weekends through 2060.

**Table 2.2-4. Current and projected peak season average occupancy levels for parking areas at Project boat launch Facilities.**

Facility	Day Type	Average Peak Season Occupancy (%)					
		2012	Projections				
			2020	2030	2040	2050	2060
Dark Day Boat Launch (103 VAOT)	<b>Overall</b>	<b>52.0</b>	<b>60.6</b>	<b>67.6</b>	<b>75.2</b>	<b>83.9</b>	<b>94.3</b>
	Weekday	22.7	26.5	29.5	32.9	36.7	41.3
	Weekend	74.4	86.7	96.7	107.6	120.1	135.0
	Holiday	75.4	87.8	98.0	109.0	121.7	136.8
Dark Day Overflow Boat Launch Parking Area (73 VAOT)	<b>Overall</b>	<b>15.0</b>	<b>17.5</b>	<b>19.5</b>	<b>21.7</b>	<b>24.2</b>	<b>27.2</b>
	Weekday	2.7	3.2	3.6	4.0	4.4	5.0
	Weekend	30.1	35.1	39.1	43.6	48.6	54.7
	Holiday	13.2	15.4	17.2	19.1	21.4	24.0
Cottage Creek Boat Launch (209 VAOT)	<b>Overall</b>	<b>47.2</b>	<b>55.0</b>	<b>61.3</b>	<b>68.3</b>	<b>76.2</b>	<b>85.7</b>
	Weekday	21.8	25.4	28.3	31.5	35.2	39.6
	Weekend	61.9	72.1	80.4	89.5	99.9	112.3
	Holiday	77.2	89.9	100.3	111.6	124.6	140.0
Moran Road Boating Site (8 VAOT)	<b>Overall</b>	<b>10.2</b>	<b>11.5</b>	<b>12.7</b>	<b>13.8</b>	<b>14.9</b>	<b>16.1</b>
	Weekday	3.6	4.1	4.5	4.9	5.2	5.6
	Weekend	18.8	21.3	23.5	25.5	27.5	29.6
	Holiday	8.3	9.5	10.4	11.3	12.2	13.2

## **Developed Day-use Facilities**

### Dark Day Picnic Site

The overall parking area occupancy was 29.5 percent in 2012 and is projected to reach 48.3 percent by 2060 (Table 2.2-5). On weekends, occupancy was 58.3 percent in 2012 and is projected to reach 95.7 percent by 2060. The facility is not projected to reach full capacity overall or on weekends through 2060.

### Sunset Vista Observation Site

The overall parking area occupancy was 9.7 percent in 2012 and is projected to reach 16.7 percent by 2060 (Table 2.2-5). On weekends, occupancy was 15.8 percent in 2012 and is projected to reach only 27.3 percent by 2060. The facility is not projected to reach full capacity overall or on weekends through 2060.

### Dam Overlook Observation Site

The overall parking area occupancy was 4.9 percent in 2012 and is projected to reach 8.0 percent by 2060 (Table 2.2-5). On weekends, occupancy was 6.9 percent in 2012 and is projected to reach only 11.2 percent by 2060. The facility is not projected to reach full capacity overall or on weekends through 2060.

**Table 2.2-5. Current and projected peak season average occupancy levels for parking areas at Project day-use Facilities.**

Facility	Day Type	Average Peak Season Occupancy (%)					
		2012	Projections				
			2020	2030	2040	2050	2060
Dark Day Picnic Site (14 VAOT)	<b>Overall</b>	<b>29.5</b>	<b>33.7</b>	<b>37.2</b>	<b>41.1</b>	<b>44.3</b>	<b>48.3</b>
	Weekday	4.1	4.7	5.2	5.7	6.1	6.7
	Weekend	58.3	66.7	73.7	81.3	87.6	95.7
	Holiday	31.0	35.4	39.1	43.2	46.5	50.8
Sunset Vista Observation Site (20 VAOT)	<b>Overall</b>	<b>9.7</b>	<b>11.2</b>	<b>12.6</b>	<b>14.0</b>	<b>15.3</b>	<b>16.7</b>
	Weekday	1.4	1.7	1.9	2.1	2.3	2.5
	Weekend	15.8	18.4	20.7	22.9	25.0	27.3
	Holiday	16.7	19.3	21.8	24.1	26.4	28.7
Dam Overlook Observation Site (24 VAOT)	<b>Overall</b>	<b>4.9</b>	<b>5.7</b>	<b>6.3</b>	<b>7.0</b>	<b>7.4</b>	<b>8.0</b>
	Weekday	3.0	3.4	3.8	4.2	4.4	4.8
	Weekend	6.9	7.9	8.8	9.9	10.4	11.2
	Holiday	5.6	6.3	7.0	7.9	8.3	8.9

## **2.3 New Bullards Bar Reservoir Management Direction**

### **2.3.1 Reservoir Boating Carrying Capacity**

#### **2.3.1.1 Existing Reservoir Boating Carrying Capacity Direction**

In the 1993 Revised Exhibit R, YCWA and the Forest Service established a theoretical water surface social carrying capacity focused on the number of boats-at-one-time (BAOT) on New Bullards Bar Reservoir. A boat was considered any motorized watercraft, which at New Bullards Bar Reservoir, generally consists of houseboats, power boats (ski boats, wakeboard boats, fishing boats, etc.) and personal watercraft (or jet skis). The Revised Exhibit R identified a maximum reservoir boating capacity of 420 BAOT and a recommended balance of 400 BAOT (YCWA 1993).

YCWA and the Forest Service developed the maximum carrying capacity of 420 BAOT based on a blend of three recreation opportunity spectrum (ROS) classes identified for New Bullards Bar Reservoir – Urban Natural, Rural Natural, and Semi Primitive ROS classes.

Next, optimal boat densities were established, which is explained in detail in the 1993 Revised Exhibit R:

Once the ROS classes for the lake were established, Licensee identified the optimal boat densities or coefficients for each ROS class. The following factors were taken into account: the overall size of New Bullards Bar Reservoir, the size of each ROS class section, and the use levels and desired experiences within the section. Boat density standards for safety were also considered. The U.S. Coast Guard Chief of Boating Education and Safety suggests that an area of about 13.7 acres per boat is needed for water-skiing (Urban Research and Development Corp. 1988). A study conducted by the Bureau of Outdoor Recreation in 1977 recommended a range of 9 to 18 acres of surface per boat as a safety standard for high-speed boating on open water (National Park Service 1987). Licensee determined that a high density (1.25 acres/boat) would be appropriate in the Urban-Natural section of the reservoir where many boats are stored or traveling at low speeds. In the Rural-Natural section, Licensee determined a density of 12 acres per boat to be appropriate due to the large open water surface and the existing use. In the more remote Semi-primitive sections where a more primitive experience is desired, Licensee selected a boat density of 18 acres per boat. (YCWA 1993, p. 6-7)

Finally, the total capacity for the reservoir was calculated by dividing the acreage of each ROS section by the social carrying capacity coefficient (Table 2.3-1).

**Table 2.3-1. Social carrying capacity calculations per 1993 Revised Exhibit R.**

ROS Class	Section Size (acres)	Capacity Coefficient (acres/boat)	Capacity (BAOT)
Urban Natural	180	1.25	144
Rural Natural	2,155	12.00	180
Semi-Primitive	1,740	18.00	96
<b>Total</b>	<b>4,075</b>	<b>9.65</b>	<b>420</b>

Source: YCWA. 1993. Revised Exhibit R, Table 6.2, pp. 6-8.

In addition, the Revised Exhibit R identified an ROS maximum capacity (420 BAOT) and a recommended balance of uses (400 BAOT) between houseboats, inland camping, boat-in camping and day-use (Table 2.3-2).

**Table 2.3-2. ROS maximum capacity and recommended balance of uses per the 1993 Revised Exhibit R.**

Boating Use Type		ROS Maximum Capacity	Recommended Balance of Uses
Houseboats	Houseboats	80	60
	Associated watercraft	80	60
Inland Camping		111	111
Boat-in Camping		74	74
Day-use		75	95
<b>Total</b>		<b>420</b>	<b>400</b>

Source: YCWA. 1993. Revised Exhibit R, Table 6.3, p. 6-13.

### 2.3.1.2 Reservoir Carrying Capacity Monitoring

The Revised Exhibit R does acknowledge that the maximum and recommended balance of uses was a conservative approach that required monitoring and verification. Since 1993, YCWA and the Forest Service have collected only periodic monitoring data, including annual BAOT counts (Forest Service) and a 2012 social survey (YCWA). Due to the sporadic monitoring data, the theoretical capacity has not been formally verified. The following section summarizes the more recent monitoring data that has been collected.

The Forest Service has been monitoring the number of BAOT on the reservoir by surveying the number of BAOT during selected holiday and non-holiday weekends. A summary of recent observations from 2010 through 2016 are provided in Table 2.3-3 below.

**Table 2.3-3. Average and maximum BAOT and percent of reservoir maximum boating capacity by day type for 2010 through 2016.**

Year	Water Year Type	Parameter	Non-holiday Weekend Day		Holiday Weekend Day	
			Average	Maximum	Average	Maximum
2010	Below Normal	BAOT Count	291	421	348	367
		% Maximum Capacity	69.3	100.2	82.9	87.4
2011	Wet	BAOT Count	242	333	296	397
		% Maximum Capacity	57.6	79.3	70.5	94.5
2012	Below Normal	BAOT Count	277	341	321	453
		% Maximum Capacity	66.0	81.2	76.4	107.9
2013	Below Normal	BAOT Count	243	320	312	353
		% Maximum Capacity	57.9	76.2	74.3	84.0
2014	Critically Dry	BAOT Count	225	273	307	354
		% Maximum Capacity	53.6	65.0	73.1	84.3
2015	Critically Dry	BAOT Count	171	214	261	287
		% Maximum Capacity	40.7	51.0	62.1	68.3
2016	Below Normal	BAOT Count	188	220	288	303
		% Maximum Capacity	44.8	52.3	68.6	72.1

Source: LAC monitoring data (USFS-TNF 2010-2016).

In 2012, YCWA's relicensing study included social monitoring data collected as part of the *Recreation Use and Visitor Surveys Study*. The user survey collected reservoir crowding data for all visitors surveyed, and specifically as well as reservoir boaters. A summary of the reservoir boating crowding data and BAOT counts as a frame of reference on non-holiday weekend days is shown in Table 2.3-4.

**Table 2.3-4. Average reservoir boater crowding and BAOT counts on non-holiday weekend days in 2012 [Below Normal Water Year].**

Weekend Day Type	Date	BAOT Count <sup>1</sup>	Reservoir WSE (ft)	Reservoir Boater Crowding Responses <sup>2</sup>											Statistics	
				On the 9-Point Scale												
				1	2	3	4	5	6	7	8	9				
				Not At All Crowded	Slightly Crowded	Moderately Crowded		Extremely Crowded								
Average	Median															
Non-holiday Weekend Days	06/02/12	352	1,951	50%	42%	8%	0%	0%	0%	0%	0%	0%	1.6	1.5		
	06/24/12	265 <sup>3</sup>	1,944	68%	0%	16%	11%	0%	5%	0%	0%	0%	1.9	1.0		
	07/07/12	no data	1,936	27%	30%	6%	12%	6%	9%	6%	0%	3%	3.1	2.0		
	07/15/12	412	1,930	4%	32%	28%	8%	12%	4%	8%	4%	0%	3.6	3.0		
	08/12/12	320 <sup>3</sup>	1,905	13%	50%	17%	7%	3%	3%	3%	0%	3%	2.8	2.0		
	08/25/12	311	1,891	13%	38%	25%	0%	0%	13%	13%	0%	0%	3.3	2.5		
	Average	358	1,926	27%	32%	16%	8%	5%	6%	5%	1%	2%	2.8	2.0		
Holiday Weekend Days	05/26/12	254	1,953	67%	0%	25%	0%	0%	8%	0%	0%	0%	1.9	1.0		
	07/01/12	no data	1,940	34%	34%	21%	10%	0%	0%	0%	0%	0%	2.1	2.0		
	09/03/12	453 <sup>3</sup>	1,887	21%	10%	10%	13%	15%	18%	8%	0%	5%	4.1	4.0		
	Average	254	1,927	33%	18%	16%	10%	8%	10%	4%	0%	3%	3.0	2.5		

<sup>1</sup> Source: Tahoe National Forest Limits of Acceptable Change (LAC) monitoring data (Forest Service 2012).

<sup>2</sup> Source: Technical Memorandum 8-1 - *Recreation Use and Visitor Survey* (YCWA 2013).

<sup>3</sup> BAOT count is not on the same day as the crowding data. Instead, the count is from the weekend day before or after the date of the crowding survey.

## 2.3.2 Reservoir Regulations and Ordinances

The Yuba County Sheriff boat patrol maintains safety and enforces the State and County regulations at Cottage Creek Boat Launch facility and within the New Bullards Bar Reservoir. Title 8 (Public Peace and Safety) of the Yuba County Code of Ordinances includes a chapter specific to New Bullards Bar Reservoir (Chapter 8.50 – Bullards Bar Recreation Area). This chapter includes the following specific subsections. Refer to Attachment A for the complete ordinance.

- 8.50.020 - General Regulations
- 8.50.030 - Traffic Regulations
- 8.50.040 - Regulation of YCWA
- 8.50.050 - New Bullards Bar Reservoir General Regulations
- 8.50.060 - New Bullards Bar Reservoir Boating Regulations
- 8.50.070 - New Bullards Bar Reservoir Houseboats, Rafts and Floats
- 8.50.080 - Fire Prevention

## SECTION 3.0

# RECREATION FACILITY MEASURES

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All recreational facilities designed, constructed, reconstructed, purchased, or replaced on NFS lands are required to comply with the most stringent applicable accessibility standards/guidelines (ABAAS, FSORAG, and FSTAG).

The FSORAG and FSTAG provide guidance for maximizing the accessibility of outdoor recreation areas and trails in the National Forest System, while protecting the unique characteristics of their natural setting. Both guidelines include conditions for an exception and general exceptions that may be applied to some specific technical requirements. Guidance and documentation in accordance to the practices described in the FSORAG and FSTAG must be followed when applying conditions for exception. Conditions for exception are considered compliant with the most stringent application of the standards and guidelines, once approved by the Forest Service.

In addition, Section 504 of the Rehabilitation Act of 1973 requires that no person be denied access to a program/activity just because the person has a disability. This act requires that any existing facility on NFS lands that has to be entered by employees or the public to participate in the program/activity inside that facility is required to be in compliance with the applicable accessibility standards/guidelines.

The above statements apply to all subsections in Section 3.0 for NFS lands.

## 3.1 Routine Maintenance and Operation Responsibilities

This section describes YCWA's responsibilities for protecting public health, safety, and the environment and for ensuring delivery of quality recreation services at the non-Marina Facilities. YCWA has entered into a lease agreement with Emerald Cove Marina, under which Emerald Cove Marina operates and maintains the Marina consistent with the requirements of the lease agreement. Existing Facilities are described in Sections 2 and improvements to the existing Facilities and new Facilities are described in Section 3.3 and 3.4, respectively. Major rehabilitation of existing and proposed Facilities is described in Section 3.2.

YCWA is responsible for operating and maintaining all Project Facilities. This includes conducting routine maintenance activities to keep permanent assets in an acceptable condition and compliant with their original standards, which typically includes repairs, painting, replacement of minor parts and minor structural components. Routine maintenance, or reconditioning, neither materially adds to the value of the property nor appreciably prolongs its life. Routine maintenance excludes activities aimed at expanding the capacity of an asset or otherwise upgrading it to serve needs different from, or significantly greater than those originally intended. The work serves only to keep the facility in an ordinary, safe, efficient operating condition. Examples of routine maintenance activities include, but are not limited to: interior painting, repair of broken windows, light bulb and plumbing fixture replacement, cleaning,

unplugging drains, greasing, servicing, inspecting, oiling, adjusting, tightening, aligning and sweeping.

### 3.1.1 Operating Season

The Facilities will remain open with all services to be provided under the responsibility of YCWA according to the schedules by type of facility shown in Table 3.1-1.

**Table 3.1-1. Operating season for each type of facility.**

Type of Facility	Operating Season		Conditions
	Open	Close	
All Campgrounds	April 15	October 15	Once outside the peak season (Memorial Day to Labor Day), partial closures of the camping facilities may occur due to reduced use.
Dark Day and Cottage Creek Picnic Sites	April 15	October 15	Access to Cottage Creek Picnic Site occurs over private lands where private timber activities may require temporary closures.
All Other Day-use Facilities	January 1	December 31	Some Facilities may be closed during winter months due to very low use (e.g., close restroom buildings, trash facilities, water, etc.)
Boat Ramps	January 1	December 31	As conditions permit. If ramps are out of the water, ramp may be closed or remain open but with appropriate warning signs.
Recreational Trails	January 1	December 31	Whole or sections of trail may need to be closed temporarily due to weather or other site conditions.

Outside of the operating season, all necessary closing and opening preparations, and any additional maintenance and repairs that were not possible during the operating season, will be the responsibility of YCWA. When Facilities are closed, YCWA will post information in a conspicuous location at the Facilities and on YCWA's website to advise the public that the Facilities are closed and provide the information to the Forest Service for electronic posting on the Forest Service website. Major rehabilitation/reconstruction of Facilities or unforeseen damage to Facilities may require YCWA to close Facilities until construction or repairs are complete and the facility is in safe working order.

### 3.1.2 Dedicated Staff

#### 3.1.2.1 YCWA Liaison Officer for Facilities on NFS Lands

YCWA's primary contact and alternate regarding the Plan for Facilities on NFS lands are:

#### **Primary Contact**

Curt Aikens  
General Manager  
Yuba County Water Agency  
1220 F Street  
Marysville, CA 95901-4226  
Tel: (530) 741-5015  
Email: [caikens@ycwa.com](mailto:caikens@ycwa.com)

#### **Alternate**

Geoff Rabone  
Projects Manager  
Yuba County Water Agency  
1220 F Street  
Marysville, CA 95901-4226  
Tel: (530) 741-5005  
E-mail: [grabone@ycwa.com](mailto:grabone@ycwa.com)



For Facilities on NFS lands within the TNF, YCWA's primary contact or alternate will liaison with:

- TNF Supervisor's Office: (530) 265-4531
  - Hydroelectric Coordinator or Public Services Staff Officer
- Yuba River Ranger District: (530) 288-3231
  - Public Services Staff Officer

For Facilities on NFS lands within the PNF, YCWA's primary contact or alternate will liaison with:

- PNF Supervisor's Office: (530) 283-2050
  - Hydroelectric Coordinator or Public Services Staff Officer
- Feather River Ranger District: (530) 534-6500
  - Public Services Staff Officer

YCWA will promptly notify the Forest Service if it's primary contact or alternate change.

If significant problems such as major acts of vandalism or natural events that result in damage (i.e., flood, fire, and law enforcement concerns) arise during the Facilities' operating season, YCWA's primary contact or alternate will contact either the TNF or PNF, depending on the forest in which the problem occurs.

### **3.1.2.2 Incident Notification**

YCWA is required to notify FERC of any incident related to the Project that results in a death or injury to an individual. If such an incident occurs on NFS lands, YCWA will copy the Forest Service on all such notifications to FERC.

With regards to non-death or injury incidents, YCWA will contact the TNF or PNF as soon as practicable, after YCWA is aware of any of the following incidents occurring on NFS lands within the FERC Project Boundary for which the Forest Service was involved; including:

- A search and rescue operation to locate a person
- Any incident that has high potential for serious personal injury or death, or for significant property, environmental, or other natural resource damage, including avalanches, landslides, flooding, fire, structural failures, and release of hazardous materials.

For any accidents that require immediate medical attention for which YCWA is the first responder, YCWA will dial 911. For any accidents that requires medical attention for which YCWA is the first responder, YCWA will contact Plumas Emergency Command Center at (530) 283-7854 and/or Grass Valley Incident Command Center at (530)478-6111.

For the incidents described above, YCWA will document all specifics of the incident, such as when, where, and how the incident occurred and who was present or affected by the incident. YCWA will include GPS coordinates plotted on a map, if they are available. The documentation will include a written summary report to be provided to the Forest Service within 1 week of when YCWA became aware of the incident.

### **3.1.2.3 Operating Staff**

An Operating Staff will accomplish the operations responsibilities described in this section (3.1). The Operating Staff may be YCWA employees; contract employees to YCWA; staff of a concessionaire, if YCWA retains a concessionaire to operate all or some of the Facilities; Forest Service staff, if YCWA enters into an agreement under which the Forest Service would operate some or all of the Facilities on NFS lands; or a combination of the above. YCWA understands that if a party other than the Forest Service operates some or all of the Facilities on NFS lands, an appropriate permit must be obtained from the Forest Service. Some or all of these Operating Staff may be on-site, part-time, or full-time, when the Facilities are open to the public.

### **Public Interaction**

Operating Staff will attend to the public in a positive and helpful manner to make visitors feel welcome. YCWA, at a minimum, will assure Operating Staff that have primary contact with the public have customer-relations skills to: 1) enable them to answer commonly asked questions concerning the Facilities; and, 2) achieve a standard of public-contact performance commensurate with similar recreation areas on the TNF and PNF.

### **Uniforms**

During normal hours of operation of the Facilities and when at the Facilities, Operating Staff will wear uniforms or apparel that identifies her or him as Operating Staff with the responsibility of operating the Facilities. Operating Staff or other YCWA staff that occasionally visit the Facilities to perform work will not be required to adhere to this condition.

### **Vehicles**

During normal hours of operation of the Facilities and when at the Facilities, Operating Staff vehicles will include easily observed information that identifies the vehicle as a YCWA, concessionaire or Forest Service vehicle.

### **Information**

During the Operating Season, YCWA will have Operating Staff available to provide information with regards to camping, at a minimum from 8:00 AM to 5:00 PM each day and from 5:00 PM to 9:00 PM on Fridays, Saturdays and the day before a holiday. Operating Staff will keep current on conditions regarding the Facilities, including any restrictions in effect, such as fire restrictions that apply to the Facilities, by the Forest Service. Operating Staff will provide visitors with up-to-date conditions at the reservoir.

## **Parking Assistance**

Operating Staff will provide information on opportunities, rules, and regulations related to parking at Dark Day and Cottage Creek boat ramp parking areas on Saturdays, Sundays, and holidays during the Operating Season. Operating Staff will also provide launching traffic control at the boat ramps.

## **Water System Operation**

YCWA will be responsible for the overall operation of these Facilities, as well as maintenance and repairs, such as: cleaning the storage tanks, testing the water, and fixing leaks.

### **3.1.2.3 Campground Host**

YCWA will provide a campground host at the existing Schoolhouse Campground and Cottage Creek Campground. In addition, YCWA will provide a host at two campgrounds (Kelly Ridge Campground and Shadow Ridge Campground) when they are constructed. Campground hosts are considered Operating Staff in this Plan.

### **3.1.3 Law Enforcement**

In responding to violations of federal, state, and local laws, ordinances, and regulations at the Facilities, Operating Staff have the same authority as a private citizen unless the Operating Staff is a Forest Service Forest Protection Officer or Law Enforcement Officer. They cannot enforce federal, state, or local laws or regulations, including 36 C.F.R. Part 261, *Prohibitions on National Forest System lands*. However, Operating Staff will be knowledgeable of applicable federal, state, and local laws and regulations, including 36 C.F.R. Part 261, and will report violations of these laws and regulations to the appropriate law enforcement authorities.

To minimize confusion between criminally enforceable federal, state, and local laws and operating rules established under this Plan, each will be separately posted within the campground. Federal, state and local law enforcement agencies have no authority to take enforcement action related to operating rules established under this Plan, unless the conduct giving rise to the operating rule violation also constitutes a violation of federal, state or local law. Operating rules may not allow an activity prohibited by federal, state or local laws or Forest Service orders that pertain to the Facilities area, but operating rules may be stricter than federal, state or local laws and Forest Service orders. This Plan should be consistent with any orders that apply.

YCWA is responsible to assure that Facilities operations occur in a manner consistent with federal, state and local laws. Currently, YCWA contracts with the Yuba County Sheriff for law enforcement of state and county laws and regulations at the Facilities. In particular, the Yuba County Sheriff uses boat patrols to maintain safety on New Bullards Bar Reservoir.

While the Yuba County Sheriff and the Forest Service mutually aid one another, the Forest Service retains all its authorities and responsibilities for enforcing federal laws and regulations relating to administration of NFS lands.

Operating Staff will make a good faith effort to obtain user compliance with Plan rules. This shall be done by informing the public of the rules by use of conspicuous signs and a “good host” approach, and by requesting compliance of those who do not abide with these operating rules. Usual problems include, but are not limited to:

- Dogs not on leash
- Excessive noise
- Exceeding stay limits or site capacity
- Parking or camping in non-designated areas
- Vandalism
- Improper disposal of waste water, sewage, refuse, etc.
- Use of fireworks or other contraband
- Unauthorized use of vehicles such as off highway vehicles

As stated above, if Operating Staff, through a good faith effort cannot obtain user compliance with Plan rules and federal, state and local laws and regulations, the Operating Staff will contact either the Yuba County Sheriff or the Forest Service for assistance.

### **3.1.4 Inspections**

#### **3.1.4.1 Pre-Season and Post-Season Inspections**

Within two weeks prior to the Operating Season and within two weeks after the Operating Season, YCWA and the Forest Service will jointly inspect the Facilities on NFS lands to verify the condition of the Facilities and identify any corrective actions. If Forest Service staff are unavailable, YCWA will conduct the inspection in the allotted timeframe and develop a punch list of corrective actions, including timeframes for correction, for Facilities on both NFS land and on YCWA-owned land. Refer to Attachment B for the annual condition assessment form that YCWA will utilize for these inspections.

The primary purpose of this annual condition assessment is to identify facilities with critical or minor rehabilitation needs so that YCWA may schedule this work into its near-term annual budgets. At each annual condition evaluation, YCWA on YCWA land and the Forest Service on NFS lands will identify facilities that fall into one of the three following minor rehabilitation need categories:

- Priority 1 Work (Immediate) – when a facility or feature requires minor rehabilitation work immediately or prior to opening the facility in the following year.

- Priority 2 Work (Within Next Calendar Year) – when a facility or feature requires minor rehabilitation work by the end of the following calendar year.
- Priority 3 Work (Beyond the Next Calendar Year) – when a facility or feature appears to need minor rehabilitation in the near-term, but beyond the next calendar year.

In addition, YCWA and the Forest Service will identify any resource impacts for Facilities on NFS lands during the annual condition evaluations.

The secondary purpose is to identify if the schedule for major rehabilitation of a facility (see Table 3.5-1) is still on target or if it should be moved up or back. The criteria for re-prioritization or re-scheduling will depend on the amount and type of use, current Forest Service recreation facility standards, latest condition of facilities, effects on surrounding areas, and other factors as agreed to by YCWA and Forest Service. The major rehabilitation schedule may also be updated at other times, with Forest Service approval for facilities on NFS lands, after consultation during the Annual Recreation Coordination Meeting described in Section 5 of this Plan. YCWA will file with FERC a revised Plan with any changes to the schedule for major rehabilitation of a facility as identified in Section 3.5 of this Plan.

#### **3.1.4.2 Inspections and Communications with Agencies Related to Recreation on NFS Lands**

YCWA's primary contact or alternate will promptly advise the Forest Service of any federal, state or local agency inspector's visit to the Facilities on NFS lands. If YCWA is invited to participate in the visit, then YCWA will request the agency invite the Forest Service to participate. YCWA will provide to the Forest Service copies of all inspection reports that YCWA receives based on these inspections.

### **3.1.5 Fees**

#### **3.1.5.1 User Fees**

YCWA may charge "*reasonable fees to users of such facilities in order to help defray the cost of constructing, operating, and maintaining such facilities*" (18 C.F.R. § 2.7), and will maintain a comparable fee structure with other NFS campgrounds in the area. Table 3.1-2 provides the existing recreation user fees for single campsites, double campsites, triple campsites, group campsites and boat-in campsites. On NFS lands, changes in fees will be mutually agreed upon by YCWA and the Forest Service at the Annual Recreation Coordination Meeting, described in Section 5.0.

**Table 3.1-2. Existing recreation user fee schedule.**

Type of Facility	Type of Use	User Fee (as of 2016)
Family Camping	Single family site	\$24
	Double family site	\$48
	Triple family site	\$72
	Each additional vehicle (over 2 per single site; 4 per double site; and 6 per triple site)	\$6
Group Camping	25-person site	\$88
	50-person site	\$155
	Each additional vehicle (over 5 vehicles at 25-person site and over 10 vehicles at 50-person site)	\$6
Boat-in Camping	Single site	\$24
	Double site	\$48
Other Camping Fees	Reservation fee	Determined by the Forest Service

Further, on NFS lands, YCWA may charge for use of various Facilities (e.g., picnic facilities and boat ramps) if the Forest Service could charge for use of these facilities. YCWA will establish a fee schedule with the Forest Service for use of the new RV dump station and shower facilities. YCWA will accept the Interagency Senior Pass and Interagency Access Pass for any applicable recreation facility-related fees.

### 3.1.5.2 Other Fees

#### Firewood

Firewood may be available for sale at the Campground Host site as long as the firewood is from a private source (i.e., not obtained on NFS lands), unless otherwise approved by the Forest Service.

#### Project Recreation Maps

YCWA may, as a public service, sell Forest Service maps. YCWA may also sell maps of the Facilities and general area at a price reflecting YCWA's cost to produce and distribute the maps. Examples of such maps include detailed campground layout maps, maps of the Facilities, including trails and trailheads or special interest features.

#### New Bullards Bar Reservoir Whitewater Boating Shuttle

From May 15 through July 31, YCWA will provide a shuttle service for North Yuba River whitewater boaters from a take-out/end-of-trip point at the upstream end of New Bullards Bar Reservoir to the Cottage Creek Boat Launch. The service may include hauling whitewater boats and boaters on the shuttle boat, or towing the whitewater boats behind the shuttle boat. Whitewater boaters who wish to take advantage of the shuttle service must make a reservation with YCWA, or its designee, and provide a non-refundable payment to YCWA, or its designee, at least four days in advance, and must execute a liability waiver related to damage to watercrafts or personal injury related to the shuttle. The reservation will include number of boaters, number and type/size of crafts, the specific time when the boaters will meet the shuttle (must be between 9:00 AM and 6:00 PM); and the specific location at which the boaters will

meet the shuttle (i.e., must be where water depth in the reservoir at that time is at least 10 ft). The shuttle is not required to wait for the boaters for more than 15 minutes after the designated meeting time; the shuttle operator is not required to handle the whitewater boats (i.e., each whitewater boater is responsible to handle his or her own whitewater boat) or provide flotation devices that meet current boating regulations; and the shuttle operator may decline service if, in his or her sole opinion, providing the service would be unsafe. YCWA, in consultation with the Forest Service and American Whitewater, will establish and publish a shuttle service fee, including a reservation fee component, taking into consideration: 1) cost of other comparable whitewater boating shuttle-type services provided at large reservoirs in the region; 2) costs of the shuttle boat craft; 3) cost related to specialized equipment or craft necessary to shuttle whitewater boats; 4) cost for staff time for traveling between Cottage Creek Boat Launch and the whitewater boating meeting location; and. The fee may be based on the number of boaters or crafts to be shuttled, or groups.

### **3.1.6 Reservations and Camping Permits**

#### **3.1.6.1 Camping Reservation System**

Consistent with Forest Service's policies, recreationists will make all reservations for Project recreation facilities campsites through the Forest Service reservation system. As of 2016, the Forest Service nationwide was using the National Recreation Reservation Service (NRRS, [www.recreation.gov](http://www.recreation.gov)) for campgrounds with reservable sites. However, if a different system is being used at the time the new license is issued, that Forest Service reservation system will be the system used during implementation of this Plan. Under contract with the Forest Service and other federal land management agencies, the NRRS performs the function of campground reservation and remittance collection for public access to all Forest Service and federally-owned campgrounds. Consistent with that contract, recreationists make all reservations for Project recreation facilities campsites through the NRRS. Under the NRRS, users are charged a reservation system use fee in addition to the campsite fee for family or group campground use. The reservation fee is set under terms of the service contract with a minor percentage of those monies remitted to the Forest Service (Washington Office) and the remainder retained by the NRRS contractor.

If YCWA operates Project campgrounds under a SUP, reservation fees will be retained by the Forest Service (Washington Office) and NRRS, while the entire campsite fee will be remitted to YCWA. Operational procedures for the NRRS will be developed and placed in the annual operating plan. YCWA will be responsible for acting on any issues related to non-reservation system customer service (e.g., camping complaints) while the NRRS will handle all matters related to reservation cancellations or camping date changes.

If the Forest Service operates the Project campgrounds under agreement with YCWA, reservation fees will be retained by the Forest Service (Washington Office) and NRRS, while the entire campsite fee will be remitted to the Forest Service. Operational procedures for the NRRS will be developed and placed in the annual operating plan. The Forest Service will be responsible for acting on any issues related to customer service (complaints, refund requests,

etc.) while the NRRS will handle all matters related to reservation cancellations or camping date changes.

Under either agency's operation, any walk-up campsite use fee will be on the honor system (e.g. the camper drops the fee and payment form into a fee collection drop-box). Fees will be periodically collected by the operating agency and added to reservation revenues for a determination of total campground revenues.

If YCWA operates the campgrounds under a SUP, use and revenue data will be submitted to the Forest Service as stipulated in the terms and conditions of the SUP.

If the Forest Service operates the campgrounds, they will provide YCWA the following use and revenue documentation: the number of reservations by type and campground, the date(s) for which the reservation was made, and the total amount of recreation use fees collected from Project facilities during the calendar year. This report will be due to YCWA by December 1<sup>st</sup>, annually.

### **3.1.6.2      Camping Outside of Designated Campgrounds at New Bullards Bar Reservoir**

When New Bullards Bar Reservoir water surface elevation is at or below 1,941 ft (i.e., 15 ft below NMWSE of 1,956 ft), the Forest Service may allow dispersed camping at up to 44 locations on NFS lands contingent on the camper having a campfire permit and a portable chemical toilet. The Forest Service will post information about camping at or below 1,941 ft on the TNF's and the PNF's public website and on the Forest Service reservation system website. YCWA will post the information, as provided by the Forest Service, on facility kiosks.

### **3.1.6.3      Length of Stay and Site Capacity**

Use is limited to existing designated units. Occupancy of all campsites will be limited to 14 consecutive days. Forest Service design standards for single campground units specify five PAOT (Forest Service (2013a) Handbook 2309.13, Recreation Site Handbook, Chapter 30, pp. 6-9; December 2013). However, the Forest Service allows up to six PAOT at single units and multiples of six for double and triple campground units. Thus, occupancy of family campground units will be limited to six persons, or immediate family, and a maximum of two vehicles per unit. Occupancy of double-unit campsites will be limited to 12 persons and a maximum of four vehicles. Occupancy of triple-unit campsites will be limited to 18 persons and a maximum of four vehicles.

### **3.1.7      Recycling Program**

YCWA will provide and maintain facilities for recycling at all vehicle-accessed campgrounds, picnic sites and boat ramp parking areas on NFS lands. Operating Staff will be responsible for the routine operation and maintenance of these facilities. YCWA will be responsible for the off-site removal of the recycling facilities (along with the trash facilities).



### 3.1.8 Routine Maintenance of the Facilities

#### 3.1.8.1 Routine Maintenance Tasks, Schedule and Standards

YCWA is responsible for all routine maintenance of the Facilities, and will adhere to the schedule of annual routine maintenance provided in Table 3.1-3.

If YCWA or its concessionaire (i.e., anyone other than the Forest Service) is performing maintenance of Facilities on NFS lands or Facilities owned by the U.S., they will do so only with the necessary SUP from the Forest Service.

**Table 3.1-3. Schedule of annual routine maintenance.**

Maintenance Task	Frequency	Remarks
Lowering boat launch docks as the season progresses and removal of the docks when the ramps are no longer in the water	<ul style="list-style-type: none"> <li>As needed, lower when water recedes</li> <li>End of season (remove)</li> </ul>	<ul style="list-style-type: none"> <li>May need to remove the dock if site conditions make the ramp unusable.</li> </ul>
Litter and trash collection within site boundaries	<ul style="list-style-type: none"> <li>Daily at hosted site</li> <li>2 times/ week at non-hosted sites.</li> </ul>	<ul style="list-style-type: none"> <li>Remove all litter observed on the grounds.</li> <li>Particular attention shall be given to the removal of all observed glass, bottles, cans and similar objects that might cause injury to site visitors.</li> <li>Do not perform litter removal in an occupied campsite.</li> <li>Trash collection shall be collected at a frequency that does not encourage animal encroachment, overflowing, or omitting offensive odors.</li> <li>Receptacles shall be animal resistant.</li> <li>Two to four yard dumpsters need to be dumped at least once a week or before they overflow.</li> </ul>
Paint entrance signs, shields and frames	<ul style="list-style-type: none"> <li>Annually, prior to July 1st</li> </ul>	<ul style="list-style-type: none"> <li>Use Forest Service approved materials</li> <li>Frames may have to be water sealed instead of painted</li> </ul>
Remove graffiti	<ul style="list-style-type: none"> <li>As needed</li> </ul>	<ul style="list-style-type: none"> <li>Remove graffiti within 48 hours of discovery or notification</li> </ul>
All ground steel/concrete fire pits will be maintained	<ul style="list-style-type: none"> <li>Prior to opening</li> <li>As needed during the operating season</li> </ul>	<ul style="list-style-type: none"> <li>Concrete fire pits will have smooth finish with minor surface exfoliation or cracking evident.</li> <li>Internal grill will be securely fastened</li> </ul>
Patch rodent and bird holes in wood restrooms, repair/replace screens	<ul style="list-style-type: none"> <li>As needed, prior to opening each year</li> </ul>	<ul style="list-style-type: none"> <li>Forest Service approved materials and standards</li> </ul>
Maintain all posters in like-new condition on bulletin boards	<ul style="list-style-type: none"> <li>Prior to opening</li> <li>As needed during operating season</li> </ul>	<ul style="list-style-type: none"> <li>Posters will not be curled, 'dog-eared', rippled or faded; temporary or press-on signs will be in good condition and professional in appearance; YCWA will be responsible for providing posters.</li> <li>Forest Service will provide source; posters will be uniformly spaced on the bulletin boards, not grouped in one corner.</li> </ul>
Return all displaced picnic tables to appropriate locations at all locations, anchor if necessary	<ul style="list-style-type: none"> <li>Prior to July 1</li> <li>Within 1 week of observance</li> </ul>	<ul style="list-style-type: none"> <li>Picnic tables will be cabled or chained in place by the leg or brace.</li> <li>Cables or chains will be of sufficient size to require a bolt cutter or similar tool for cutting.</li> <li>The cable or chain will be connected to a buried anchor that may be concrete, block or steel post or like material.</li> <li>No wood anchors shall be used.</li> <li>Anchors will be placed so they are not a tripping hazard or otherwise cause injury; tables will have all 4 legs in contact with the ground; no legs will be propped up with rocks or other objects</li> <li>No anchors will be needed if concrete models are installed.</li> </ul>
Raise picnic tables that have sunken into ground due to snow load	<ul style="list-style-type: none"> <li>Prior to opening, annually</li> </ul>	<ul style="list-style-type: none"> <li>All tables seating should be at appropriate height</li> </ul>

**Table 3.1-3. (continued)**

<b>Maintenance Task</b>	<b>Frequency</b>	<b>Remarks</b>
All campsite markers will be straight with numbers clearly visible from roadway	<ul style="list-style-type: none"> <li>• Prior to July 1, annually</li> <li>• Within 1 week of observance</li> </ul>	<ul style="list-style-type: none"> <li>• Forest Service standards; Carsonite posts with reflectorized letters or numbers, or equivalent; posts and lettering will be in good physical condition.</li> </ul>
Remove trash from road and non-road accessed primitive sites	<ul style="list-style-type: none"> <li>• Weekly, between Memorial Day and Labor Day</li> <li>• Twice monthly after Labor Day until Facilities are closed for the season</li> </ul>	<ul style="list-style-type: none"> <li>• Remove and dispose of trash off site</li> </ul>
Replace all metal signs (particularly, 'No Parking') when they fade	<ul style="list-style-type: none"> <li>• Prior to opening, annually</li> <li>• Within 1 week of observance</li> </ul>	<ul style="list-style-type: none"> <li>• All metal signs shall be legible and clearly visible at all times.</li> <li>• The signs will be replaced when sunlight or other environmental factors has caused the numbers or letterings to appear weathered, discolored or bleached.</li> </ul>
Straighten, replace, reset, improve, and reinstall barriers.	<ul style="list-style-type: none"> <li>• By opening date</li> <li>• As needed</li> </ul>	<ul style="list-style-type: none"> <li>• Straighten, replace, reset, and reinstall barriers within and adjacent to all project recreation sites; along the roads surrounding the reservoir; and along Project roads and trails where there is uncontrolled vehicle use.</li> </ul>
Remove human and pet waste	<ul style="list-style-type: none"> <li>• Regular basis</li> <li>• As needed</li> </ul>	<ul style="list-style-type: none"> <li>• Waste will be removed on a regular basis to maintain acceptable site conditions.</li> <li>• Excess waste will be documented noting what sites this is occurring.</li> </ul>
Remove hazard trees	<ul style="list-style-type: none"> <li>• Prior to opening</li> <li>• As needed, during operating season</li> </ul>	<ul style="list-style-type: none"> <li>• Forest Service standards and in compliance with Integrated Vegetation Management Plan.</li> </ul>
Rake around fireplaces and pedestal barbecues	<ul style="list-style-type: none"> <li>• Prior to opening</li> </ul>	<ul style="list-style-type: none"> <li>• Rake needles away from all fire units for 5 ft in all directions</li> </ul>
Clean out inlets, outlets and inside of culvert pipes	<ul style="list-style-type: none"> <li>• At end of season</li> <li>• Prior to opening, as needed</li> </ul>	<ul style="list-style-type: none"> <li>• Forest Service standards; material removed will be placed in an area outside the stream environment zone.</li> </ul>
Sweep all areas of roads, parking lots and paved camp spurs	<ul style="list-style-type: none"> <li>• Prior to opening</li> <li>• As needed</li> </ul>	<ul style="list-style-type: none"> <li>• Material will not be piled;</li> <li>• Material will be scattered; and</li> <li>• Cones and limbs will be kept off roadways and walkways for public safety.</li> </ul>
Cut back all vegetation sufficient to permit visibility to vehicles on roadway and allow vehicles use of the entire road	<ul style="list-style-type: none"> <li>• Prior to opening</li> <li>• As needed during operating season</li> </ul>	<ul style="list-style-type: none"> <li>• All shrubs, limbs and brush will be trimmed back to a distance no less than 6 ft from the edge of all roadways and spurs.</li> </ul>
Maintain all restroom doors in operating condition	<ul style="list-style-type: none"> <li>• As needed</li> </ul>	<ul style="list-style-type: none"> <li>• Interior and exterior of entry door</li> <li>• Must be able to close and lock doors at all times</li> <li>• Facilities shall not be out of service longer than 5 days</li> <li>• Use Forest Service approved materials</li> </ul>
Inspect developed boat ramps	<ul style="list-style-type: none"> <li>• Bi-monthly</li> </ul>	<ul style="list-style-type: none"> <li>• Inspect for obstacles, deterioration, and safety hazards.</li> <li>• Safety hazards will be taken care of immediately.</li> </ul>
Maintain restroom roofs	<ul style="list-style-type: none"> <li>• Prior to opening</li> <li>• As needed during operating season</li> </ul>	<ul style="list-style-type: none"> <li>• Make sure pine needles are removed before season starts, and buildups do not occur during season</li> <li>• To prevent structural damage, buildings must be leak proof at all times.</li> </ul>
Site inspections and safety remediation	<ul style="list-style-type: none"> <li>• Inspect on a regular basis during the peak season</li> </ul>	<ul style="list-style-type: none"> <li>• Hosted Facilities will be inspected on a daily basis.</li> <li>• Non-hosted Facilities will be inspected bi-weekly and include one weekend day.</li> <li>• All safety items identified will be remediated prior to opening and, throughout the season within 48 hours of discovery, unless the severity is such that it would dictate closing the site.</li> </ul>
Pump toilet vaults when $\frac{3}{4}$ full at vehicle accessed Facilities	<ul style="list-style-type: none"> <li>• Beginning of season</li> <li>• As needed</li> </ul>	<ul style="list-style-type: none"> <li>• Vaults may need to be pumped at end of the season or, if the toilet vault is subject to accumulation of water from snowmelt at the beginning of season.</li> <li>• Remove any trash from vaults when pumped</li> </ul>
Pump toilet vaults as needed at boat-in access Facilities and floating comfort stations	<ul style="list-style-type: none"> <li>• As needed</li> <li>• End of season</li> </ul>	<ul style="list-style-type: none"> <li>• Vaults may need to be pumped at end of the season or, if the toilet vault is subject to accumulation of water from snowmelt at the beginning of season.</li> <li>• Remove any trash from vaults when pumped</li> </ul>

**Table 3.1-3. (continued)**

Maintenance Task	Frequency	Remarks
Pump RV sanitary dump station as needed	<ul style="list-style-type: none"> <li>As needed</li> <li>End of season</li> </ul>	<ul style="list-style-type: none"> <li>Vaults may need to be pumped in advance of Independence Day and Labor Day holiday weekends to deal with peak holiday weekend RV usage.</li> </ul>
Painting restroom buildings	<ul style="list-style-type: none"> <li>On a rotating basis</li> <li>Each building painted once every 3 years</li> </ul>	<ul style="list-style-type: none"> <li>Paint interior and exterior once every three years with Forest Service approved materials</li> <li>Surfaces to be painted shall be free of dust, dirt, scale or any other substance which may interfere with the adhesion of the specified coat. This may require sanding and smoothing.</li> <li>Forest Service approved paint at full strength.</li> </ul>
Paint trash bins, food lockers, recycling centers, and gates	<ul style="list-style-type: none"> <li>As needed</li> </ul>	<ul style="list-style-type: none"> <li>Paint with Forest Service approved materials</li> <li>Surfaces to be painted shall be free of dust, dirt, scale or any other substance which may interfere with the adhesion of the specified coat. This may require sanding and smoothing.</li> <li>Forest Service approved paint at full strength.</li> </ul>
Paint roadway signs and arrows	<ul style="list-style-type: none"> <li>Prior to July 1</li> <li>As needed</li> </ul>	<ul style="list-style-type: none"> <li>All symbols shall be in conformance with the 'Standard Alphabets for Highway Signs and Pavement Markings' available from the Federal Highway Administration (ref. Manual on Uniform Traffic Control Devices).</li> <li>Arrows shall be 12 -ft-wide at the base; the wings shall extend 10 ft from the outside edge of the base at a point 24 ft up from the bottom of the base; and the arrow portion shall extend 24 ft from the point where the wings start.</li> <li>A high pressure air hose shall be used to clean the pavement immediately prior to painting.</li> <li>Approved white traffic paint shall be used to paint signs and arrows.</li> </ul>
Paint, stain or otherwise waterproof wooden picnic tables	<ul style="list-style-type: none"> <li>On a rotating basis</li> <li>Each table treated once every 3 years</li> </ul>	<ul style="list-style-type: none"> <li>Forest Service Standards and approved materials; surfaces to be painted shall be free of dust, dirt, scale or any other substance which may interfere with the adhesion of the specified coat. This may require sanding and smoothing;</li> <li>Forest Service approved paint at full strength.</li> </ul>
Dismantle user created fire rings	<ul style="list-style-type: none"> <li>Throughout season</li> </ul>	<ul style="list-style-type: none"> <li>Dismantle user created fire rings at project reservoirs where camping is limited to designated sites only. Rocks will be removed from unauthorized fire rings, turned burned side down outside the campsite.</li> </ul>
Remove ashes from fire rings	<ul style="list-style-type: none"> <li>When 2/3 full</li> </ul>	<ul style="list-style-type: none"> <li>Cooled ashes will be disposed of off site at a county landfill. Previously disposed ashes onsite (including those disposed of onsite by users) shall be properly disposed of as described above.</li> </ul>

Standards for cleaning recreation facilities located on NFS lands will be consistent with current Forest Service national and forest-specific standards and policies, which may change over time. Currently, National Forest Service standards and policies for cleaning recreation sites are addressed in the Forest Service's *Cleaning Recreation Sites* (Forest Service 1995) and the *Recreation Sites National Quality Standards* (Forest Service 2002). YCWA will furnish all supplies, tools, and materials necessary to clean, operate, and routinely maintain the Facilities.

### 3.1.8.2 Taxes, Fees, Etc.

YCWA will be responsible for all state and local taxes, fees, or charges levied as a result of YCWA's operation and maintenance of the Facilities. No Forest Service rental fees will be required of YCWA pursuant to 36 C.F.R. 251.57(b)(1).

### **3.1.8.3 Utilities**

Maintenance of all utilities (e.g., water, electricity, septic system, garbage removal and propane) is the responsibility and at the expense of YCWA.

### **3.1.8.4 Vandalism**

YCWA will take reasonable measures to prevent vandalism in the Facilities. YCWA will repair any damage to the Facilities that occurs from vandalism. Graffiti or signs placed by the public will be removed and the Facilities restored by YCWA.

### **3.1.9 Fire**

If material is to be burned on NFS lands at the Facilities, YCWA will coordinate with the Forest Service to plan and manage burning of the woody material. If YCWA plans to burn within the Facilities on non-NFS lands, YCWA will obtain a burn permit from Cal Fire and/or Air Quality Management District, as applicable.

### **3.1.10 Gambling and Fireworks**

No gambling or fireworks will be permitted in the Facilities.

## **3.2 Major Rehabilitation and Improvement Guidelines**

This section provides design guidance for Facility rehabilitation over the license period, for major recreation investments, major rehabilitation, replacement, and improvements of Facilities. Such facilities include but are not limited to camping facilities, picnic areas, viewing areas at overlooks, beach access routes, outdoor recreation access routes (ORAR), and other constructed features associated with outdoor recreation areas in the National Forest System. All trails in the National Forest System that meet all three of the following criteria shall comply with the Forest Service Trails Accessibility Guidelines (FSTAG):

- Are new or altered (i.e., an alteration is a change in the original purpose, intent, or design of the trail).
- Have the Federal Trail Data Standard (FTDS) designation designed use of “Hiker/Pedestrian”
- Connect directly to a trailhead or to a trail that currently substantially complies with the FSTAG

Construction or alteration of all facilities within the National Forest System that are not addressed in the FSORAG or FSTAG shall comply with the applicable requirements of the Architectural Barriers Act Accessibility Standards (ABAAS).

YCWA will provide a primary contact for communicating with the Forest Service whenever planning or constructing new Facilities, major rehabilitation on existing Facilities or other major Project improvements placed on NFS lands within the FERC Project Boundary. YCWA agrees to cooperate with the Forest Service through this individual in contract review and work inspection. The YCWA contact person may not always be the same person. If YCWA's contact person changes, it will immediately inform the appropriate offices of the TNF and PNF.

As a benchmark for major rehabilitation and capital improvements over the term of the new license, YCWA has provided Existing Site Plans for each of the existing Facilities (Attachment C). An Existing Site Plan is a schematic that illustrates the layout, location, size, shape, and relationship between existing Facilities and features. It is used to represent existing conditions and serves as the baseline for potential changes to Facilities.

Over the term of the new license, YCWA will be responsible for funding, constructing, and O&M of all proposed new Facilities and improvements, and rehabilitation of existing Facilities, as well as any additional needed National Environmental Policy Act surveys or documentation that was not addressed in the FERC relicensing Environmental Impact Statement (EIS). When constructing Facilities, YCWA will obtain all necessary permits and approval for survey work, facility design and on-site resource evaluations, including the Forest Service on NFS lands.

YCWA will perform major rehabilitation on Facilities on NFS lands and Facilities owned by the U.S. only with the necessary SUP from the Forest Service.

Within 1 year of completion or as otherwise agreed to by YCWA and the Forest Service and subject to obtaining the necessary SUP consistent with this Plan from the Forest Service, YCWA will convey to the U.S. ownership of rehabilitated Facilities.

### **3.2.1 Recreation Facility Design Standards and Guidelines**

The Forest Service has developed standards, guidelines and policies for design of Forest Service recreation. These standards, guidelines and policies will be followed in the design and planning of the Facilities and replacement of existing Facilities on NFS lands. Below is a summary of some of the most relevant guidance and policy documents that will be used for the design of new and replacement facilities, and rehabilitation of existing Facilities on NFS lands.

- Forest Service Manual 2300 – *Recreation, Wilderness, and Related Resource Management, Chapter 2330 – Publicly Managed Recreation Opportunities* (Forest Service 2006)
- The Built Environment Image Guide (BEIG)
- FSORAG and ABAAS
- *Forest Service Trail Accessibility Guidelines* (FSTAG)
- Engineering Management-7100-15 *Sign and Poster Guidelines for the Forest Service* (SPGFS) - to the extent these are consistent with FERC requirements regarding sign guidelines at FERC-licensed hydroelectric facilities

An overall theme of these standards and guidelines is designing facilities, modifying the site, and using materials in ways that are compatible with the designated ROS setting for the area (refer to Table 2.1-2 for ROS settings and appropriate development scales).

In addition, all new, rehabilitated, and reconstructed Facilities located on NFS lands will meet Forest Service national and regional direction, regulations, design and other applicable standards in place at the time of design, such as, but not limited to: FSORAG; Forest Service Manual (FSM) direction; Forest Service Handbooks (FSH); and official correspondence and other applicable direction. At Facilities on NFS lands, YCWA will provide the Forest Service “as-built” drawings (hard copy and electronic .dwg versions or latest software in common use) for altered, improved, new construction, or expanded Facilities when they are submitted to FERC.<sup>16</sup>

As a general policy at Facilities on YCWA land, site elements will be replaced with designs that meet current, applicable accessibility standards and guidelines (USDOI 2010) at the time of design for picnic tables, fire rings, pedestal grills, water hydrants, restrooms (including FCS), and other relevant constructed features. YCWA will use the ROS as guidelines, and the generally accepted professional recreation guidelines for its facilities.

### **3.2.2 Planning, Consultation, and Implementation Process for Major Rehabilitation and Improvements**

Major rehabilitation of existing Facilities and the construction of new major Facilities or improvements generally require a topographic site survey, design, engineering and permitting work and frequently result in a new site footprint. Such projects typically require multiple years to implement. Examples of major improvements or rehabilitation include construction of new campgrounds, picnic sites, parking areas, boat ramps and changing the footprint of an existing facility. Minor recreation rehabilitation or improvements, such as the installation or replacement of signs, food lockers or picnic tables, do not need to go through this process. YCWA will obtain prior approval from FERC for all major rehabilitation and improvements to the Facilities; and, in addition, from the Forest Service for improvements to Facilities on NFS lands. Minor improvements require minimal construction and time to complete. All development should be consistent with the applicable accessibility standards and guidelines for the type of facility being constructed, reconstructed or altered.

#### **3.2.2.1 Planning Timeframe**

Major recreation rehabilitation and improvement work generally involves a three-step planning and implementation process. Steps in this process include: 1) preparation of a Site Plan (Design Narrative and Site Concept Plan); 2) preparation of a Site Development and Construction Plan; and 3) contracting and construction for each facility. In addition, for all sites located on NFS

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<sup>16</sup> Once all construction work is completed, YCWA will include all final as-built drawings in Attachment D.

lands, reconstruction plans and minor recreation rehabilitation or improvements (such as constructed feature replacement) will meet current Forest Service standards; and each step will require approval by the Forest Service. These steps described below are typical and variances may occur because of the complexity or simplicity of the rehabilitation or improvement work.

## **Environmental Analysis and Permitting**

Notably, environmental analysis and permitting work does not fit clearly into any of the three planning and implementation steps below; and, in practice, can often span the first and second steps of the process. As a rule, construction (Step 3) will not occur until all environmental and permitting work is complete. However, the timing and scope of the environmental review and permitting work will vary between major rehabilitation of existing recreation facilities as compared to the construction of new Facilities.

For major rehabilitation of existing Facilities, YCWA anticipates the FERC relicensing EIS will cover the environmental analysis and the permitting scope of work will be well-known, well-defined and will begin after 100 percent design (Step 2) is complete. In comparison, for the construction of new Facilities, YCWA expects an increased level of environmental review and permitting to occur overall and earlier on in the three-step planning process (often starting in Step 1 compared to after Step 2 for major rehabilitation). YCWA expects that environmental studies and analysis will be needed, particularly where new Facilities are located outside the existing FERC Project boundary; and these studies may be necessary to inform the design process (e.g., avoidance of sensitive resources) in Step 2 (Site Development Plan and Construction Plan).

## **Step 1 - Site Planning**

YCWA will conduct the planning and design in consultation with the Forest Service at Facilities on NFS lands. The planning phase consists of a Design Narrative, a Site Concept Plan, and an environmental analysis/decision if the Facilities are not already addressed in the FERC relicensing EIS.

The Design Narrative describes the management objectives, design criteria, and constraints associated with the major rehabilitation of a recreation facility. The Design Narrative typically includes: a) management objectives; b) design criteria, including criteria on type and color of materials and accessibility; c) existing physical conditions; d) any rehabilitation and new construction; e) anticipated management problems that design may minimize; f) site capacity, durability, and protection; and g) user safety.

The Site Concept Plan presents a preliminary graphic illustration of proposed facilities and utilities in relationship to existing site features, facilities and utilities. The Site Concept Plan communicates proposed development ideas and/or alternatives. The Site Concept Plan may include large-scale representations of the area that indicate placement and orientation of the proposed facilities. This may include the use of aerial photography or topographic maps.

## Step 2 – Site Development Plan and Construction Plan

In this step, YCWA will develop a Site Development Plan that adapts the Site Concept Plan to a detailed topographic survey that better represents actual, existing site conditions. This plan also identifies the site design details (e.g., picnic tables, fire rings, restroom buildings, signage, and road surface materials). YCWA will submit all Site Development Plans to FERC for approval regardless of land ownership. For Facilities on NFS lands, YCWA will also provide Site Development Plans to the Forest Service for review prior to submitting the plans to FERC. YCWA assumes a period of 30 days for the Forest Service to review and approve design drawings at the 30, 60, 90 and 100 percent completion (i.e., total of 120 days for review) and FERC requires 90 days to approve the final design drawings. Table 3.2-1 outlines general guidelines for drawing plan sets to help aid Forest Service review.

**Table 3.2-1. Content guidelines for 30, 60, 90 and 100% design drawings.**

Drawing Level	Drawing Content Guidelines
30%	<u>Schematic Design</u> - represents approx. 30% of the design plan effort <ul style="list-style-type: none"> <li>Title page</li> <li>Notes and index page</li> <li>Basic CAD drawings – demolition plan and site layout plan</li> <li>Basic or standard construction details</li> </ul>
60%	<u>Design Development</u> - represents approx. 60% of the design plan effort <ul style="list-style-type: none"> <li>Comments to the Schematic Design are addressed</li> <li>Refine Title, Notes and Index pages</li> <li>Demolition Plan and Site Layout Plan are fully developed, including: <ul style="list-style-type: none"> <li>Dimensions, callouts and notes are included but may not be complete</li> <li>Other plans may be included such as: Grading and Drainage, Erosion Control, Electrical and Lighting, and Utilities</li> </ul> </li> <li>Basic or standard construction details are complete and site specific details are developed but may be incomplete</li> <li>Product specifications and details are included but may be incomplete</li> </ul>
90%	<u>Pre-final Design</u> - represents approx. 90% of the design plan effort <ul style="list-style-type: none"> <li>Comments to the Design Development submittal are addressed</li> <li>Refine and finalize all dimensions, callouts and notes</li> <li>Refine and finalize all construction details and product specifications</li> </ul>
100%	<u>Final Design</u> - represents 100% completion of design plans <ul style="list-style-type: none"> <li>Comments to the Pre-final Design submittal are addressed</li> <li>Forest Service approves and signs off on the plan set</li> </ul>

The goal of this step is to develop: 1) design drawings for the proposed recreation improvements; and 2) an implementation schedule.

This step also involves the development of a Construction Plan. The Construction Plan has the following elements:

- 1) Description of the proposed rehabilitation or improvements, construction methods, equipment, crews, access routes, and timing;
- 2) Description of measures to avoid impacts to water quality and sensitive resources (i.e., cultural and biological);
- 3) Identification of permitting and other regulatory requirements needed prior to construction;



- 4) Identification of appropriate site-specific erosion and sedimentation control measures; and
- 5) Identification of necessary measures to provide appropriate public and worker safety, recreation traffic and parking during the construction.

At Facilities located on NFS lands, YCWA will submit the Site Development Plan and Construction Plan to the Forest Service for approval. After Forest Service approval, YCWA will finalize and submit these plans to FERC for final approval. Other minor permitting processes would occur in parallel, where possible, while the Forest Service design review and approval process progresses.

When new construction or expansion is specified in this Plan, the site capacities in this Plan are estimates only and will be refined based on topographic conditions, resource constraints, design and accessibility standards and guidelines, relevant regulations, and, when located on NFS lands, in consultation with the Forest Service.

### **Step 3 – Contracting and Construction**

This step involves contracting, planning and coordination in preparation of construction activities. For rehabilitation or improvements on NFS lands, YCWA will commence construction: 1) after consultation with the Forest Service to ensure construction activities are coordinated with Forest Service; 2) after FERC approval; and 3) after all permitting has been completed. YCWA will make a good faith effort to complete the rehabilitation of any one campground or picnic site within one year of commencement of reconstruction activities, so that the facility (or portion thereof) is not closed for more than one calendar year.

YCWA will aim to complete as much work as possible during periods when the Facilities are normally closed (immediately before and after the open season); however, it is expected that some work will require closing the Facilities during the typical open season to complete all the proposed work. If construction takes longer than one year, and is not overly disruptive, YCWA will consider reconstructing individual campground loops separately, if the construction activity would unduly reduce the capacity of the area during a facility's open season. Furthermore, YCWA may choose to complete scheduled work prior to the described implementation schedule (Table 3.5-1), particularly when substantial cost savings are possible (i.e., volume discounts, high mobilization or transportation costs, etc.). In such scenarios, YCWA will include these ahead-of-schedule work tasks in the site development plans as with all other normally scheduled work.

During this three-step process and at the Annual Recreation Coordination Meeting described in Section 5, YCWA and the Forest Service will review the implementation status of Facilities proposed for major rehabilitation or improvement on NFS lands. For Facilities on NFS lands, upon agreement by both YCWA and the Forest Service, the recreation rehabilitation or improvement schedule for these facilities may be revised, as needed.

Following construction work on all new or rehabilitated Facilities, YCWA will include all final as-built drawings in Attachment D of this Plan.

### **3.2.3 Avoidance, Protection, and Minimizing Affects to Sensitive Resource Areas**

New and major rehabilitation projects can potentially affect sensitive resources (e.g., wetlands, culturally-sensitive sites, critical wildlife habitats, and sensitive botanical sites) at or near planned rehabilitation or improvement sites. Site Concept Plan and Site Development Plans for recreation sites, will avoid, mitigate, and/or minimize effects to these sensitive resources, which mean environmental surveys will be needed early in the Site Development process in some instances. This may necessitate additional surveys, consultation with resource and regulatory agencies, or analysis to prescribe appropriate mitigation. In particular, YCWA will review the conditions in the new license, including resource management plans, during the development of Site Concept Plans and Site Development Plans to identify any additional resource protection measures to be implemented during construction.

### **3.2.4 Guidelines for Major Rehabilitation**

The designs of major rehabilitation and replaced Facilities will meet current, applicable federal and state standards and guidelines that exist up to the beginning of construction of these projects (see Section 3.2.1 for current standards and guidelines). Furthermore, at the time of replacement, YCWA will work with the Forest Service on NFS lands to evaluate if a new design or technology can be reasonably implemented that would better serve recreationists.

Prior to major rehabilitation or replacement of a Project recreation facility on NFS lands, YCWA will meet with the Forest Service to review the design and functionality of the facility based on current use patterns. Reasonable modifications will be made to the facility design to address the functionality of the facility in light of the current and projected future use and compliance of the facility with current design standards. All planning, design, and coordination will be accomplished with the intent to complete construction, reconstruction, or replacement during the implementation year as shown in the master implementation schedule (Section 3.5).

Additionally, on NFS lands, at the time of replacement or reconstruction, YCWA will address site grading and other potential site modifications including, but not limited to:

- Reconstruction, or replacement of constructed features, including – toilets, gates, table, fire rings, septic systems, water system features, barriers, retaining walls, unit markers, bulletin boards, signs, entrance and fee stations, and animal resistant food lockers.
- Accessibility – Fully comply with the applicable accessibility standards and guidelines at the beginning of construction of features.

- Resurfacing paved roads, including – providing asphalt treatment of roads and spurs and sufficient subgrade and, where appropriate, providing turnouts at entrance stations, toilets, trash bin pads, etc. and providing asphalt treatment of spurs when the circulation road is paved.
- Address opportunities to lengthen and widen spurs
- Address opportunities to increase turning radius to accommodate larger RVs and/or truck/trailer combinations.
- Replacement of wood barriers with rock barriers of sufficient quantity to discourage off-road travel. Install additional barriers as needed for resource protection.
- Remove protrusions and provide a graded living space including tent pads and clear floor space around tables, food storage lockers and grills.
- Installation of gates.
- Upgrade of host sites with water, electric hook-ups and holding tanks.
- Providing improvements such as extra parking when there is a demand.
- Installing signing that meets Forest Service standards and addresses recreation area opportunities (including trails), vicinity maps, facilities, interpretive and resource protection information (appropriate for the area), emergency contacts, safety, and regulations (including water surface regulations).

Items typically addressed during major rehabilitation or the replacement of facilities is described below.

### **3.2.4.1 Guidelines for Specific Facilities and Site Features**

#### **Roads, Parking Areas, Campground Spurs and Boat Ramps**

All roads, parking areas, campground spurs and boat ramps at Facilities will be maintained according to the guidelines in the Transportation System Management Plan included in the license.

#### **Signs**

Directional signs, entrance signs, information boards, and other signs will be replaced as needed, with similar messages. Signs and information boards need to meet applicable Forest Service (i.e., SPGFS, FSORAG), FERC, California Department of Transportation (Cal Trans), Manual on Uniform Traffic Control Devices (MUTCD), and YCWA standards and guidelines at the time of their replacement.

#### **Restroom Buildings and Wastewater Systems**

Restroom buildings including floating models will be replaced with models meeting current accessibility standards and guidelines (ABAAS on NFS lands, ADASAD on YCWA lands) of

similar size (number of stalls). All flush restroom fixtures should be upgraded to contemporary low-flow flush toilets. Potential to install alternative septic designs and technologies to improve the efficiency and reliability of existing restroom septic facilities should be examined.

When replacing the restroom buildings, YCWA will also evaluate the rehabilitation needs of any associated septic systems, including leach fields and mark them in the field. YCWA assumes that all existing wastewater systems (septic systems and leach fields) will need replacement at the same time as the restroom buildings, but cannot be certain until the septic systems are evaluated at the time of restroom replacement.

## **Water Systems**

During the license term, YCWA anticipates that all water system facilities and infrastructure will need to be replaced or upgraded at least once. Upgrading generally includes replacing the existing distribution piping, connections, and water hydrants, while maintaining the same system design and footprint, as warranted. However, during the planning for replacement of the water distribution system, YCWA will utilize current designs or technologies that can be reasonably implemented that would better serve recreation users, improve the operation, minimize maintenance and rehabilitation and minimize water line easement on private land. In addition, for the protection of the California Red-Legged Frog (CRLF) and at the request of the United States Fish and Wild Service (USFWS) and Forest Service, YCWA will install drainage plates with a circular opening no larger than 0.25 inch on all water hydrant drainage basins (when existing hydrants are replaced or new hydrants are installed) at recreation facilities to prevent CRLF from entering the drains.

## **Campgrounds and Picnic Sites**

### Campgrounds

At new or reconstructed Project campgrounds on NFS lands, YCWA will provide the following facilities or features, unless specifically excluded in this Plan or as subsequently agreed to by YCWA and Forest Service:

- Roads and spurs with barriers to prevent off-road vehicular travel
- ORARs
- Tables
- Fire rings and grills, where appropriate
- Animal-resistant food lockers (at least 30 cubic ft)
- Paved dumpster pads with animal-proof trash/recycle bins (except at boat-in campgrounds)
- Information boards
- Entrance station kiosk with lighting
- Site identification, guide, and regulatory signs

- Toilets with interior and exterior lighting. Unless specified otherwise all toilets at inland campgrounds will be high-efficiency flush models
- Site markers
- Level tent pads and living areas
- Fuel break around the perimeter of facility cleared annually to 10-ft-wide to mineral soil

YCWA will provide a campground host site at select campgrounds. Refer to Section 3.1.2.3 for anticipated locations of campground hosts.

#### Picnic Sites

At new or reconstructed picnic sites on NFS lands, YCWA will provide the following facilities or features unless YCWA and Forest Service agree otherwise:

- Circulation roads and parking areas with barriers, where needed, to prevent off-road travel
- ORAR Tables with clear and level floor space
- Pedestal grills
- Information boards
- Entrance station kiosk
- Site identification, guide, and regulatory signs
- Animal-proof trash/recycle bins
- Fuel break around the perimeter of facility cleared annually to 10-ft-wide to mineral soil

On a site-by-site basis at picnic sites on NFS lands, YCWA will install toilet buildings and pedestal grills or concrete barbecue grills with self-contained ash boxes.

### **3.2.5 Vegetation Management at Recreation Facilities**

General measures for vegetation management at Facilities, including non-native invasive plant management, hazard tree removal, site clearing, visual enhancement and stand maintenance and improvement are discussed in of the *Integrated Vegetation Management Plan* (Section 3.5) and *Visual Resources Management Plan* (Section 3.3), which are included in the license.

During major rehabilitation of existing Facilities, YCWA will address in the Site Development Plan the site-specific visual and vegetation management measures consistent with the Integrated Vegetation Management Plan and Visual Resources Management Plan (e.g., non-native invasive plant management, hazard trees, visual enhancement, stand improvement and other appropriate issues). For new Facilities, the plan will be developed concurrent with site design.

### **3.3            Major Rehabilitation and Improvements of Existing Facilities**

YCWA will improve existing Facilities on NFS lands only after obtaining the necessary authorization from the Forest Service. Such authorization will make clear any conditions on acceptance of the improvements. Upon completion, title to all such improved facilities will remain the property of the U.S.

Within 1 year of completion or as otherwise agreed to by YCWA and the U.S. and subject to obtaining the necessary SUP consistent with this Plan from the Forest Service, YCWA will convey to the U.S. ownership of the improved Facilities.

#### **3.3.1            Project-wide Visitor Education and Interpretation Materials**

##### **3.3.1.1            Standardized Signage**

YCWA will provide the following improvements to the standardized visitor information, education and interpretive materials at Facilities. Notably, as new Facilities are constructed over the term of the new license, these materials will need to be updated accordingly and re-installed. Visitor information and interpretive components will utilize universal design techniques, per Forest Service approval.

#### **Project Recreation Facilities Map**

YCWA will develop a standardized Project Recreation Facilities Map. In general, the Project Recreation Facilities Map will be installed at all developed Facilities and located at entrance stations or key areas of visitor contact (e.g., boat preparation areas at boat ramps or parking areas at day-use facilities). The map will have the following key specifications and features. Refer to Attachment E for the example map.

- A map approximately 4-ft by 4-ft in size, made of a durable weather-resistant material(s).
- Map graphics and symbols that are easy to read and use colors that provide additional and appropriate information.
- Identify all Facilities (campgrounds, boat ramps and marinas, day-use facilities, trails and trailheads) and connecting non-project trails and trailheads.
- Include a “You are here” symbol for each location where a Project Recreation Facilities map is provided.

#### **Recreational Facility Description Sign**

YCWA will develop a standardized 1-panel Project Recreation Facility Description sign that describes each Project recreation campground, day-use facility, boat ramp and trail utilizing text, tables and a facility map. The sign will highlight the key facility features and capacities and

include pertinent safety and emergency information. The sign will be approx. 4-ft by 4-ft in size and made of durable weather-resistant material.

### **Fee Schedule Sign**

YCWA will provide a standardized 1-panel sign that identifies the fee schedule and payment procedures for each facility that has a user fee.

### **Site-specific Regulations Sign**

YCWA will provide a standardized 1-panel sign that identifies the site-specific regulations at a facility. Typically, this signage will be predominantly standardized regulations for each type of facility (i.e., campgrounds, day-use facilities, boat launches, and undeveloped recreation sites), but it may include additional information that is relevant only to that specific site.

### **New Bullards Bar Reservoir Boating, Fishing and Aquatic Invasive Species (AIS) Information Sign**

YCWA will develop a standardized 1-panel New Bullards Bar Reservoir Boating and Fishing Information sign that describes applicable reservoir boating and fishing regulations, safety information and other relevant reservoir information. The sign will typically be located at developed boat ramp facilities. The sign will be approximately 4-ft by 4-ft in size and made of durable weather-resistant material.

As described in the *Aquatic Invasive Species Management Plan* in the license, YCWA will implement a public education program on New Bullards Bar, Log Cabin Diversion Dam and Our House Diversion Dam. This program will include signage visible to the public at known access points for these areas, including all public boat launch facilities (i.e., Dark Day Boat Launch, Cottage Creek Boat Launch, and Moran Road Boating Site), campgrounds, and day-use areas. Information pamphlets will also be provided at all developed public boat launch facilities and campgrounds. This signage and information will cover the following prevention actions to be undertaken by the recreationist:

#### Prior to leaving a water access site:

- Remove all plants and mud from watercraft, trailers, and equipment and dispose of all materials in the trash.
- Drain all water from watercraft, including motor, motor cooling system, live wells, bilges, and lower end unit.
- Dry all visible surface areas of watercraft and trailers.
- Dispose of all unwanted bait in trash. Do not dispose of bait in the waterbody.

Prior to entering a new waterbody:

- Decontaminate watercraft and trailers, using current Cal Fish and Wildlife recommended protocols, which include:
  - Pressure wash watercraft and trailers with 140 degrees Fahrenheit (°F) water, including all boat equipment (i.e., ropes, anchors, etc.) that came in contact with water.
  - Flush engine with 140 °F water for at least 10 minutes and run 140 °F water through live wells, bilges, and all other areas that could contain water.
- Decontaminate recreational equipment and gear using current Cal Fish and Wildlife recommended protocols, which include any of the following:
  - DRY: Allow equipment/gear to dry thoroughly (i.e., until there is a complete absence of moisture), preferably in the sun, for a minimum of 48 hours.
  - HOT WATER SOAK: Immerse equipment/gear in 140 °F or hotter water for a minimum of 5 minutes.
  - FREEZE: Place equipment/gear in a freezer 32 °F or colder for a minimum of 8 hours.
- Avoid the release of plants and animals into a waterbody unless they came from that waterbody.

In addition, before new houseboats are placed on New Bullards Bar Reservoir, YCWA will ensure they are inspected to ensure that no AIS are present in or on the houseboats. Additionally, houseboats will be inspected for AIS when they are removed from the reservoir for maintenance. All persons conducting houseboat inspection will be properly trained in Cal Fish and Wildlife boat inspection protocols.

## **Interpretive Displays**

At select Facilities, YCWA will develop interpretive displays. In general, each interpretive display will be a one-or two-panel display. Each panel will be approximately 3-ft by 4-ft in size and made of durable weather-resistant material. Notably, interpretive displays and information may not always fit a standardized presentation and some displays may warrant a different size and layout depending upon the message and materials being presented, which will be clearly identified in following Sections 3.3.2 and 3.3.3. In addition to the interpretive displays provided in this Plan, the *Historic Properties Management Plan*, which is included in the license, also has interpretation measures that may be implemented at certain campgrounds.

## **Project Recreation Brochure**

YCWA will develop a Project Recreation Brochure that will be disseminated at Facilities (typically the entrance station) as an additional tool to inform the public of the recreational opportunities at the Project. The Project Recreation Brochure will also be available to the public at YCWA's Marysville office and the Marina. Hardcopies of the brochure will also be provided



to the Forest Service offices, including the TNF Yuba River Ranger District, TNF Supervisor's Office, PNF Feather River Ranger District and PNF Challenge Visitor Center. In addition, an electronic version will be provided to the TNF and PNF for posting on their respective websites. At the Post-Season Inspections (Section 3.1.4.1), YCWA and the Forest Service will determine the number of brochures to be provided to the Forest Service for the following calendar year. The Project Recreation Brochure will include the following general format and content and will be updated as facilities are upgraded or new facilities are constructed.

- The front side of the brochure will provide text descriptions of the Facilities and opportunities, regulations, important safety issues (boating rules and etiquette, emergency phone numbers, Forest Service District Ranger Office locations and numbers), applicable AIS education.
- The back side of the brochure will include a map of the Facilities based on the Project Recreation Facilities Map described above.

### **3.3.1.2 Entrance Station Kiosks**

YCWA will provide the following entrance station kiosk designs depending upon the type of facility.

#### **Campgrounds**

At each campground, YCWA will provide a 4-panel entrance station kiosk with the following informational signage panels.

- Panel 1 – Fee Schedule
- Panel 2 – Project Recreation Facilities Map
- Panel 3 – Project Recreation Facility Description (with facility map)
- Panel 4 – Site-specific Regulations

#### **Boat Launches**

At each boat launch, YCWA will provide a 4-panel entrance station kiosk with the following informational signage panels.

- Panel 1 – Project Recreation Facilities Map
- Panel 2 – Project Recreation Facility Description (with facility map)
- Panel 3 – New Bullards Bar Reservoir Boating, Fishing and AIS Information
- Panel 4 – Site-specific Regulations

## **Day-use Facilities**

At each day-use facility, YCWA will provide a 3-panel entrance station kiosk with the following informational signage panels.

- Panel 1 – Project Recreation Facilities Map
- Panel 2 – Project Recreation Facility Description (with facility map)
- Panel 3 – Site-specific Regulations

### **3.3.2 New Bullards Bar Reservoir Facilities**

As a reference in Attachment C, YCWA has provided Site Plans for each of the existing Facilities, which also identifies substantial new or expanded site improvements (i.e., new facilities, site features or expansions). The existing facility layouts are based on GIS data collection and are depicted in black ink on the Site Plans. The proposed improvements to the existing layouts are conceptual only and are depicted in red on the Site Plans. Notably, minor improvements and in-place improvements (e.g., adding electricity, replacing features in-kind, replacing vault restrooms with flush models, signage) are not identified on the Site Plans. Further, the complexity of some rehabilitation and improvements (e.g., major rehabilitation and upgrades to the Dark Day Boat Ramp) precluded depiction on these drawings.

#### **3.3.2.1 Campgrounds**

##### **Schoolhouse Campground (NFS Lands)**

For reference purposes, this facility is a Forest Service Development Scale 4 facility; and is scheduled for major rehabilitation in License Year<sup>17</sup> 10 (refer to Section 3.2 – Major Rehabilitation Guidelines, for details).

##### Improvements and Other Actions

In License Year 1, YCWA will complete the following improvements:

- Install a standardized 4-panel entrance station kiosk that contain the elements under “Campgrounds” in Section 3.3.1.2
- Provide appropriate trailhead signage on the facility entrance sign.

In License Year 2, YCWA will complete the following improvements:

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<sup>17</sup> The scheduling (years) in this Plan use “License Years,” with “License Year 1” designating the first full calendar year in which the new license is effective.

- Replace two-unit vault restroom with new vault restroom, and all existing flush restroom buildings with efficient flush models (including septic systems).

In License Year 10 concurrent with major rehabilitation, YCWA will complete the following improvements:

- Convert all the double and triple campsites into single campsites, except for campsite #9 (double site), which will be separated into two single sites (for a total of 57 sites).
- Expand and formalize the existing overflow parking area to provide a single, paved and striped parking area with 10 vehicle plus trailer spaces and 15 single vehicle spaces that will serve both campground overflow and trailhead parking needs.
- Construct native surface, non-motorized, multi-use connector trail to Schoolhouse Trail from the trailhead parking area.
- Construct a 50-PAOT amphitheater across the road from the campground overflow and trailhead parking area with bench seating, a large group fire ring and an electrical hookup.
- Install electricity at the entrance station, host site, and each restroom.
- Upgrade the host site with water and electric hookups and a holding tank.
- Install a shower building or buildings with a total of 4 shower stalls.
- Upgrade the campsite vehicle spurs to accommodate RVs as outlined in Table 3.3-1 below.
- Install RV hookups (water and electric only) at 10 existing campsites.<sup>18</sup>
- Upgrade the existing campground circulation roads to accommodate RVs up to 45 ft in length as outlined in Table 3.3-2. These upgrades shall only be completed if they do not: 1) require significant re-designing of the existing circulation roads; and 2) reduce the total number of existing campsites.

**Table 3.3-1. Site-by-site campsite vehicle spur upgrades to accommodate 45-foot RVs at Schoolhouse Campground.**

Site No.	Spur Width Upgrade <sup>1</sup>			Spur Length Upgrade			Other Site Notes
	Widen to 20 ft	Widen to 16 ft	Keep Width As-Is	Extend to 60 ft	Extend As Terrain Allows	Keep Length As-Is	
Host	X			X			None
1D	X			X			Currently a double site (convert to single)
2D			X			X	Currently a double site (convert to single)

<sup>18</sup> Based on an April 20, 2016 site visit with the Forest Service, the 10 proposed campsites are Site 5, 14, 20, 26, 31, 39, 40, 51, 54 and 56.

**Table 3.3-1. (continued)**

Site No.	Spur Width Upgrade <sup>1</sup>			Spur Length Upgrade			Other Site Notes
	Widen to 20 ft	Widen to 16 ft	Keep Width As-Is	Extend to 60 ft	Extend As Terrain Allows	Keep Length As-Is	
3	X			X			Remove secondary spur (only 1 full RV spur)
4	X					X	None
5	X			X			None
6D			X	X			Currently a double site (convert to single)
7	X					X	None
8	X			X			None
9D			X			X	Currently a double site, but split into 2 single sites. New site with 20 ft. x 60 ft. spur; existing spur is currently as large as possible
10	X					X	Existing pull-through spur
11			X			X	None
12	X				X		Convert to a back-in spur (remove pull-through)
13	X			X			Reconfigure/relocate spur to provide 20ft x 60 ft spur
14D	X					X	Currently a double site (convert to single). Primary spur is pull-through but short (60 ft.). Keep the secondary spur due to small size of primary pull-through
15	X			X			None
16	X					X	Existing pull-through spur
17	X			X			None
18	X			X			None
19D	X			X			Currently double site (convert to single); remove secondary separate pull-through spur
20	X			X			None
21		X				X	None
22	X			X			None
23	X			X			None
24	X				X		Lengthen spur to approx. 40 ft.
25	X			X			None
26D	X					X	Currently a double site with pull-through spur (convert to single)
27	X			X			None
28D			X	X			Currently a double site (convert to single)
29	X					X	None
30			X			X	None
31		X				X	None
32	X			X			Remove secondary spur
33			X			X	None
34			X			X	None
35			X			X	None
36			X			X	None
37			X			X	None
38	X					X	None
39D	X					X	Currently double site with pull-through spur (convert to single)
40D	X					X	Currently double site with pull-through spur (convert to single)
41	X					X	None
42			X			X	None

**Table 3.3-1. (continued)**

Site No.	Spur Width Upgrade <sup>1</sup>			Spur Length Upgrade			Other Site Notes
	Widen to 20 ft	Widen to 16 ft	Keep Width As-Is	Extend to 60 ft	Extend As Terrain Allows	Keep Length As-Is	
43			X			X	None
44D			X			X	Currently a double site (convert to single)
45	X					X	None
46		X				X	None
47			X			X	None
48	X					X	None
49			X			X	None
50			X			X	None
51D			X			X	Currently a double site (convert to single)
52		X		X			None
53		X				X	Improve exit angle of spur
54	X			X			None
55		X				X	None
56	X			X			Relocate spur opposite site 15 (remove pull-thru). Widen turning angles of road at site.
<b>Totals</b>	<b>33</b>	<b>6</b>	<b>18</b>	<b>21</b>	<b>2</b>	<b>34</b>	<b>n/a</b>

<sup>1</sup> Spur width upgrades comply with the FSORAG as of 2016 and may need to be revised according to current applicable accessibility standards and guidelines at the time of design and construction.

**Table 3.3-2. Locations of circulation road upgrades to accommodate 45-foot RVs at Schoolhouse Campground.**

Location of Road Upgrade	Description of Upgrade
1. Ingress to loop serving Sites #5 through #14	• Widen the one-way entrance turning radius into the loop at Site #5
2. Roadway between Site #5 and #6	• Widen the roadway from the entrance turn up to Site #6
3. Egress at Site #14 from loop serving Sites #5 through #14	• Widen the exit turning radius from Site #14 to the main circulation road
4. Turnaround loop and egress serving Sites #21 through #25	• Widen the one-way turnaround road width and exit turning radius from the loop
5. Roadway from Site #27 through #33	• Widen the roadway
6. Ingress to cut-off road (left turn) after Site #33	• Widen the left entrance turning radius leading from Site #33 to the cut-off road to Sites #51 and #52
7. Egress from Site #55 and #56	• Widen the exit turning radius (right turn) from Site #55 and #56 to the main circulation road

## Dark Day Campground (NFS Lands)

For reference purposes, this facility is a Forest Service Development Scale 4 facility; and is scheduled for major rehabilitation in License Year 6 (refer to Section 3.2 – Major Rehabilitation Guidelines, for details).

### Improvements and Other Actions

In License Year 1, YCWA will complete the following improvements:

- Install a standardized 4-panel entrance station kiosk that contain the elements under “Campgrounds” in Section 3.3.1.2.

In License Year 2, YCWA will complete the following improvements:

- Replace the two-unit vault restroom building that serves Campsites 5 through 10 with a new vault restroom.

In License Year 7 concurrent with major rehabilitation of the facility, YCWA will complete the following improvements:

- Maintain facility for tent camping only.
- Provide vegetative screening between campsites.
- Improve each campsite that does not comply with current accessibility standards and guidelines.
- Install a one-unit vault restroom at the triple Campsite #4.
- Replace the two-unit vault restroom building that serves double campsites (Site #1 through #3) with an efficient two-unit flush model if the site terrain allows for a leach field. If a flush model is not feasible, then replace with a vault model.

### **Hornswoggle Group Campground (NFS Lands)**

For reference purposes, this facility is a Forest Service Development Scale 4 facility; and is scheduled for major rehabilitation in License Year 11 (refer to Section 3.2 – Major Rehabilitation Guidelines, for details).

#### Improvements and Other Actions

In License Year 1, YCWA will complete the following improvements:

- Install a standardized 4-panel entrance station kiosk that contain the elements under “Campgrounds” in Section 3.3.1.2.

In License Year 2 concurrent with major rehabilitation of the facility:

- Replace the existing four-unit flush restroom buildings at the Manzanita and Madrone campsites with efficient two-unit flush models including appropriate septic systems; and
- Replace the existing two-unit vault restroom at the Sugarpine campsite with a one-unit vault model.

YCWA will complete the following improvements in License Year 5 (concurrent with major rehabilitation of the facility), unless boat ramp parking expansion has been triggered (Section 4.4.1). In that case, major rehabilitation and the following improvements at Hornswoggle Group Campground will occur by License Year 11.

- Replace the existing two-unit vault restroom at the Douglas Fir campsite with an efficient one-unit flush model (including appropriate septic system).

- Install efficient one-unit flush restroom buildings including appropriate septic system at Dogwood and Ponderosa campsites (1 each where restroom buildings do not currently exist).
- Install a shower building or buildings with a total of 4 shower stalls
- Reconfigure turning radii of each existing group campsite spur road to accommodate RVs up to 45-ft-long at all the group campsites, except Site No. 4 (Ponderosa). Site No. 4 (Ponderosa) will be designated with an RV size limit (exact limit TBD), which includes signage at the campsite and the facility entrance information kiosk, as well as a disclosure about the size limit at this particular site through the Forest Service reservation system at the time of reservation.
- Expand the capacity by one group campsite (25 PAOT), including a paved parking area, one-unit vault restroom, and group camping area with picnic tables, food lockers, fire ring and a pedestal grill.
- Provide electricity at the entrance kiosk/information board and each restroom

### **Cottage Creek Campground (NFS and YCWA Land)**

This facility was destroyed in a 2010 fire and was partially reconstructed on the lands with minimal fire damage (western portion of the site). For reference purposes, this facility is a Forest Service Development Scale 4 facility.

#### Improvements and Other Actions

YCWA will complete the second phase of the facility reconstruction on the eastern portion of the campground that was severely burned in the 2010 fire once the area has been re-vegetated. The second phase of development will occur when an average tree height of 20 ft is reached for the trees within the re-vegetation area. For planning purposes, YCWA scheduled the second phase of development in License Year 2 unless: 1) the work was completed under the initial license; or 2) YCWA and the Forest Service determine that development is premature due to the re-vegetation status.

The development will consist of four additional small group campsites with the following specifications.

- A total of four additional campsites, including two double campsites and two triple campsites each with a paved vehicle spur and a living space and the following additional specifications:
  - Double campsites will consist of a paved vehicle spur with 2 single vehicle spaces and 2 RV camping spaces; and a living space with 1 group-sized fire ring, 2 food lockers, 2 picnic tables and 2 tent pads.
  - Triple campsites will consist of a paved vehicle spur with 3 single vehicle spaces and 3 RV camping spaces; and a living space with 1 group-sized fire ring, 3 food lockers, 3 picnic tables and 3 tent pads.

- A potable water system extension from the existing system consisting of underground distribution and water hydrants.
- A two-unit vault restroom building.
- A paved circulation road with vehicle barriers.
- Trash facilities, including a dumpster and recycling receptacles.
- Install a standardized 4-panel entrance station kiosk that contain the elements under “Campgrounds” in Section 3.3.1.2, if not installed under the first phase (initial license).
- Install a 2-panel interpretive display at a location with the best view down canyon within the facility. The interpretive display panels will include information about the hydrology, water systems, and drainages of the Yuba River; and potentially include a photograph with a view down valley that identifies the river drainages, ridges, mountains, and the Coast Range.

### **Garden Point Boat-in Campground (NFS Lands)**

For reference purposes, this facility is a Forest Service Development Scale 3 facility; and is scheduled for major rehabilitation in License Year 11 (refer to Section 3.2 – Major Rehabilitation Guidelines, for details).

#### Improvements and Other Actions

In License Year 1, YCWA will complete the following improvements:

- Install a standardized 4-panel entrance station kiosk that contain the elements under “Campgrounds” in Section 3.3.1.2.
- Install a 1-panel interpretive display that includes information about the gold mining history in the Yuba River drainage and the North Yuba River/Bullards Bar area.

In License Year 2, YCWA will complete the following improvements:

- Replace the existing 2 one-unit and 1 two-unit vault restroom buildings with new vault models with the most efficient configuration of one- and/or two-unit restroom buildings based on campsite locations

In License Year 11 concurrent with major rehabilitation of the facility, YCWA will complete the following improvements:

- Expand the site capacity by at least 7 single campsites to replace lost capacity with the closure of Frenchy Point Campground;
- Install additional restroom building(s) to meet the needs of the final number of new campsites developed with the most efficient configuration of one- and/or two-unit restroom buildings based on campsite locations;
- Provide solar-powered lighting at the entrance station kiosk; and



- Remove Klamath stove facilities and concrete bases.

### **Madrone Cove Boat-in Campground (NFS Land)**

For reference purposes, this facility is a Forest Service Development Scale 3 facility; and is scheduled for major rehabilitation in License Year 11 (refer to Section 3.2 – Major Rehabilitation Guidelines, for details).

#### Improvements and Other Actions

In License Year 1, YCWA will complete the following improvements:

- Install a standardized 4-panel entrance station kiosk that contain the elements under “Campgrounds” in Section 3.3.1.2; and
- Install a 1-panel interpretive display that includes information about the gold mining history in the Yuba River drainage and the North Yuba River/Bullards Bar area.

In License Year 2, YCWA will complete the following improvements:

- Replace the existing vault restroom with new vault model; and evaluate the size, design and location of the new vault toilet.

In License Year 11 concurrent with major rehabilitation of the facility, YCWA will complete the following improvements:

- Improve the facility to meet the needs of the users (e.g., redevelopment from a family campground to a group campground);
- Replace campsite retaining walls with durable materials;
- Provide solar-powered lighting at the entrance station kiosk; and
- Remove old Klamath stove facilities and concrete bases.

### **Frenchy Point Boat-in Campground (NFS Lands)**

In License Year 1, YCWA will decommission the facility due to low-use caused by difficult (very steep) access conditions, which results in a very narrow period of use (approximately two months). YCWA will remove all the remaining site facilities and restore the site to conditions satisfactory to the Forest Service. Once decommissioned, the site will no longer be used as a dispersed shoreline camping area.

### **3.3.2.2 Day-use Facilities**

#### **Dark Day Picnic Site (NFS Lands)**

For reference purposes, this facility is a Forest Service Development Scale 3 facility; and is scheduled for major rehabilitation in License Year 6 (refer to Section 3.2 – Major Rehabilitation Guidelines, for details).

#### Improvements and Other Actions

In License Year 1, YCWA will complete the following improvements:

- Install a standardized 3-panel entrance station kiosk that contain the elements under “Day-use Facilities” in Section 3.3.1.2

In License Year 6 concurrent with major rehabilitation of the facility:

- At the western picnic site cluster:
  - Provide a total of 10 picnic sites near the NMWSE – each with a picnic table and a concrete grill with self-contained ash box;
  - Remove any existing, remnant picnic sites and amenities (tables and grills); and restore the sites to conditions satisfactory to the Forest Service;
  - Remove the Klamath stoves at each picnic site;
  - Install signage to direct users from the parking area to the re-located picnic sites via the new ORARs;
  - Where practical, enhance reservoir views at the re-located picnic sites through selective vegetation management; and
  - YCWA will apply to Yuba County for an ordinance establishing a non-motorized boating only zone on the reservoir adjacent to the western picnic site cluster.
- At the northern/peninsula picnic site cluster:
  - Provide a total of 5 picnic sites near the end of the peninsula – each with a picnic table and a concrete grill with self-contained ash box;
  - Remove any existing, remnant picnic sites and amenities (tables and grills) beyond the 5 proposed new/improved picnic sites; and restore the sites to conditions satisfactory to the Forest Service;
  - Remove the Klamath stoves at each picnic site;
  - Install signage to direct users from the parking area to the re-located picnic sites via improved ORARs; and
  - Where practical, enhance reservoir views at the re-located picnic sites through selective vegetation management.
- Replace and relocate the existing four-unit vault restroom with a new four-unit vault

model. The restroom will be located to provide for more efficient maintenance and provide the opportunity for expanded parking where the existing restroom is located.

- Provide a total parking capacity of 34 single vehicle spaces by:
  - Re-configuring the existing parking area to maximize the parking capacity, including utilizing the existing island and peripheral areas, as practical; and
  - Expanding the parking area to meet the total parking capacity of 34 single spaces.
- Install trailhead signage for the Bullards Bar Trail, as follows:
  - At the parking area, install: 1) a trailhead identification sign; 2) a 1-panel information board with trail information and a map; 3) trailhead identification signs where the Bullards Bar Trail intersects the parking area; and
  - On Marysville Road at Dark Day Road junction, install a trailhead identification sign.

### **Sunset Vista Observation Site (NFS Lands)**

For reference purposes, this facility is a Forest Service Development Scale 3 facility; and is scheduled for major rehabilitation in License Year 2 (refer to Section 3.2 – Major Rehabilitation Guidelines, for details).

#### Improvements and Other Actions

In License Year 1, YCWA will complete the following improvements:

- Install a standardized 3-panel entrance station kiosk that contain the elements under “Day-use Facilities” in Section 3.3.1.2.

In License Year 2 concurrent with major rehabilitation of the facility, YCWA will complete the following improvements:

- Install two additional picnic sites, each with a picnic table and a concrete grill with self-contained ash box. Note: the site design, vegetation management measures and visual enhancement measures at the new picnic sites should aim to provide shade through existing trees, but in the event that shading via existing trees would not be adequate, then at the time of design and/or construction the installation of shade structures (e.g., ramadas) may be utilized to provide shading.
- Install a water hydrant near the new picnic sites;
- Upgrade the existing picnic site by replacing the picnic table and installing a concrete grill with self-contained ash box;
- Enhance the vistas of the reservoir from each picnic site by selectively clearing vegetation per the guidelines in YCWA’s *Visual Management Plan*;
- Replace the existing four-unit vault restroom with a new two-unit vault model;

- Pave and delineate the parking spaces/areas on the shoreline side for the vista/picnic visitors and trailhead users;
- Install a trailhead sign at the start of the Bullards Bar Trail;
- Install a 1-panel interpretive display at the picnic sites. The interpretive panel will be approx. 3-ft by 4-ft in size and will contain key historical information about the Yuba River Development Project, particularly the dam and associated facilities; and the primary purposes of YCWA and the Project (e.g., flood control, downstream water supply, recreation, fisheries enhancement, hydroelectric generation).

### **Dam Overlook Observation Site (YCWA Land)**

For reference purposes, this facility is a Development Scale 2 facility; and is scheduled for major rehabilitation in License Year 7 (refer to Section 3.2 – Major Rehabilitation Guidelines, for details). However, this site may be utilized for construction purposes for the potential New Bullards Bar Dam new low-level spillway. If this project occurs, then YCWA will alternatively complete the recreation facility major rehabilitation and improvements described below within 2 years of completion of the project.

#### Improvements and Other Actions

Concurrent with the major rehabilitation of this facility, YCWA will complete the following improvements:

- Grade, gravel and install vehicle barriers at the existing parking area for a total parking capacity of 10 single vehicle spaces;
- Install a standardized 3-panel entrance station kiosk that contain the elements under “Day-use Facilities” in Section 3.3.1.2; and
- Install a 1-panel interpretive display. The interpretive panel will be approximately 3-ft by 4-ft in size and will contain key historical information about the Yuba River Development Project, particularly the dam and associated facilities; and the primary purposes of YCWA and the Project (e.g., flood control, downstream water supply, recreation, fisheries enhancement, hydroelectric generation).

### **3.3.2.3 Boat Launches**

#### **Cottage Creek Boat Launch (YCWA Land)**

For reference purposes, this facility is a Forest Service Development Scale 4 facility; and is scheduled for major rehabilitation in License Year 18 (refer to Section 3.2 – Major Rehabilitation Guidelines, for details).

#### Improvements and Other Actions

In License Year 1, YCWA will complete the following improvements:

- Install a standardized 4-panel entrance station kiosk that contain the elements under “Boat Launches” in Section 3.3.1.2.

### **Dark Day Boat Launch (NFS Lands)**

For reference purposes, this facility is a Forest Service Development Scale 4 facility, and is scheduled for major rehabilitation in License Year 4, excluding the overflow boat ramp parking area (constructed in 2004), which is scheduled for major rehabilitation in License Year 10 (refer to Section 3.2 – Major Rehabilitation Guidelines, for details).

#### Improvements and Other Actions

##### *Overflow Parking Area*

YCWA will complete the following improvements at the overflow parking area facility.

In License Year 1:

- Improve the switchback trail by conducting basic trail maintenance on the trail connecting the overflow parking area to the boat ramp, including brush cutting, rock and root removal, slough and berm removal, and switchback maintenance. Note: this trail does not fully meet FSTAG (steep terrain) and will be maintained in its current configuration.
- Decommission the adjacent, user-created, non-switchback trail;
- Install trail signage at the start and end of the trail;
- Install lighting at the existing restroom; and
- Install a standardized 4-panel entrance station kiosk that contain the elements under “Boat Launches” in Section 3.3.1.2.

##### *Main Parking Area and Boat Ramp*

In License Year 1:

- Install a standardized 4-panel entrance station kiosk that contain the elements under “Boat Launches” in Section 3.3.1.2; and
- Install trailhead signage at the parking area, including: 1) a trailhead identification sign; 2) a 1-panel information board with trail information and a map; and 3) trailhead identification signs where the Bullards Bar Trail intersects the parking area.

In License Year 4 concurrent with major rehabilitation of the facility, YCWA will complete the following improvements:

- Upgrade the existing launch ramp in consultation with the Forest Service and California Division of Boating and Waterways (DBW) staff that meets: 1) DBW ramp design

standards; and 2) the following goals. YCWA and the Forest Service both understand that meeting the full extent of all of these goals for the entire length of the ramp may not be practical due to terrain, feasibility and/or excessive cost, but it is YCWA's intent to meet these goals.

1. Goal #1 – Straighten the Ramp: straighten the ramp as much as possible.
2. Goal #2 – Widen the Ramp:
  - A. Widen the ramp to the appropriate number of lanes to meet DBW design requirements for number of lanes per vehicle with trailer parking spaces in the Dark Day Boat Ramp parking areas (currently 1 lane per 50 vehicle plus trailer parking spaces); and
  - B. Provide as much width (number of lanes) for as much of the ramp length as possible. Ideally, the ramp would be the same width from top to bottom.
3. Goal #3 – Minimize Ramp-side Erosion: minimize the erosion along the uphill side of the ramp that periodically impedes the use and function of the boat ramp<sup>19</sup>
4. Goal #4 – Provide a Fully Functional/Accessible Floating Courtesy Dock: install an accessible dock that is functional for the full extent of the ramp
5. Goal #5 – Extend the Boat Ramp: provide a ramp extension that allows for boat launching in all Water Year Types

If YCWA is unable to meet the above goals, then YCWA will discuss with the Forest Service alternative solutions to meet the above goals.

- Install lighting at the restroom, top of the launch ramp and in the parking area
- Replace the existing four-unit vault restroom with a new four-unit vault model (if not done sooner as part of parking area re-organization work under the initial license)
- Repave and stripe the existing parking area (if not done sooner as part of parking area re-organization work under the initial license); and
- Remove the accessible loading ramp (if not done sooner as part of parking area re-organization work under the initial license).

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<sup>19</sup> The Dark Day Boat Launch ramp has a functionality issue at an approximate WSE of 1,856 ft due to slope instability in the upslope side of the ramp, where at times, the slope erodes depositing sediment on the boat ramp – typically during the non-peak season (January up to Memorial Day weekend and after Labor Day through December). The accumulation of the sediment impacts the functionality of the boat ramp, making the boat ramp impassable by vehicles backing down boat trailers; and the sediment impedes or damages the function of the boat dock rail and roller system requiring that the dock be removed.

### *Future Parking Area Expansion*

YCWA will evaluate the need to provide additional boat launch parking at Dark Day based on site-specific monitoring process at the Dark Day and Cottage Creek boat launch designated parking areas and overflow parking outside of designated parking areas. The detailed monitoring methods are provided in Monitoring section of this Plan (Section 4.4.1).

### **Moran Road Boating Site (NFS Lands)**

For reference purposes, this facility is a Forest Service Development Scale 3 facility; and is scheduled for major rehabilitation in License Year 5 (refer to Section 3.2 – Major Rehabilitation Guidelines, for details).

#### Improvements and Other Actions

In License Year 1, YCWA will complete the following improvements:

- Install a standardized 4-panel entrance station kiosk that contain the elements under “Boat Launches” in Section 3.1.1.2.

In License Year 5, YCWA will complete the following improvements:

#### *Car-top Boat Ramp*

- Replace the gravel on the existing boat ramp;
- Improve each of the three existing turnarounds along the car top boat ramp, as follows:
  - Widen to meet turning radius standards at the time of design for a large pickup truck;
  - Installing gravel on the turnaround surface, vehicle barriers and appropriate signage (turnaround only/no parking); and
  - Installing vehicle barrier and signage at the end of the ramp/third turnout to prevent vehicle access beyond.

#### *Parking Area*

- Expand the existing parking area by five single spaces<sup>20</sup>

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<sup>20</sup> Expansion of the parking area may require relocating the existing one-unit vault restroom to provide the 5 additional single vehicle parking spaces.

### **3.3.2.4 Recreational Trails**

#### **Bullards Bar and Schoolhouse Trails**

The Bullards Bar and Schoolhouse trails are not scheduled for major rehabilitation. Rather, the trails will be routinely maintained on an annual or as-needed basis.

#### Improvements and Other Actions

In License Year 1, YCWA will complete the following improvements:

- Install a trailhead symbol or sign at all: 1) facility entrance signs located along Marysville Road that provide access to the Project trails; and 2) Project trailhead parking areas.
- Install consistent directional signage at all Project trail junctions

### **3.3.2.5 Recreational Water and Wastewater Systems**

#### **Water Delivery System**

For reference purposes, this facility is scheduled for major rehabilitation in two phases in License Year 3 and 6 (refer to Section 3.2 – Major Rehabilitation Guidelines, for details).

#### Improvements and Other Actions

In License Year 3, YCWA will complete the following improvements:

- Replace the first segment of underground water distribution system from the water treatment facility at Cottage Creek Boat Launch, across the dam, along Marysville Road and terminating at the Dark Day Road, including the above-ground span of piping across the dam.

In License Year 6, YCWA will complete the following improvements:

- Replace the underground water distribution system from the end of the first segment above to the Dark Day Campground, Picnic Area and Boat Launch complex.

Note that the underground water distribution lines (off the main line) and hydrants within each recreation facility will be replaced as part of the major rehabilitation of each facility and not specifically as part of the main line rehabilitation.

#### **Water Treatment Facility**

For reference purposes, this facility is scheduled for major rehabilitation in License Year 20 (refer to Section 3.2 – Major Rehabilitation Guidelines, for details).



#### Improvements and Other Actions

No specific improvements to the water treatment facility and storage tanks are planned at this time. However, as YCWA prepares to construct additional recreational facilities as scheduled in this Plan, then YCWA will rehabilitate, improve and upgrade the capacity of the water treatment facility as needed to meet the water system demands of the existing and new Facilities.

Further, as noted above, YCWA will be replacing and upgrading the water delivery system piping in the first 3 years of the new license, which YCWA expects will improve the overall water system supply. Thus, at a minimum, YCWA will wait to see the impacts that the delivery system upgrades have on the overall system supply before addressing any further treatment facility upgrades. In the meantime, YCWA will continue to maintain and operate the water treatment facility with the current layout and capacity.

#### **Water Storage Tanks**

For reference purposes, this facility is scheduled for major rehabilitation in License Year 10 (refer to Section 3.2 – Major Rehabilitation Guidelines, for details).

#### Improvements and Other Actions

No specific improvements to the water storage tanks near Sunset Vista Observation Site and at the Cottage Creek Boat Launch maintenance yard are planned at this time. However, as YCWA prepares to construct additional recreational facilities as scheduled in this Plan, then YCWA will rehabilitate, improve and upgrade the storage tanks as needed to meet the water system demands of the existing and new Facilities.

Further, as noted above, YCWA will wait to see the impacts that the delivery system upgrades have on the overall system supply before addressing any further treatment or storage facility upgrades. In the meantime, YCWA will continue to maintain and operate the water storage tanks with the current layout and capacity.

#### **Recreational Wastewater Systems (Septic and Leach Fields)**

For reference purposes, the existing wastewater systems are scheduled for major rehabilitation in License Year 2 (refer to Section 3.2 – Major Rehabilitation Guidelines, for details).

#### Improvements and Other Actions

No specific improvements to the recreational wastewater systems are planned at this time.

#### **3.3.2.6 Floating Comfort Stations**

For reference purposes, this facility is scheduled for major rehabilitation as needed, but no later than License Year 20.

#### Improvements and Other Actions

When each FCS is replaced during major rehabilitation, YCWA will install an FCS that meets applicable accessibility standards and guidelines.

### **3.3.3 Diversion Dam Impoundment Facilities**

#### **3.3.3.1 Our House Diversion Dam**

This site does not have any recreation facilities and, thus, is not scheduled for major rehabilitation. For reference purposes, this site is a Forest Service Development Scale 2 facility.

##### Improvements and Other Actions

In License Year 1, YCWA will complete the following improvements at the parking area:

- Install a standardized 3-panel entrance station kiosk that contain the elements under “Day-use Facilities” in Section 3.3.1.2. YCWA will remove the kiosk and discontinue replacing it if subject to repeated vandalism or loss.
- Provide a temporary restroom (1 unit) every year from October 1 through June 30. If YCWA finds that trash or vandalism at the site are problems after March (after which YCWA is not required to make whitewater boating releases in the Middle Yuba River downstream of Our House Diversion Dam), YCWA may remove the temporary restroom before the end of June in a given year. Chronic vandalism and any other issues related to the restroom or cart will be discussed at the next annual Forest Service meeting and collaborative solutions sought. Any permanent changes to the time period for which the restroom is in place, will be addressed as a revision to the Plan approved by the Forest Service. Providing the restroom through June will not be used as a reason to require YCWA provide whitewater boating releases after March.

In License Year 4, YCWA will complete the following improvements behind the existing locked gate at the diversion dam:

- Construct a trail (herein referred to as “beach access route” to be consistent with Forest Service standards and guidelines) downstream of the diversion dam and weir. The beach access route will be designed to accommodate whitewater boaters transporting rafts, inflatable kayaks and hardshell kayaks from the end of the existing maintenance road below the diversion dam down the slope to the granite bench near the river’s edge. YCWA will consult with the Forest Service and American Whitewater during the design of this beach access route. One possible conceptual layout for this beach access route is provided in Figure 3.3-3.
- Provide a wheeled-cart designed for carrying whitewater rafts behind the existing locked gate at the parking area. To the extent possible, YCWA will design the cart to minimize the potential for removal from the site (i.e., around, under or over the existing locked gate on the road). However, YCWA will only provide this cart one time and if the cart is damaged beyond repair or stolen from the site, then YCWA is not required to replace the cart, as has been agreed to by the Forest Service and American Whitewater. Refer to Figure 3.3-1 for a cart design example. If the cart is not damaged beyond repair or stolen from the site but only suffers reasonable wear, YCWA will repair or replace the cart as needed for long-term maintenance.



Figure 3.3-1. Example of a whitewater raft cart design. [Source: ARTA River Trips 2016]

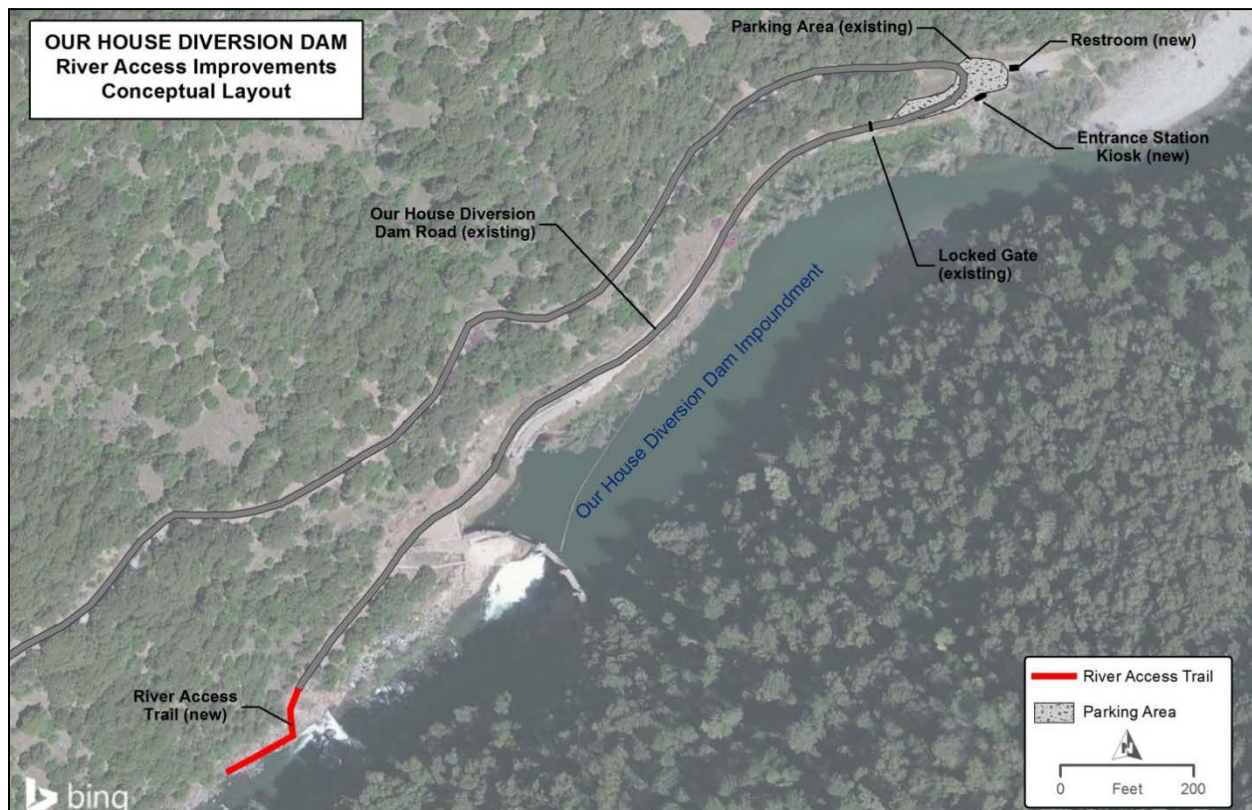
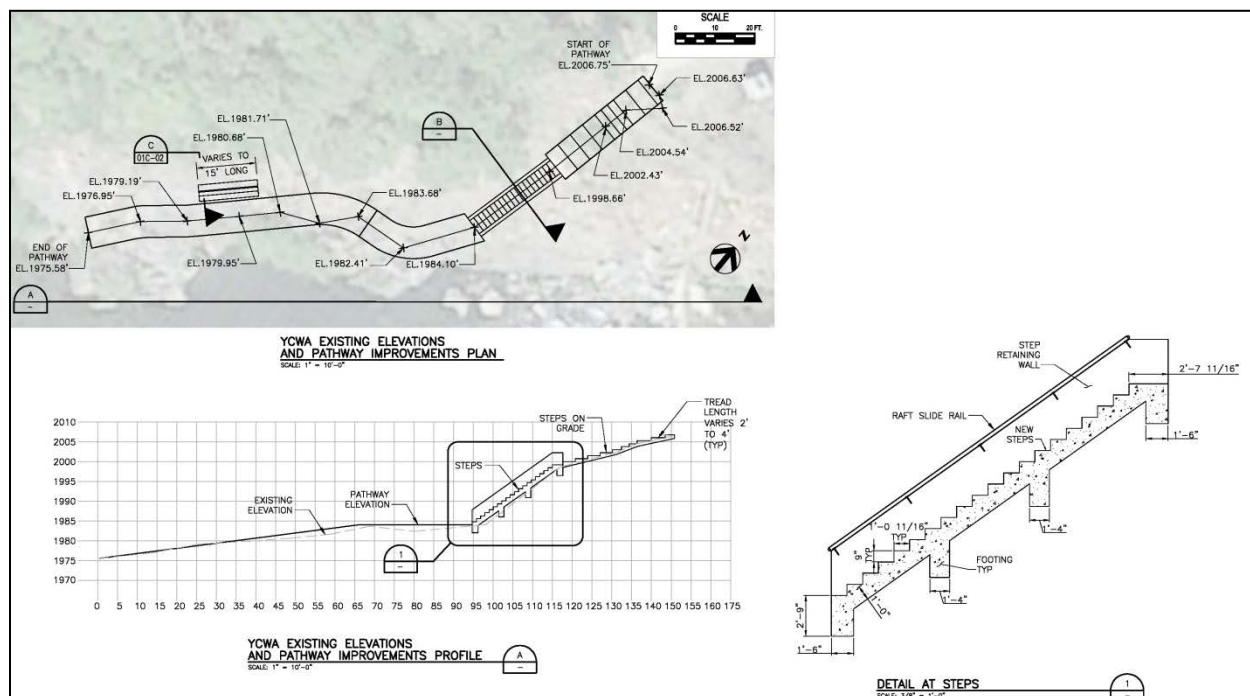


Figure 3.3-2. Conceptual layout of beach access route improvements at Our House Diversion Dam.



**Figure 3.3-3. Conceptual layout of this beach access route downstream of the Our House Diversion Dam. [Note: this conceptual design does not meet current beach access route standards set forth in the FSORAG. During design, YCWA will work with the Forest Service to evaluate conditions for exception given the terrain at this location.]**

### 3.3.3.2 Log Cabin Diversion Dam

This site does not have any existing recreation facilities and no specific improvements are planned at this time.

## 3.4 New Facilities

### 3.4.1 Kelly Ridge Campground (NFS Lands)

#### Improvements and Other Actions

In License Year 9, YCWA will construct a new Forest Service Development Scale 5 campground, designed to accommodate small groups (double and triple sites) and RVs on Kelly Road off Marysville Road. The facility will include two discrete camping areas separated by Kelly Road (refer to the conceptual layout in Figure 3.4-1). The facility will have the following specific facilities, features and configurations:

- 27 total campsites (22 double campsites and 5 triple campsites), each with a paved vehicle spur, RV hookups, and a living space.

- The double campsites will consist of a paved vehicle spur with 2 single vehicle spaces and 2 RV camping spaces; 2 water and electric RV hookups (no septic); a living space with 1 group-sized fire ring, 2 food lockers, 2 picnic tables and 2 tent pads.
- The triple campsites will consist of a paved vehicle spur with 3 single vehicle spaces and 3 RV camping spaces; 3 water and electric RV hookups (no septic); a living space with 1 group-sized fire ring, 3 food lockers, 3 picnic tables and 3 tent pads.
- A host site designed for an RV with a 20-ft-wide by 60-ft-long vehicle spur, an RV hookup with water and electric connections, and a holding tank;
- A potable water source and delivery system;
- A shower building with 4 shower stalls, 4 flush restroom stalls and a parking area;
- Restroom buildings including 2 two-unit vault buildings and the remainder will be flush buildings;
- Paved circulation roads with vehicle barriers and gates; and
- Install a standardized 4-panel entrance station kiosk that contain the elements under “Campgrounds” in Section 3.3.1.2



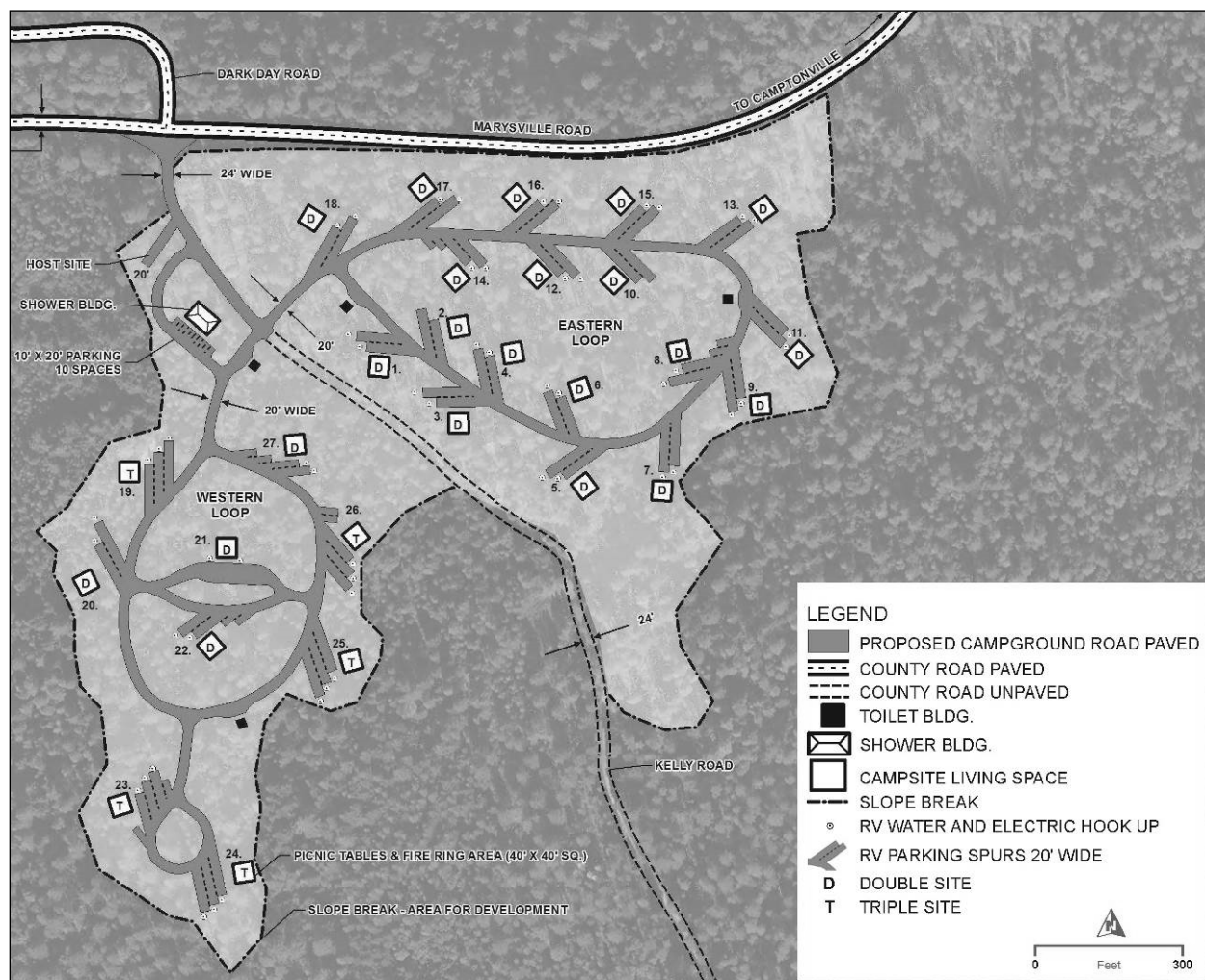


Figure 3.4-1. Conceptual layout for Kelly Ridge Campground.

### 3.4.2 Shadow Ridge Campground (NFS Lands)

#### Improvements and Other Actions

In License Year 5, YCWA will construct a new campground (Forest Service Development Scale 3) designed to accommodate single families at the former Burnt Bridge Campground site. The facility will include a campground, trailhead parking area, non-motorized shoreline loop trail, a non-motorized interpretive trail and a reservoir overlook (refer to the conceptual layouts in Figure 3.4-2 and 3.4-3). The facility will have the following specific facilities, features and configurations.

#### *Camping Facilities*

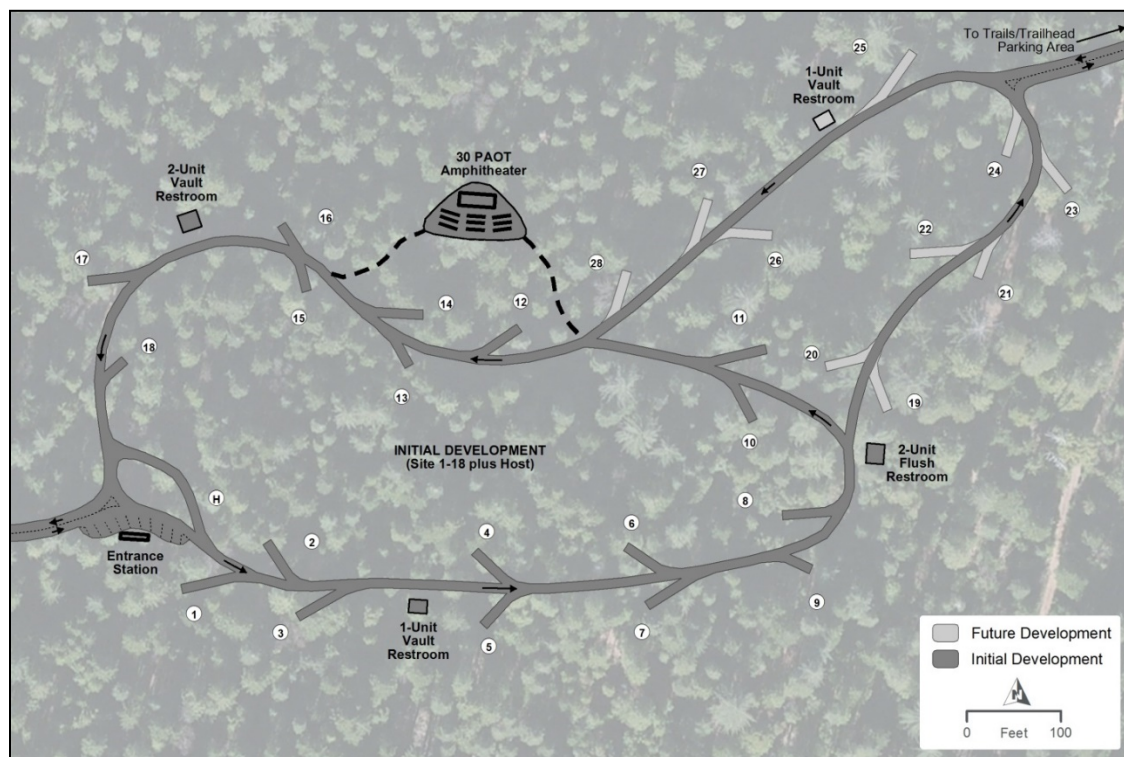
- Eighteen single campsites each with a paved vehicle spur and a living space (1 fire ring, food locker, picnic table and 2 tent pads);

- A host site designed for an RV (20-ft-wide by 60-ft-long vehicle spur) with water and holding tank;
- A potable water system, including source (well), underground distribution and water hydrants dispersed throughout the campground;
- Two, 2-unit restroom buildings (1 flush and 1 vault model);
- Paved circulation roads;
- A 30-PAOT amphitheater with bench seating and a large group fire ring; and
- Install a standardized 4-panel entrance station kiosk that contain the elements under “Campgrounds” in Section 3.3.1.2.

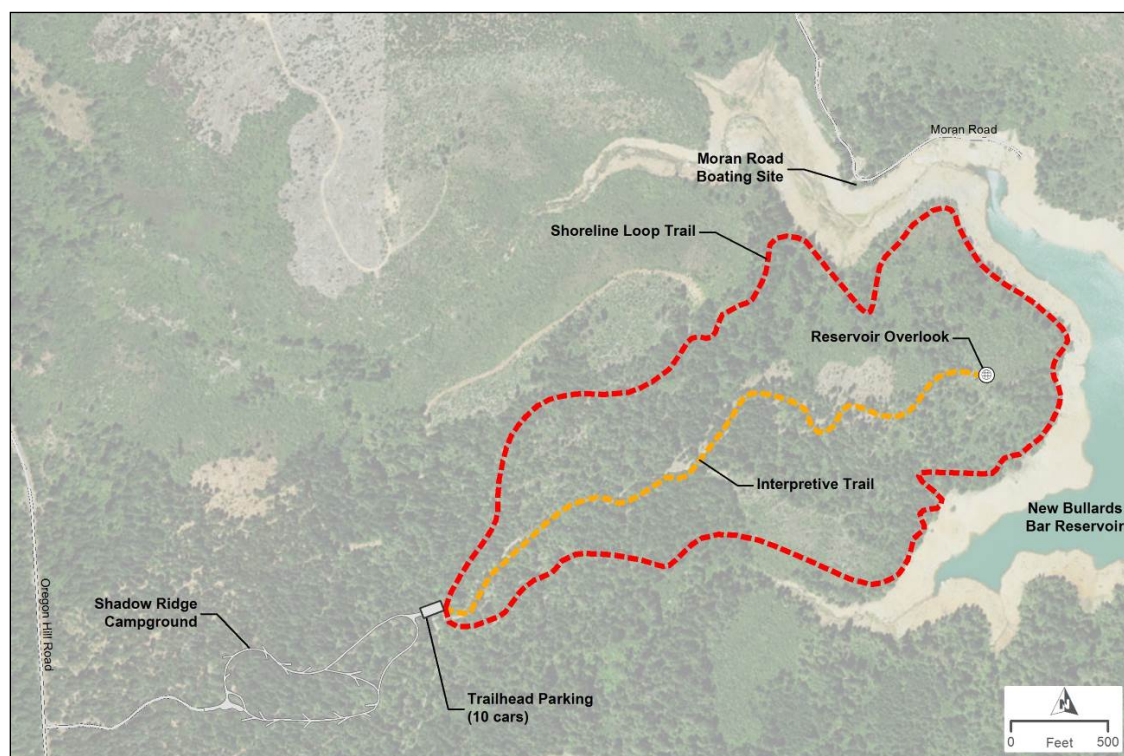
#### *Trailhead, Trails and Overlook Facilities*

YCWA will develop the following facilities originating from the east end of the re-developed campground.

- Trailhead parking area consisting of a:
  - Gravel parking area for 10 single vehicles with vehicle barriers;
  - Standardized 4-panel entrance station kiosk; and
  - Two-panel interpretive display with information about local wildlife, (e.g., California Red legged frog, bald eagle, and spotted owl) and local vegetation (e.g., ponderosa pine, white fir, Douglas fir, sugar pine, dogwood, tan oak, poison oak)
- A non-motorized shoreline loop trail (at least 48-in-wide tread, native surface) from the trailhead to a contour near the NMWSE around the Shadow Ridge peninsula.
- A non-motorized interpretive trail (at least 48-in-wide tread, native surface) from the trailhead along the existing road to the top of the Shadow Ridge peninsula. The interpretation will include 8–10 interpretive display stations each with a 1-panel interpretive display (12 in. by 18 in.) identifying specific local wildlife, vegetation and any other relevant site-specific information.
- A reservoir overlook atop the peninsula along the interpretive trail consisting of:
  - A picnic area with 3–5 picnic sites (table only);
  - A 2-panel interpretive display with information about the history of the valley before construction of the new dam, history of the old dam and area gold mining history; and
  - Appropriate vegetation management and clearing to enhance the views of the reservoir (Moran Cove).



**Figure 3.4-2. Conceptual layout for Shadow Ridge Campground.**



**Figure 3.4-3. Conceptual layout for the trail system at Shadow Ridge Campground.**



### *Future Campground Expansion*

YCWA will expand the campground by an additional 10 single campsites based upon the site-specific monitoring detailed in the Monitoring section of this Plan (Section 4.4.2). If the monitoring triggers are met, then YCWA will expand the campground with the following facilities and amenities.

- 10 single campsites each with a paved vehicle spur and a living space with 1 fire ring, 1 food locker, 1 picnic table and 2 tent pads).
- An extension of the potable water system constructed during the initial development, including underground distribution and water hydrants dispersed throughout the campsites.
- A two-unit vault restroom building
- Paved circulation roads

### **3.4.3 Cottage Creek Picnic Site (YCWA/NFS/Private Land)**

In License Year 2 and pending access easements from the private land owners along the access road to the site, YCWA will construct a new Forest Service Development Scale 3 picnic site in T.18N., R.7E., Sec 24 with the following facilities and features (refer to the conceptual layout in Figure 3.4-4). If YCWA is unable to attain the easements, then YCWA will consult with the Forest Service on alternate locations for a shoreline day-use facility.

The facility will be open during the same period that Cottage Creek Campground will be open (approximately April 15 to October 15) as the Operating Staff at Cottage Creek Campground (facility located at the start of the day-use facility access road) will be responsible for closing and opening the gate daily. When Cottage Creek Campground closes, the picnic facility will be closed as well including signage indicating the facility is closed for the season.

#### Parking Area

- Develop a gravel parking for 15 single vehicles with vehicle barriers
- Install a two-unit vault restroom
- Install a facility identification sign and directional signage at the parking area; and along Yuba County Road 169 at the intersection with the facility access road (Forest Service Road 18N15)
- Install a standardized 3-panel entrance station kiosk that contain the elements under “Day-use Facilities” in Section 3.3.1.2

#### Shoreline Day-use Area

- Develop 10 picnic sites each with a picnic table

- Develop a beach access route (approximately 200 to 300 ft) to the NMWSE from the picnic site to the cove southwest of the picnic site
- YCWA will apply to Yuba County for an ordinance establishing a non-motorized boating only zone in the cove accessed by the accessible shoreline trail; and install buoys at the mouth of the cove stating non-motorized watercraft only in the cove
- Install a 1-panel interpretive display with information about the history of the valley before construction of the new dam; history of the old dam; and area gold mining history.

#### Access Road

- Provide basic improvements<sup>21</sup> to the existing access road (Forest Service Road 18N15) from the intersection with Yuba County Road 169 to the new parking area. Improvements are likely: 1) maintaining a native surface road; 2) removing the old asphalt pavement segments; 3) installing spot gravel where road surface needs repair; 4) installing a new culvert plus shoulder drainage improvements where the creek intersects the road; 5) installing vehicle pullouts periodically along the road to allow two-way vehicle passing; and 6) installing signage along the road stating “No Vehicular Access off Designated Road.”
- Install vehicle barriers (e.g., gate, boulders, etc.) to prevent vehicle access beyond the road and the parking area.
- Install a gate: 1) near the junction with County Road 169; and 2) immediately after the parking area to prevent vehicles from accessing private property beyond the parking area.
- Since the road crosses private property and as a condition of the easement across the private property, the access road may be closed periodically: 1) due to road conditions/safety, until the condition is fixed, which would be YCWA’s responsibility to do; and 2) potentially during private logging activity or other potentially dangerous forest management activities on private lands nearby the picnic site.

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<sup>21</sup> It is expected that the existing road alignment and width is adequate for the new facility needs.

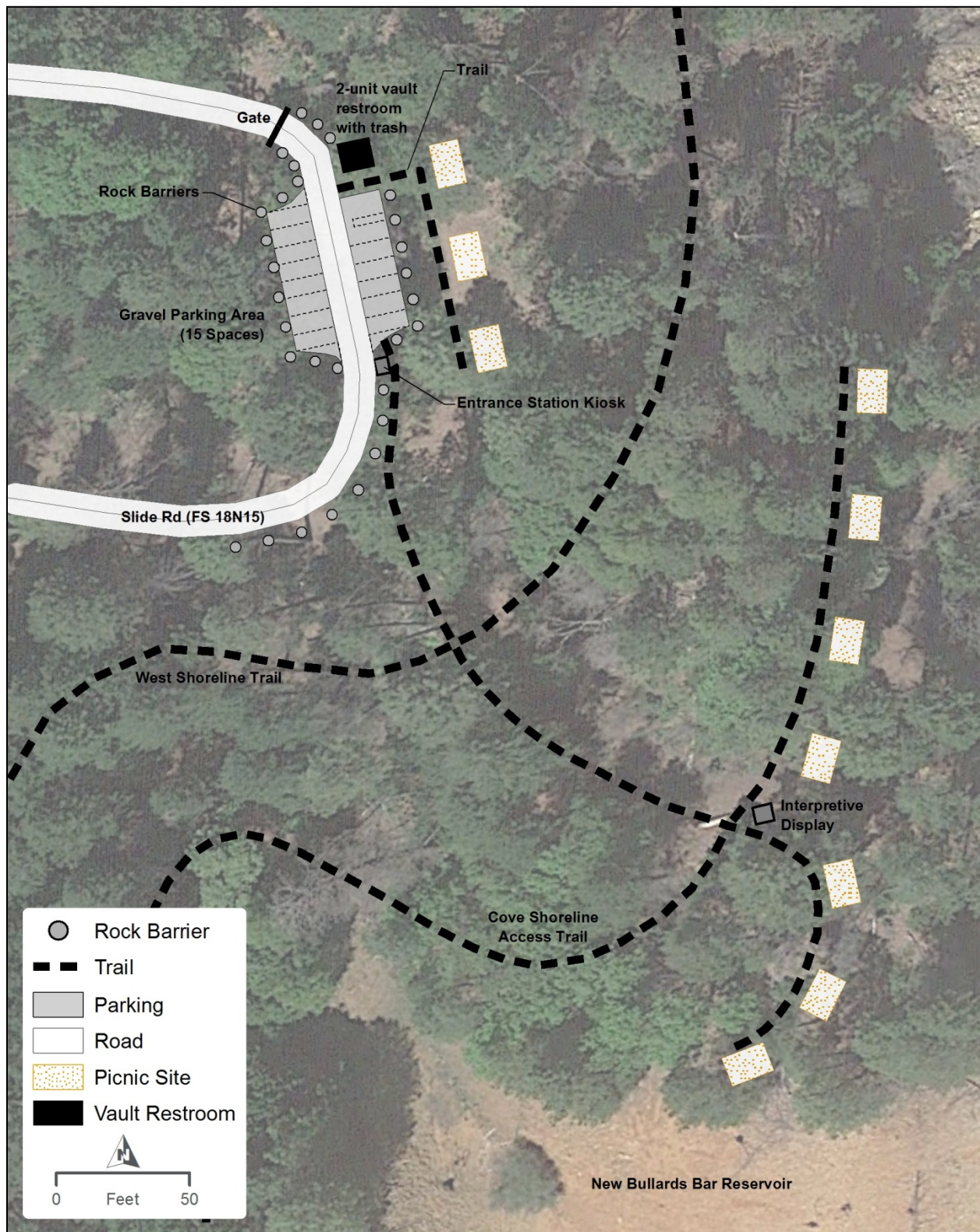


Figure 3.4-4. Conceptual layout for Cottage Creek Picnic Site.

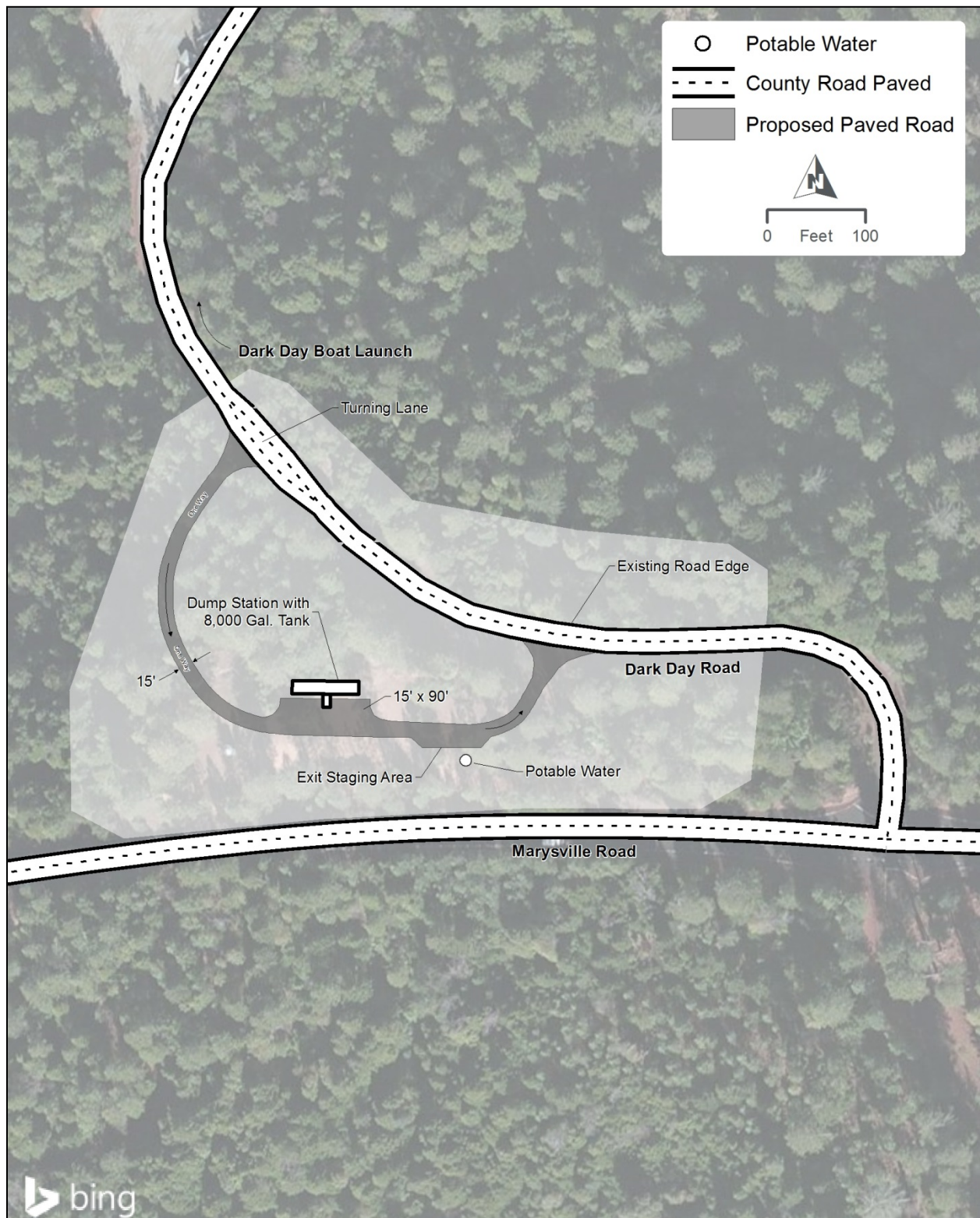
### **3.4.4 Dark Day RV Dump Station (NFS Lands)**

#### Improvements and Other Actions

In License Year 9, YCWA will construct a sanitary dump station for RVs on Dark Day Road (refer to the conceptual layout in Figure 3.4-5). The facility will include the following facilities and features.

- A one-lane dump station with an 8,000-gallon holding tank, potable water hydrant, non-potable water tower for cleaning, an overhead light and trash facilities
- A one-way (15-ft-wide) paved circulation road with an RV pullout after the dump station
- A turning lane on Dark Day Road for vehicles coming from the Marysville Road direction
- Install a standardized 3-panel entrance station kiosk that contain the elements under “Day-use Facilities” in Section 3.3.1.2
- Install signage on the existing Dark Day complex facility signs along Marysville Road indicating a dump station is available
- Install a facility identification sign on Dark Day Access Road near the entrance to the dump station facility



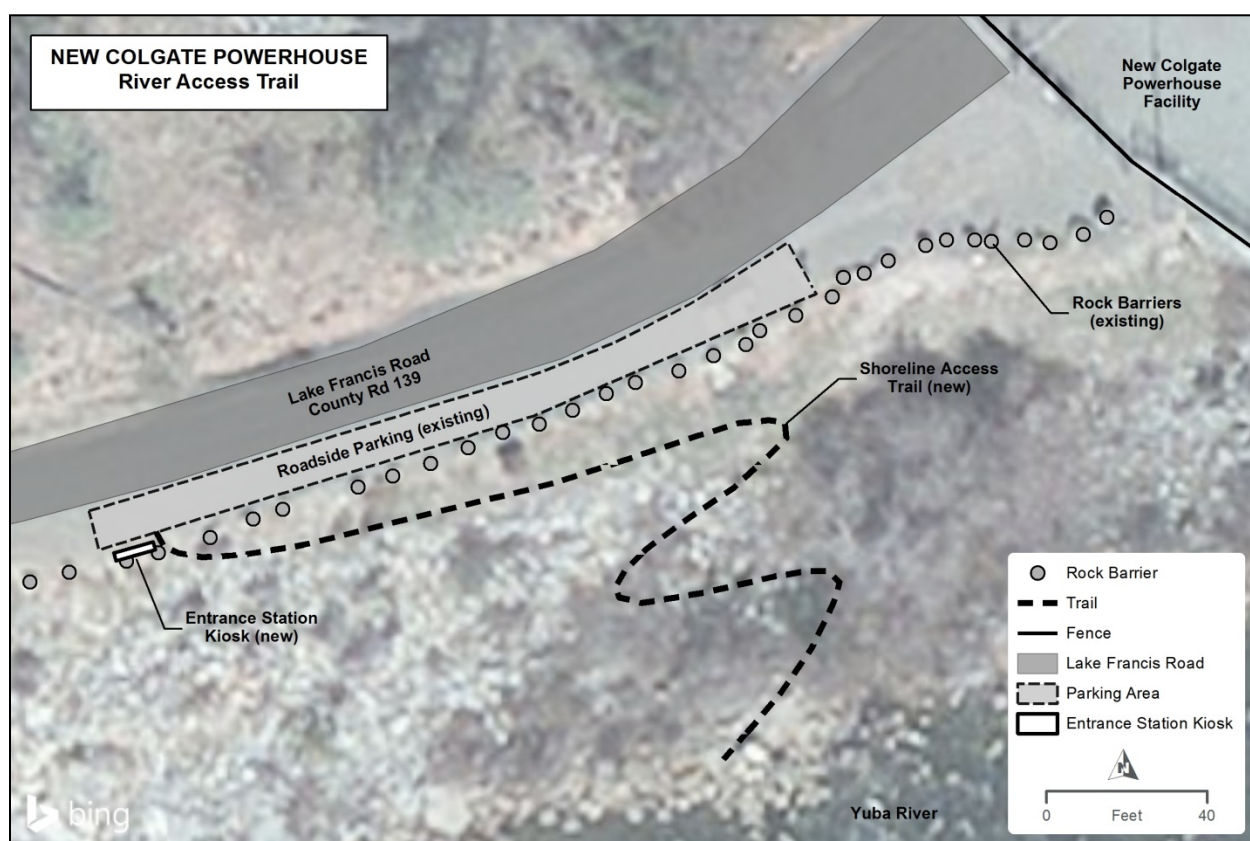


**Figure 3.4-5. Conceptual layout for Dark Day RV Dump Station.**

### 3.4.5 New Colgate Powerhouse River Access (YCWA Land)

In License Year 2, YCWA will complete the following river access improvements immediately downstream of New Colgate Powerhouse (Figure 3.4-6).

- Construct a non-motorized river access trail (36-in-wide tread, native surface) from the shoulder of Lake Francis Road (Yuba County Road 139) to the river's edge
- Install a standardized 3-panel entrance station kiosk that contain the elements under “Day-use Facilities” in Section 3.3.1.2
- Install directional signage indicating where parking is permitted/not permitted along the shoulder of Lake Francis Road (Yuba County Road 139)



**Figure 3.4-6. Conceptual layout for the New Colgate Powerhouse river access improvements.**

### 3.4.6 West Shoreline Trail (YCWA/NFS Lands)

YCWA will develop a Class 3 shoreline trail and appropriate signage on the west shoreline of New Bullards Bar Reservoir connecting the Cottage Creek recreation complex (boat launch, campground and picnic site) and the Shadow Ridge recreation complex (campground and trails). The trail will be Class 3 trail designed for non-motorized uses (pedestrian, mountain biking and equestrian uses) with a 48-in-wide native surface tread and a 36-in-wide vegetation clearance on

each side of the tread. YCWA will complete this trail construction in two phases as described below and shown in Figure 3.4-7.

**Phase 1 Segment: Cottage Creek Boat Launch to Cottage Creek Campground and Cottage Creek Picnic Site**

In License Year 2 concurrent with the development of Cottage Creek Picnic Site (new facility to be constructed), YCWA will construct an approximately 1.1-mi-trail that connects the three adjacent Cottage Creek Facilities – boat launch, campground and picnic site. Trailhead parking areas for this trail segment will utilize the existing parking areas at Cottage Creek Boat Launch and Cottage Creek Picnic Site. In addition, since Cottage Creek Campground lacks a suitable parking area to accommodate trailhead parking, YCWA will provide a native surface parking area adjacent to the campground alongside Forest Service Road 18N15 for 10 single vehicles with vehicle barriers and appropriate signage.

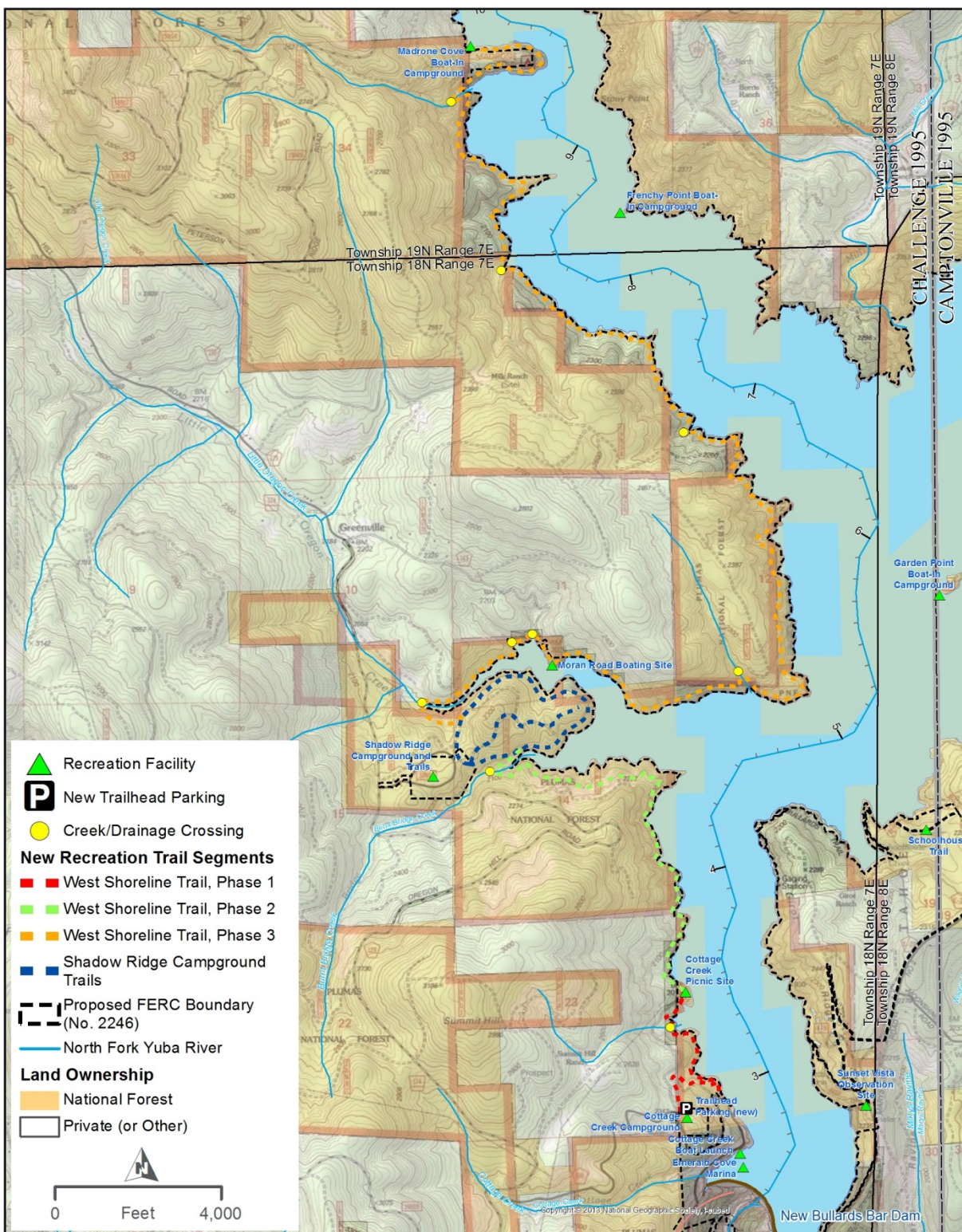
**Phase 2 Segment: Cottage Creek Picnic Site to Shadow Ridge Campground**

In License Year 6, YCWA will construct an approximately 4.5 mi trail that connects Cottage Creek Picnic Site to the trailhead at Shadow Ridge Campground. Notably, Shadow Ridge Campground is a new facility scheduled for construction by Year 5 that will include trails and a trailhead parking area, which will serve as the trailhead for this new trail segment as well.

**Phase 3 Segment (Future Expansion): Shadow Ridge Campground to Madrone Cove Boat-in Campground**

YCWA will develop a third trail segment from Shadow Ridge Campground to Madrone Cove Boat-in Campground based upon the site-specific monitoring detailed in the *Monitoring* section of this Plan (Section 4.4.3).





**Figure 3.4-7. Rough alignments for the three phases of the West Shoreline Trail.**



### **3.5            Master Implementation Schedule**

This section identifies the implementation schedule for the major rehabilitation and improvements at each existing recreation facility; and the implementation schedule for new Facilities (i.e., improvements); summarized in Table 3.5-1 (covering new License Years 1 through 20). The majority of the work on NFS lands will occur within the first eleven years of the new license, with some work on YCWA facilities occurring in years 14 through 20. After year 20, the need for replacement and/or redevelopment of facilities will be discussed and planned at the Annual Coordination Meeting with the Forest Service, described in Section 5.0 of this Plan.

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**Table 3.5-1. Schedule of major rehabilitation and improvements of facilities over the new license term.**

Specific Facility or Feature	Existing or New Facility	Year During New License <sup>1</sup>																			
		[LEGEND: I=improvement/R=major rehabilitation/O=other Yellow= planning /Gray=construction]																			
		1 <sup>1</sup>	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Decommission Frenchy Point Boat-In Campground	existing	R																			
Implement education/interpretive strategy and trail signage	new	I																			
Sunset Vista Observation Site	existing	R,I	R,I																		
Replace restrooms <sup>2</sup> in-kind at existing campgrounds	existing	R	R																		
New Colgate Powerhouse River Access	new	I	I																		
Cottage Creek Campground	existing	I	I	I																	
Cottage Creek Picnic Site	new	I	I																		
West Shoreline Trail - Phase 1 (Cottage Creek Facilities Connector Trail)	new	I	I																		
Replace existing water delivery system, Segment 1 (Treatment Plant to Dark Day Rd)	existing	R	R	R																	
Our House Diversion Dam	existing	I	I	I	I																
Dark Day Boat Launch – developed boat ramp and main parking area	existing	R,I	R,I	R,I	R,I																
Shadow Ridge Campground and Trails	new			I	I	I															
Hornswoggle Group Campground	existing			R,I <sup>3</sup>	R,I <sup>3</sup>	R,I <sup>3</sup>															
Moran Road Boating Site	existing				R,I	R,I															
Replace existing water delivery system, Segment 2 (Along Dark Day Road)	existing	R	R				R														
West Shoreline Trail-Phase 2 (Cottage Creek Picnic Site to Shadow Ridge Campground)	new					I	I														
Dark Day Boat Launch – parking expansion	new	Based on monitoring starting in Year 1 and triggers (refer to Section 3.3.2.3)																			
Dark Day Picnic Site	existing	R,I	R,I	R,I			R,I														
Dark Day Campground	existing	R,I	R,I	R,I			R,I														
Dam Overlook Observation Site	existing						R,I <sup>4</sup>	R,I <sup>4</sup>													
Develop electricity connection to Schoolhouse/Hornswoggle/Kelly Ridge campgrounds	new					I	I	I													
Kelly Ridge Campground	new						I	I	I	I											
RV Dump Station	new						I	I	I	I											
Dark Day Boat Launch – overflow parking area	existing	I								R	R										
Water storage tanks	existing									R	R										
Schoolhouse Campground	existing								R,I	R,I	R,I										
West Shoreline Trail – Phase 3 (Shadow Ridge Campground to Madrone Cove Campground)	new										O <sup>5</sup>										
Garden Point Boat-In Campground	existing										R,I	R,I									
Madrone Cove Boat-In Campground	existing										R,I	R,I									
Cottage Creek Boat Launch – developed boat ramp and existing parking area	existing															R	R	R	R		
Water treatment plant	existing																			R	R
Replace the floating comfort stations	existing																			R	R

<sup>1</sup> Year 1 of the new license refers to the first full calendar year of the new license.

<sup>2</sup> Refers to “in-kind” replacement of restrooms (i.e., vault with a new vault or flush with a new flush); and does not apply to existing vaults being replaced with flush models.

<sup>3</sup> YCWA will implement in this year unless the boat ramp parking expansion has been triggered (Section 4.4.1). In that case, major rehabilitation and the following improvements at Hornswoggle Group Campground will occur by year 11.

<sup>4</sup> This site will be used for the spillway/low-level outlet modification project. This work will be completed within 2 years after the modifications are completed.

<sup>5</sup> YCWA will monitor the Phase 2 trail segment and development of Phase 3 will be based on this monitoring (refer to Section 3.4.7 and 4.4.3).

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## SECTION 4.0

# MONITORING PROGRAM

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This section describes the Project's recreation-monitoring program. Since YCWA and the Forest Service have agreed to and scheduled significant improvements to the existing Facilities and construction of new Facilities (Section 3.3 and 3.4), the monitoring program is primarily focused on collecting periodic data throughout the new license to help ensure that Facilities: 1) meet user needs/demand (including boat ramp parking); 2) provide users with quality recreation experiences; and 3) minimize recreation-use resource conflicts and impacts.

The monitoring program has three elements, including a: 1) facility occupancy element; 2) reservoir boating capacity element; and 3) Project-wide social monitoring element. In general, the facility occupancy element provides levels of use at all Facilities at varying intervals. The reservoir boating capacity element monitors reservoir boating use levels in comparison to the existing reservoir boating capacity every six years. The social monitoring element provides key social information on user patterns, experiences and preferences at all the Facilities.

This monitoring program will begin the first full calendar year (License Year 1) after license issuance. Notably, this Plan's monitoring program is designed to collect and report recreation use monitoring parameters in concurrence with the FERC Form 80 schedule to provide consistent, comprehensive and valuable reporting of recreation use over the new license term.

## 4.1 Facility Occupancy Element

For this element, the indicator of importance is the occupancy rates at developed Facilities, which are divided into two categories – campground and day-use facilities. Campgrounds will be monitored for campsite occupancy, except where parking areas exist within a campground and then YCWA will monitor the parking area occupancy as well. The day-use facilities (picnic sites, boating sites, etc.) are all monitored for parking area occupancy and, where applicable, picnic site occupancy.

A facility's occupancy rate is expressed as a percentage from 0-to-100 and is calculated by dividing the number of occupied sites by the number of available sites at the facility only when a facility is open and excluding host sites. Overflow use is not included in the occupancy calculation of a recreation facility.

### 4.1.1 Campground Occupancy Methods

Each year, YCWA will calculate the occupancy for all Project campgrounds by using the camping reservation system records and first-come/first-serve records from the fee tubes (if applicable). The key methods for the campground occupancy monitoring will be as follows:

- **Data Collection Frequency:** annually
- **Season:** campground open season (typically April 15 through October 15)

- **Day Type:** all days
- **Indicator:** occupancy for each day for each individual campground
- **Data Collection Method:** Daily campground reservation system records as provided to YCWA by the Forest Service reservation system; and any first-come/first-serve records via fee tubes (if applicable) as provided to YCWA by the Forest Service
- **Data Collection Period:** not applicable
- **Trigger:** none

As an example, YCWA will calculate the occupancy for each day by dividing the number of occupied campsites by the facility's site capacity (e.g., 30 campsites occupied with a site capacity of 40 campsites would equal 75% occupancy).

#### 4.1.2 Day-use Facility Occupancy Methods

Every six years concurrent with the FERC Form 80 monitoring year, YCWA will collect recreation occupancy at the day-use facilities using an observation survey. The day-use facilities include picnic sites, observation sites, and boat launches. During each observation survey, YCWA will record the number of observed "at-one-time" occupied parking spaces and occupied picnic sites, where applicable. YCWA will conduct the first observation survey of the new license in the year indicated as the first FERC Form 80 Recreational Use Report monitoring year scheduled after license issuance. The key methods for the day-use facility occupancy monitoring will be as follows:

- **Data Collection Frequency:** every 6<sup>th</sup> year (concurrent with the FERC Form 80 cycle)
- **Season:** April 15 through October 15
- **Day Type:** 2 weekdays (Mon-Thu) and 2 non-holiday weekend days (Saturdays) per month; plus 1 holiday day (Saturday) per summer holiday weekend (total of 3 holiday monitoring days)
- **Indicator:** average daily occupancy by day type (weekday, non-holiday weekend and holiday days) for each month for each individual facility
- **Data Collection Method:** on-site observations
- **Data Collection Period:** between 10:00 a.m. and 5:00 p.m.
- **Trigger:** none

As an example, YCWA will calculate the average daily occupancy by day type (weekday, non-holiday weekend and holiday days) using the following two-step process.

- Step 1 – Calculate Each Facility's Occupancy for Each Monitoring Day – divide the number of occupied picnic sites or parking spaces by the facility's site capacity (e.g., 30 sites occupied with a site capacity of 40 sites would equal 75% occupancy).

- Step 2 – Calculate Monthly Average Occupancy for Each Day Type (Weekday, Non-holiday Weekend and Holiday Days)
  - *Weekday Calculation* – calculate a single monthly occupancy by averaging the occupancy for the 2 weekday survey days
  - *Non-holiday Weekend Day Calculation* – calculate a single monthly occupancy by averaging the occupancy for the 2 non-holiday weekend survey days
  - *Non-holiday Weekend Day Calculation* – report the single monthly occupancy for the 1 holiday survey day

In addition, YCWA will also calculate a monthly and seasonal (peak vs. non-peak season) average occupancy for each day type (weekday, non-holiday weekend day and holiday weekend). The peak season is Memorial Day through Labor Day holiday weekends; and the non-peak season is from April 15 up to Memorial Day holiday weekend and after Labor Day through October 15.

## **4.2 Project-wide Social Monitoring Element**

To address the social indicators at all Facilities, YCWA will conduct a Project-wide recreation visitor survey. Social indicators measure the interaction between recreation users and user acceptability levels with Facilities and management over the term of the license. These indicators will be measured using a short, focused recreation user survey performed every 12 years throughout the license period (concurrent with alternate Form 80 monitoring years). Critical social indicators to be monitored include perceived crowding of land and reservoir water surface areas and conflict between user groups.

### **4.2.1 Specific Monitoring Indicators and Standards**

#### **4.2.1.1 Perceived Crowding**

Researchers have developed a relatively simple measure of perceived crowding (Heberlein & Vaske 1977). The question asks people to indicate how crowded the area was at the time of their visit. Responses are given on the scale below:

<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>
<i>Not at all</i>		<i>Slightly</i>		<i>Moderately</i>		<i>Extremely</i>		
<i>Crowded</i>		<i>Crowded</i>		<i>Crowded</i>		<i>Crowded</i>		

This measure is simple and easy to apply. Two of the nine scale points on the crowding scale label the situation as uncrowded, while the remaining seven points label it as crowded (to some degree). The scale can be analyzed from various perspectives, but has traditionally been collapsed into two variables (not crowded versus any degree of crowding), which is the method used for this monitoring program. Currently, the best available science identifies five distinct categories of crowding when the scale was collapsed into the two variables (i.e., uncrowded versus crowded) (Shelby et al., 1989).

- Under 35% – No crowding: Relatively unique low-density experiences
- 36 to 50% – Low normal: Unlikely to be a problem
- 51 to 65% – High normal: experiences approaching capacity
- 66 to 80% – Over capacity: management probably needed
- Over 80% – Greatly over capacity: manage for high density or a sacrifice area

However, at the time of the first Project-wide user survey, YCWA will utilize the best available science as agreed to by YCWA and the Forest Service to help YCWA collect data and evaluate the crowding element. It is anticipated that future monitoring will measure weekday and weekend crowding at Facilities, reservoir shoreline, and reservoir water surface areas, which will provide managers with information as to whether the crowding issue is facility-based, is associated with the social capacity of the reservoir's water surface area, or the shoreline.

#### **4.2.1.2 Conflicts or Problems with Other Recreation Users**

Conflicts or problems with other recreation users refer to the proportion of users that report these incidents during their trips on a user survey. At the time of the first Project-wide user survey, YCWA will utilize the best available science as agreed to by YCWA and the Forest Service to help YCWA develop appropriate conflict questions and evaluate the conflict-related survey results. Based on current science, typical survey questions to assess conflict include:

- Did you or your group experience any problems with other recreation users during your current visit to this facility or area?
- If you had problems, please identify the other group and describe the problem.

### **4.2.2 Monitoring Methods**

#### **4.2.2.1 Detailed Methods**

Every 12 years corresponding with the FERC Form 80 monitoring year, YCWA will conduct a recreation user survey at all the Facilities. YCWA will conduct the first user survey of the new license in the first full year indicated as the scheduled FERC Form 80 Recreational Use Report monitoring year after license issuance. The detailed methods for the Project-wide social monitoring are as follows.

- **Data Collection Frequency:** every 12<sup>th</sup> year (concurrent with the Form 80 cycle)
- **Season:** Memorial Day through Labor Day holiday weekends
- **Day Type:** 2 weekdays (Monday-Thursday) and 2 non-holiday weekend days (Saturdays) per month; plus 1 holiday day (Saturday) per summer holiday weekend (total of 3 holiday monitoring days)
- **Indicator:** 1) perceived crowding, and 2) user conflicts



- **Data Collection Method:** on-site user surveys
- **Data Collection Period:** between 8:00 a.m. and 7:00 p.m.
- **Trigger:** none

As an example, YCWA will calculate the average responses (in percent) for the crowding and conflict questions by day type (weekday, non-holiday weekend and holiday days) using the following two-step process.

- Step 1 – Report the Percent Crowding and Conflict for Each Survey Day – for each monitoring day, YCWA will report the responses in percentages for each conflict question; and a percentage for each survey response to the 9-point crowding scale.
- Step 2 – Calculate Monthly Average Crowding and Conflict Percent for Each Day Type (Weekday, Non-holiday Weekend and Holiday Days)
  - *Weekday Calculation* – calculate a single crowding percentage for each point on the 9-point scale; and conflict percentage by averaging the occupancy for the two weekday survey days
  - *Non-holiday Weekend Day Calculation* – calculate a single crowding percentage for each point on the 9-point scale; and conflict percentage by averaging the occupancy for the two non-holiday weekend survey days
  - *Holiday Calculation* – report the single crowding and conflict percentage for the one holiday survey day

In addition, YCWA will also calculate a seasonal (Memorial Day through Labor Day holiday weekends) crowding and conflict percentage for each day type (weekday, non-holiday weekend day and holiday weekend).

#### **4.2.2.2 User Survey Development and Content**

The purpose of the user survey is not only to collect the social indicator information described in Section 4.2.1 above, but also to collect other pertinent recreation visitor information. The other recreation information includes: 1) general baseline recreation visitor information such as group size, vehicle and boat data, primary and overall recreation activity participation, and visitor's primary residence zip code; and 2) angler information such as the quality of the angling experience and species caught to help inform YCWA's New Bullards Bar Reservoir Fish Stocking Plan.

YCWA in collaboration with the Forest Service will develop a short, focused recreation survey instrument that specifically addresses social indicators, baseline recreation information and angler information. YCWA will provide the Forest Service a draft monitoring survey instrument and methodology for review and comment at least 90 days prior to implementation. The target number of survey interviews for each Project reservoir will be based on relicensing study results, the most recent FERC Form 80 use report, and other relevant, available recreation use information.

#### **4.2.2.3 Management Actions**

YCWA will meet with the Forest Service prior to the next calendar year open season (typically opens April 15) to discuss what, if any, potential management actions are necessary to maintain a quality visitor experience and alleviate either crowding or conflict at certain facilities or areas. Examples of land-based management actions that may be considered include:

- Providing additional visitor management and/or enforcement
- Providing adequate buffers between uses
- Expanding and/or developing new facilities/use areas
- Providing increased visitor education

### **4.3 Reservoir Boating Capacity Monitoring Element**

#### **4.3.1 Reservoir Boating Capacity Monitoring**

##### **4.3.1.1 BAOT and Reservoir Boater Survey**

Reservoir boating capacity monitoring will focus on two data points: 1) total BAOT levels and 2) reservoir boater survey results. YCWA will conduct the first reservoir boating monitoring (BAOT counts and reservoir boater survey) in the same year and concurrent with the day-use facility occupancy observation survey (i.e., in the first FERC Form 80 Recreational Use Report monitoring year scheduled after license issuance). The reservoir boating monitoring methods are as follows.

- **Data Collection Frequency:** every 6<sup>th</sup> year (concurrent with the Form 80 cycle).
  - Conditional Data Collection #1: if during the first three reservoir boater survey years there are no Below Normal/Dry or Above Normal/Wet water year types, then YCWA will survey the next available water year type grouping that has yet to be surveyed. For example, if the first three survey years do not include a “Below Normal/Dry” water year, then YCWA will survey the next “Below Normal/Dry” water year. This conditional survey will take the place of the next six-year survey.
  - Conditional Data Collection #2: if the final survey year (Form 80 survey year) does not occur in one of the last two years of the new license, then YCWA will conduct an additional boater survey and BAOT counts in the year before the end of the new license.
- **Season:** Memorial Day through Labor Day holiday weekends
- **Day Type:** all Saturdays (non-holiday and holiday)
- **Indicator(s):** 1) total reservoir BAOT; and 2) reservoir boater survey crowding and conflict results

- **Data Collection Methods**

- A. **BAOT Component:** on-site observations of BAOT, as follows:

- Boat Trailers

- 1. Number of observed boat trailers parked at: 1) Cottage Creek and Dark Day boat launch parking areas (striped spaces); and 2) any informal overflow areas outside the striped parking spaces
      - 2. Number of observed empty boat trailers parked at: 1) campgrounds in parking spurs or striped parking areas in the campgrounds (excluding boat-in campgrounds); and 2) any overflow areas outside the campsite parking spurs and striped parking areas

- Houseboats (from Marina records)

- 3. Number of unoccupied, but rented houseboat moorings
      - 4. Number of rental houseboat reservations, including any “walk-ins”

- Day-use Boats and Slips (from Marina records)

- 5. Number of rental day-use boat reservations, including and “walk-ins”
      - 6. Number of unoccupied, but rented boat slips at the marina

- Total BAOT per Day Calculation: sum of all six numbers above to get a single BAOT count per monitoring day

- B. **Reservoir Boater Survey Component:** on-site user survey at the boat launch parking areas (contact reservoir boaters immediately after taking their boat out of the reservoir)

- **Data Collection Period:** 1) BAOT component between 1:00 p.m. and 3:00 p.m.; and 2) reservoir boater survey component between 1:00 p.m. and 7:00 p.m.

- **Trigger:** none

YCWA will report the total BAOT and a calculated average response (in percent) for the crowding and conflict questions for each monitoring day. For BAOT, YCWA will sum the 6 BAOT counts to get a single total BAOT number for each monitoring day. For the crowding and conflict survey results, YCWA will report the percentage for each response to the conflict question(s) and for each response to the 9-point crowding scale question. In addition, YCWA will also calculate a monthly and seasonal (Memorial Day through Labor Day holiday weekends) crowding and conflict percentage for non-holiday Saturdays and holiday Saturdays.

#### **4.3.1.2 Reservoir Boater Survey**

The purpose of the reservoir boater survey is to collect the social indicator information that corresponds with the BAOT levels for each survey day. As such, the survey will be short and focused on the indicators needed to evaluate the carrying capacity on the reservoir – typically crowding-related questions; and other key boating-related characteristics (e.g., type of boat, group size, boating activities, etc.). YCWA in consultation with the Forest Service will develop appropriate reservoir boating capacity survey methods and a focused survey instrument using the best available reservoir carrying capacity methodology at the time of the first survey. YCWA will provide the Forest Service a draft survey instrument and methodology for review and comment at least 90 days prior to implementation.

#### **4.3.1.3 Reservoir Water Surface Elevation and Surface Area**

To help in evaluating the BAOT and boater survey results, YCWA will also provide the New Bullards Bar Reservoir water surface elevation and corresponding surface area (from the area-capacity curves) for each survey day as a critical frame of reference for the data results.

#### **4.3.1.4 Management Actions**

Each year following the reservoir boating monitoring fieldwork, YCWA will meet with the Forest Service as part of the annual recreation coordination meeting (Section 5) to discuss what, if any, potential management actions are necessary to maintain a quality reservoir boating experience and address any potential crowding or conflict on the reservoir. YCWA will utilize the best available reservoir carrying capacity science to help evaluate the results of the reservoir boating survey and BAOT levels in comparison to the existing reservoir capacity. Examples of reservoir-based management actions that may be considered include:

- Providing additional visitor management and/or enforcement to help ensure that uses do not exceed acceptable capacity standards;
- Establishing boat speed limits;
- Providing specific water surface zones;
- Establishing specific (i.e., circular) travel patterns for boats;
- Increasing boat ramp efficiency by adding ramp lanes, courtesy docks, parking spaces, staffing, etc.;
- Providing increased boater education;
- Limiting boat launch parking to developed parking spaces during high use weekends; and
- Providing real-time internet information to notify boaters when boat launch parking areas are full.

## 4.4 Site-specific Monitoring

### 4.4.1 Boat Launch Parking Areas

YCWA will evaluate the need to provide additional boat launch parking at Dark Day based on site-specific monitoring process at both Dark Day and Cottage Creek boat launch parking areas, as follows.

- **Data Collection Frequency:** annually (starting in Year 1)
- **Season:** Memorial Day through Labor Day holiday weekends
- **Day Type:** all non-holiday Saturdays
- **Indicator:** daily occupancy
  - Occupancy is based on two parking counts at each boat launch facility, including the: 1) total number of parking spaces occupied in designated parking areas; and 2) total number of vehicles and vehicles plus trailers outside the designated parking areas (informal overflow areas where parking spaces are not striped).
  - Note: a single vehicle space and a vehicle plus trailer space are both counted as one occupied space.
- **Data Collection Method:** on-site observations between the hours of 1:00 p.m. and 3:00 p.m. at the following locations:
  - Striped parking areas at Dark Day Boat Launch (the main parking area and overflow area) and at Cottage Creek Boat Launch (the main parking area and overflow parking area)
  - Any informal overflow areas outside the striped parking spaces at Dark Day and Cottage Creek Boat Launches
- **Triggers:** 80 percent average seasonal occupancy for the combined Dark Day and Cottage Creek parking facilities. Note: the average seasonal occupancy will be provided for each boat launch separately and combined.

YCWA will also report any periods when the boat ramp was closed or otherwise unavailable.

- Actions
  - ***If trigger is met:*** YCWA and the Forest Service will meet to evaluate the monitoring data and decide what level of additional parking, if any, is needed. If YCWA and the Forest Service mutually agree that additional parking is needed based on the monitoring results, planning will begin immediately for the agreed-upon amount of additional parking and associated pedestrian trail to the boat ramp. Based on current information the expected full build out is approximately 965 parking units, but the number of parking units will be based upon best available information at that time. *Note that a single vehicle parking space equals*

*one parking unit and a vehicle plus trailer parking space equals two parking units.*

- ***If trigger is NOT met:*** YCWA will continue with same annual monitoring methods until the total parking capacity is constructed (965 parking units) or YCWA and Forest Service agree monitoring is no longer needed.

For example, the three-step occupancy calculation will be:

- Step 1 - Calculate Daily Combined Occupancy for Each Boat Launch Facility
  - *Calculation #1* - Sum the total number of vehicles and vehicles plus trailers in striped spaces as well as areas outside the striped spaces
  - *Calculation #2* - Divide summed parking number by the total # of striped parking spaces at the boat launch
- Step 2 - Calculate Seasonal Average for Each Boat Launch Facility
  - *Calculation #3* - Sum of Combined Occupancy for Each Monitoring Day
  - *Calculation #4* - Divide the summed number by the total number of monitoring days
- Step 3 - Calculate Combined Seasonal Average for Combined Boat Launch Facility
  - *Calculation #5* - Sum Calculation #1 result and #3 result above to get total vehicles and vehicles plus trailers at combined launch facilities
  - *Calculation #6* - Sum Calculation #2 result and #4 result above to get total number of striped spaces at the combined launch facilities.
  - *Calculation #7* – Divide Calculation #5 result by Calculation #6 result to get the combined seasonal average

#### **4.4.2 Shadow Ridge Campground**

YCWA will expand the campground by an additional 10 single campsites (refer to Section 3.4.2 for the expansion details) if the trigger is met based upon the site-specific monitoring at Shadow Ridge Campground as follows:

- **Data Collection Frequency:** annually (once the campground is constructed)
- **Season:** Memorial Day through Labor Day holiday weekends
- **Day Type:** all non-holiday weekend days (Fridays and Saturdays)
- **Indicator:** daily occupancy
  - Occupancy will only be calculated for days when the facility is open
  - Campground host site is exempt from the occupancy calculation

- **Data Collection Method:** 1) campground reservation system records as provided to YCWA by the NRSS; and 2) first-come/first-serve (walk-in) records via fee tubes (if applicable) as provided to YCWA by the Forest Service
- **Data Collection Period:** not applicable
- **Trigger:** when 75 percent daily occupancy (Fridays and Saturdays) averaged for the monitoring season is reached in two consecutive years or two years out of a three year rolling period.
  - **Actions:**
    - **If trigger is met:** develop a 10 campsite expansion with associated facilities and amenities. The Site Development Planning Process will begin in the calendar year following the year the trigger was met with one year of planning expected followed by site construction in the second calendar year following the trigger being met. Refer to Section 3.4.2 for the campground expansion specifications.
    - **If trigger is NOT met:** continue with annual monitoring and data collection unless YCWA and Forest Service agree monitoring is no longer needed.

As an example, YCWA will calculate the seasonal daily occupancy to compare against the 75 percent trigger threshold using the following two-step calculation.

- Step 1 – Calculate Daily Occupancy for Each Monitoring Day – Divide the number of occupied campsites by the facility's site capacity (e.g., 15 campsites occupied with a site capacity of 20 campsites would equal 75 percent occupancy).
- Step 2 – Calculate Seasonal Occupancy – take the average of all the monitoring days.

#### 4.4.3 West Shoreline Trail

In License Year 10, YCWA will monitor the use levels on the trail segment between Cottage Creek Picnic Site and Shadow Ridge Campground to determine if trail use levels along the full extent of the trail have reached levels that requires additional trail development.

YCWA will directly monitor trail use levels through the use of trail counters, cameras or other appropriate methods to identify the levels of use. At a minimum, use will be monitored along the trail near Cottage Creek Picnic Site (within approximately one mile of the picnic site), near Shadow Ridge Campground (within approximately one mile of the campground) and near the midpoint of the trail. The monitoring methods are as follows:

- **Data Collection Frequency:** in License Year 10, Year 13 and then every Form 80 year unless YCWA and the Forest Service agree more frequent monitoring is needed.
- **Season:** Memorial Day through Labor Day holiday weekends
- **Day Type:** all days
- **Indicator:** trail use levels and patterns

- **Data Collection Method:** trail monitoring devices (e.g., counter, camera or other device)
- **Data Collection Period:** continuous
- **Trigger:** if, after reviewing the monitoring results, YCWA and the Forest Service mutually agree that the trail use levels have reached levels that require constructing additional trail.

YCWA will begin planning for the construction of a third segment (Class 3 design) of the West Shoreline Trail from Shadow Ridge Campground to Madrone Cove Campground (approx. 6.6 mi in length).

## **4.5      Summary of Monitoring Methods by Facility**

Table 4.5-1 summarizes each of the monitoring program components described above. Table 4.5-2 identifies the type(s) of monitoring that YCWA will conduct at each facility. Notably, new Facilities that are not yet constructed but proposed over the term of the new license have been included in Table 4.5-2 for reference.



**Table 4.5-1. Summary of the recreation monitoring program components.**

Monitoring Criteria	MONITORING PROGRAM COMPONENT						
	Campground Occupancy	Day-use Facility Occupancy	Reservoir Boating Capacity	Project-wide Social Survey	Boat Launch Parking	Shadow Ridge Campground	West Shoreline Trail
Frequency	Annually	Every 6 years	Every 6 years + conditional surveys	Every 12 years	Annually (until full build-out)	Annually (once constructed)	License Year 10, then every 6 years
Season	open season (April 15 – October 15)	same as campgrounds (April 15 – October 15)	Memorial Day – Labor Day	Memorial Day – Labor Day	Memorial Day – Labor Day	Memorial Day – Labor Day	Memorial Day – Labor Day
Day Type	All days	Monthly: 2 weekdays (Mon-Thu) 2 weekend days (Sat) 1 holiday day (Sat)	All Saturdays (non-holiday & holiday)	Monthly: 2 weekdays (Mon-Thu) 2 weekend days (Sat) 1 holiday day (Sat)	All non-holiday Saturdays	All non-holiday weekends (Friday & Saturday)	All days
Indicator	Daily occupancy	Daily occupancy	-BAOT counts -Boater crowding & conflict	-Crowding -Conflict	Daily occupancy	Daily occupancy	Trail use levels/patterns
Facility Type	Campgrounds	-Picnic sites -Parking areas	-boat ramp -campground -marina	All Facilities	-Striped parking areas -Non-striped overflow areas	Shadow Ridge Campground	Trail
Data Collection Method	-Reservation system -First-come/first-serve records from Forest Service	Onsite observations	-Onsite observations -User survey	Onsite user survey	Onsite observations	-Reservation system -First-come/first-serve records	Trail monitoring device
Data Collection Time Period	Not applicable	10 a.m. - 5 p.m.	1 - 3 p.m. (BAOT) 1 - 7 p.m. (survey)	8 a.m. - 7 p.m.	1 - 3 p.m.	N/A	Continuous
Trigger?	No	No	Not a specific threshold, but YCWA & FS discuss potential management actions	Not a specific threshold, but YCWA & FS discuss potential management actions	80% occupancy triggers new development(s)	75% occupancy triggers expansion	Not a specific threshold, but YCWA & FS discuss potential expansion per data

**Table 4.5-2. Type of monitoring by Project reservoir and site<sup>1</sup>.**

Project Impoundment	Type of Facility	Recreation Facility or Site	Campground Occupancy (Annual)	Day-use Facility Occupancy (Every 6 years)		Reservoir Boating Capacity (Every 6 years)	Project-wide User Survey (Every 12 years)
				Parking Area	Picnic Sites		
New Bullards Bar Reservoir	Campground	Schoolhouse Campground	X	X			X
		Dark Day Campground	X				X
		Hornswoggle Group Campground	X				X
		Garden Point Boat-in Campground	X				X
		Madrone Cove Boat-in Campground	X				X
		Cottage Creek Campground (new)	X				X
		Shadow Ridge Campground (new)	X	X (trailhead)			X
		Kelly Ridge Campground (new)	X				X
	Day-use	Dark Day Picnic Site		X	X		X
		Sunset Vista Observation Site		X	X		X
		Dam Overlook Observation Site		X			X
		Cottage Creek Picnic Site (new)		X	X		X
	Boat Launch	Cottage Creek Boat Launch		X		X	X
		Dark Day Boat Launch		X		X	X
		Moran Road Boating Site		X		X	X
	Recreational Trail	Bullards Bar Trail					X <sup>1</sup>
		Schoolhouse Trail					X <sup>2</sup>
		West Shoreline Trail (new)		X (trailhead at Cottage Creek Campground)			X <sup>3</sup>
Diversion Dam	Day-use	Our House Diversion Dam (new)		X			X
Colgate Powerhouse	Day-use	New Colgate Powerhouse River Access (new)		X			X

<sup>1</sup> Bullards Bar Trail users will not be surveyed along the trail, but rather through surveys administered at the trailheads and/or facilities co-located at or near the trails (i.e., Schoolhouse Campground, Sunset Vista Observation Site, Dark Day Boat Launch and Dark Day Picnic Site).

<sup>2</sup> Schoolhouse Trail users will not be surveyed along the trail, but rather through surveys administered at the Schoolhouse Campground.

<sup>3</sup> West Shoreline Trail users will not be surveyed along the trail, but rather through surveys administered at the trailhead parking areas co-located at Cottage Creek Boat Launch, Cottage Creek Campground, Cottage Creek Picnic Site and Shadow Ridge Campground.

## **4.6            Monitoring Reporting**

YCWA will prepare a recreation monitoring report every six years, to coincide with the year that FERC Form 80 monitoring reports are due to the FERC, file the report with FERC by December 31 of that year, and provide the report to the Forest Service. The report will be in addition to the FERC-required Form 80 report. The recreation monitoring report will summarize the data for the current monitoring period and, if appropriate, make management recommendations if monitoring indicators exceed established standards. Facility occupancy information will be presented on a weekly basis by day type.

For all Facilities, the report will include information electronically in spreadsheet format. Every twelve years the report will also contain results from the Project-wide user survey. Monitoring reports may include suggested improvements, as appropriate, based on the monitoring results.

In addition to the comprehensive six-year and twelve-year monitoring reports, YCWA will also compile a basic campground occupancy summary report, file it with FERC and provide it to the Forest Service a minimum of 30 days prior to the Annual Recreation Coordination Meeting (refer to Section 5). The summary report will provide the campground occupancy information on a weekly basis by day type (weekday, non-holiday weekend and holiday weekend days), and include the raw occupancy data from the Forest Service reservation system as provided by the Forest Service to YCWA.

For Facilities on NFS lands, YCWA shall provide a draft of the annual, six-year and twelve-year final reports to the Forest Service, for a 30 day review and comment period. In addition, YCWA will meet with the Forest Service during the review period to discuss potential reasonable resource management measures based on the report's results. YCWA shall file with FERC the reports listed below, including evidence of consultation, concurrent with the next Form 80 Report filing (the Recreation Resources Report in compliance with the regulations at 18 CFR Section 8.11, or as amended).

### **4.6.1            Annual Monitoring Report Content**

YCWA will include the following monitoring information in the annual monitoring report, at a minimum:

- Raw data from the campground reservation records as provided to YCWA by the Forest Service reservation system
- Summary of all previous year's campground occupancy indicator information (be summarized by week and day type)
- Boat ramp parking area occupancy (when collected)
- Summary of law enforcement incidents and lake surface accident information collected from the sheriff departments, Forest Service and any other readily available sources.

#### **4.6.2 Six-year Monitoring Report Content**

YCWA will include the following monitoring information in the six-year monitoring report, at a minimum:

- All the items in the Annual monitoring reports.
- Updated list of the existing Facilities and their capacities.
- Summary of recreation observation survey indicators and other data collected during the previous year, including VAOT and PAOT information.
- Summary of the current year and previous years' (starting in 2012) reservoir boating survey data to allow managers to understand trends and relationships of boating density to crowding and safety; and in particular:
  - Perception of crowding data
  - BAOT levels
  - Reservoir levels during reservoir boating surveys and BAOT counts
  - User and resource conflicts
- Outstanding health and safety issues.
- New or modified management actions (increased patrols, additional sanitation facilities, closure orders, etc.) proposed to address concerns identified in report.
- Six-year schedule for major rehabilitation, reconstruction, new construction and proposed facility changes based on any mandated updated guidelines.

#### **4.6.3 Twelve-year Monitoring Report Content**

YCWA will include the following monitoring information in the twelve-year monitoring report, at a minimum:

- All the items in the Annual and 6-Year monitoring reports.
- Results of Project-wide visitor surveys and, in particular:
  - Changes in use type, volume, group size, duration of stay, other use pattern and trends
  - Kinds and sizes of recreational vehicles (i.e., trailer, RV)
  - User perceptions of crowding per Project-wide user survey both at Facilities and along shoreline and water surface
  - Kinds, quality, quantity, and range of recreational opportunities visitors are engaging in

- Preferences in recreation activities and amenities
- Summarize the most current regional and statewide trends in recreation based on publicly available surveys and reports

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## SECTION 5.0

# ANNUAL RECREATION COORDINATION MEETING

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Each year during the term of the license, YCWA will arrange to meet with the Forest Service for an Annual Recreation Coordination Meeting to discuss issues regarding Facilities, use and management, public safety, and recreation related resource protection. YCWA and the Forest Service will mutually agree to the date of the meeting, but in general, the meeting will be held within the first 90 days of each calendar year. YCWA will provide an agenda and a proposed meeting date to the Forest Service in advance.

The following, at a minimum, will be discussed at the Annual Recreation Coordination Meeting:

- Need for additional garbage collection and/or other trash management actions based on the results of observations, visitor surveys, evidence of wildlife habituation and the status of garbage and litter left on site by users.
- Need for toilet facilities where dispersed camping is occurring will be discussed at least every 6 years (following submittal of the Project's monitoring report), and more frequently if warranted.
- Other O&M issues identified by the Forest Service or YCWA.
- Review and discuss the fall condition assessment for improvements and facilities on NFS lands to include compliance with applicable accessibility standards at the time of construction.
- Schedule and invite the Forest Service to the recreation facility condition assessment to be conducted on NFS lands. Review the *Recreation Condition Facility Assessment Form* (Attachment B) and determine if any changes are needed.
- Report on relevant monitoring results, such as if monitoring triggers are being met from the previous year(s).
- Discussion of planned monitoring efforts, particularly methodology in the upcoming year(s).
- Significant issues raised by the public.
- Hazard trees
- Capital improvement projects (as applicable)
- Law enforcement
- Recreation use data that is available from YCWA or the Forest Service, which includes summary data, at a minimum; and upon request, raw data in an electronic spreadsheet or database format.
- YCWA will provide Forest Service a copy of all documentation associated with FERC inspections of Facilities and use on NFS lands, including follow-up action taken by YCWA.

- Status of recreation projects from the previous year, including ongoing planning efforts, rehabilitation of existing Facilities, the establishment of new recreation Facilities, and any other recreation measures or programs that were implemented.
- List and review the existing Facilities scheduled for reconstruction as well as any new Facilities proposed for construction and other measures to be implemented as part of this Plan, including:
  - Logistical and coordination planning
  - Implementation schedule, including potential adjustments
  - Coordination needs
  - Permitting requirements
  - Key resources that will need to be protected from potential impacts associated with the implementation of the scheduled recreation projects
- Review the whitewater boating shuttle service operations, fees and any other information or issues from the previous year

YCWA and the Forest Service will identify any coordination needed with other activities and projects being implemented in the area. Permitting requirements, additional required environmental documentation and key resources that will need to be protected from potential impacts associated with the implementation of the scheduled recreation projects will be addressed. YCWA will file with FERC evidence of the meeting. The Annual Recreation Coordination Meeting is a minimum requirement and it is anticipated that additional meetings may occur throughout each year as needed to implement the Plan (e.g., coordination with marina, coordination with law enforcement, capital improvement priorities and fee schedule).



## SECTION 6.0

# PLAN REVISIONS

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YCWA and the Forest Service will meet to discuss the need to revise the Plan if significant changes in recreation use or resources occur. A need may arise from recreation monitoring results, from day-to-day O&M of the Project, or, from other unanticipated events that may arise during the license period. Examples of events that may trigger a need to revise the Plan include:

- Revisions and updates to Forest Service or other applicable management plans.
- Substantial changes in Project recreation use on or affecting NFS lands, as revealed by the Project monitoring.
- When new Facilities have been constructed.
- Changes in road maintenance standards or similar physical factors affecting the use of the Facilities within the Project area.
- Catastrophic natural events, such as major forest fires or natural disasters.
- New federal or state policies, regulations, and laws that significantly affect recreation resources in the Project Area.
- Acquisition by Forest Service of non-YCWA private land around Project reservoirs or impoundments that would allow for improvements where there is a demand, but suitable land was previously unavailable for construction on NFS lands of such improvements.
- Documented substantial changes in demographic use patterns (e.g., increases in size or amount of RV use, changes in types of boats using the lake, lack of use at a particular location), visitor needs, recreation preferences, types or patterns of use, season of use changes (such as school schedule changes) or other social factors affecting Facilities within the Project Area.

YCWA, in consultation with the Forest Service, will 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. Sixty days will be allowed for the Forest Service to provide written comments and recommendations before YCWA files the revised plan with FERC for FERC's approval. YCWA will include all relevant documentation of coordination/consultation with the revised Plan filed with FERC. If YCWA does not adopt a particular recommendation by the Forest Service, 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>22</sup>

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<sup>22</sup> The Plan will not be considered revised until FERC issues its approval.

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## SECTION 7.0

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# **Recreation Facilities Plan**

## **Attachment A**

### **Yuba County, California - Code of Ordinances Title VIII – Public Peace and Safety Chapter 8.50 - Bullards Bar Recreation Area**

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

June 2017

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### **8.50.010. - Definitions**

When used in this Chapter the following terms shall have the meaning hereinafter set forth:

- (1) *Agency* means the Yuba County Water Agency created by the Act approved June 3, 1959 (Stats. 1959, Ch. 788 (Water Code App., § 84-1 et seq.)).
- (2) *Engineer-Administrator* means the Engineer-Administrator of the Agency and includes his authorized representative.
- (3) *Motor-powered conveyance* means automobiles, motorcycles, motor-driver cycles, motor trucks, motor scooters, trail bikes, motor vehicles as defined in the Vehicle Code, which definitions are incorporated herein and made a part hereof by this reference, and all other self-propelled vehicles or conveyances.
- (4) *New Bullards Bar Reservoir* means the reservoir resulting from the construction of the New Bullards Bar Dam on the North Yuba River located in Section 25, Township 18 North, Range 7 East, M.D.B.&M., and appurtenant facilities.
- (5) *Pollution hazard* means any substances which can create a reasonable possibility that its contact with the waters of New Bullards Bar Reservoir would contaminate such waters and render such waters unfit for human consumption.
- (6) *Recreation area* means the Bullards Bar Recreation Area containing approximately 14,500 acres of forested lands and 4,600 acres of surface water in the New Bullards Bar Reservoir and the surrounding land to the top of the ridge nearest to said reservoir.

(Prior Code, § 8.50.010; Ord. No. 435; Ord. No. 1082)

### **8.50.020. - General Regulations**

- (a) No person shall commit any act of vandalism in the recreation area, including damaging or destroying trees or their leaves, limbs, or branches, brushes, shrubbery, equipment, signs, buildings, or rooms, or tear down or deface the same.
- (b) No person shall enter any portion of the recreation area or buildings or portions thereof in the recreation area which are posted with signs which state "No Entry," "Keep Out," "No Trespassing," "Closed Area," or other prohibition of entry.
- (c) No person shall discharge or use in the recreation area any firearms or air or gas or spring propelled guns, sling shots, bows and arrows, except that bows and arrows may be permitted in such portions of the recreation area as are specifically designated for archery by the United States Forest Service or where prior written permission has been given by the owner of the property upon which the archery is conducted.
- (d)
  - (1) No person shall camp on the reservoir if the elevation of the water of the reservoir is above 1,940 feet above sea level.
  - (2) No person shall camp or stay overnight on the reservoir without a valid camping permit issued for a fee to his or her party by the Marina concessionaire or other person as may be designated by the "Agency."

- (3) There shall be two types of permitted shoreline camping and two types of permits issued:
  - a. Camping within boat-in access campgrounds at designated areas shall be those areas adjacent to improved campgrounds;
  - b. Camping at undesignated areas shall be all other permitted camping sites, no person shall camp at an undesignated area unless he or she either:
    - 1. Has a boat with sanitary facilities;
    - 2. Has a portable, chemical toilet.
- (4) The Board of Directors of "Agency" shall, as deemed necessary and in its discretion by resolution, determine and fix the quantity and price of each type of camping permit.
- (e) It shall be unlawful for any owner or keeper of any pet or domestic animal to allow such animal to run at large anywhere within 300 feet of the New Bullards Bar Reservoir or any designated picnic area, camping area, road, or boat launching ramp. Animals shall be leashed within campgrounds and designated areas.
- (f) No person shall ride, drive, lead or keep a saddle horse or other animal in the Recreation Area except on such roads, trails, or areas, and subject to such regulations as the Agency may from time to time especially designate. No horse or other animal shall be hitched to any tree or shrub in a manner that may cause damage.
- (g) No person shall molest, injure, or kill any bird or mammal, or disturb its habitat in the recreation area.
- (h) No trash, litter, garbage, oil, bottles, broken glass, ashes, waste paper, or other rubbish or debris shall be dumped, discharged, or left in the recreation area except in properly provided receptacles designated for that purpose.
- (i) No person shall cut, break, dig up, or in anyway mutilate or injure or fasten any bill, advertisement, or inscription on any tree, shrub, plant, fern, grass, turf, railing, seat, fence, structure or any other object in the recreation area, except upon private land when permitted to do so by the owner thereof.
- (j) No unauthorized person shall dig up or remove any dirt, stones, rocks, or other substance whatever, make any excavation, quarry any stone, or lay or set off any blast, or cause or assist in doing any of such things, within the recreation area.
- (k) No person shall camp or occupy any portion of the recreation area as a trailer site, excepting in such places and locations as are designated by posted notices permitting such uses.
- (l) It shall be unlawful for any person to engage in the business of soliciting, selling, or peddling any liquids or edibles for human consumption, or to distribute circulars, or to hawk, peddle, or vend any goods, wares, or merchandise, in the recreation area, except when authorized to do so by the public agency having jurisdiction over the area where such activities are conducted.

(Prior Code, § 8.50.020; Ord. No. 435; Ord. No. 1082)

#### **8.50.030. - Traffic Regulations**

- (a) No person shall operate any vehicle, except an authorized emergency vehicle, at a speed in excess of the posted speed limits.
- (b) No person shall operate any vehicle, except authorized emergency vehicles, within the recreation area except on established public vehicular roads and defined or authorized parking areas.
- (c) No person shall park or leave unattended any automobile, motor powered cycle, or any other vehicle within the recreation area except in areas specifically designated as parking areas. When such parking areas shall have been designated, and parking spaces provided therein and conspicuously marked, along the water front, public roads, parks or camping grounds, all vehicles shall be required to park within the spaces designated; and it shall be unlawful for any person to park an automobile without parking the same in the spaces designated, or to park in such manner as to prevent another vehicle, which has been properly parked, from backing out, or in such manner as to prevent a party desiring to park a vehicle in a space provided therefor from driving into such parking space. Vehicles parked or left unattended in violation of this Chapter may be towed away and stored at the owner's expense.
- (d) This Section does not apply to officers, agents, or employees of the United States, the State, the County, or other local governmental agency when they are using motor-powered conveyances in the performance of their official duties, nor to the use of motor-powered conveyances in emergencies when it is necessary to use them for the preservation or protection of life or property, nor to utility companies using motor-powered conveyances for the installation, maintenance, repair, or servicing of utility lines, nor to the owners of property using motor-powered conveyances on their own property.
- (e) No person shall use or operate a motor-powered cycle in the recreation area except on public roads or public trails.

(Prior Code, § 8.50.030; Ord. No. 435; Ord. No. 1082)

#### **8.50.040. - Regulation of by Yuba County Water Agency**

- (a) The Yuba County Water Agency is authorized to adopt ordinances and special rules and regulations with reference to the public use of the Bullards Bar Recreation Area, including New Bullards Bar Reservoir.
- (b) It shall be unlawful to violate any rule, regulation, or ordinance adopted by the Yuba County Water Agency regulating the public use of the Bullards Bar Recreation Area, including the New Bullards Bar Reservoir.
- (c) It shall be unlawful to operate or use any boat or watercraft upon any portion of the waters of the New Bullards Bar Reservoir for which the fees and charges established by the Yuba County Water Agency have not been paid.
- (d) Any person who violates any of the provisions of this Section 8.50.040 or any of the ordinances, rules, or regulations adopted by the Yuba County Water Agency regulating the public use of the Bullards Bar Recreation Area, including New Bullards Bar Reservoir, shall

be guilty of a misdemeanor and punishable by a fine not exceeding \$1,000.00 or by imprisonment not exceeding six months, or by both such fine and imprisonment.

(Prior Code, § 8.50.040; Ord. No. 446; Ord. No. 1082)

#### **8.50.050. - New Bullards Bar Reservoir General Regulations**

- (a) It shall be unlawful to contaminate or pollute the waters of New Bullards Bar Reservoir or the shore area thereof.
- (b) It shall be unlawful for any person to clean fish in New Bullards Bar Reservoir or on the shore areas thereof, except at places designated by the Agency, which locations will be equipped with necessary receptacles to prevent littering the shore areas or polluting or contaminating the waters of the reservoir. This provision shall not apply to the cleaning of fish on houseboats, which are equipped with suitable receptacles for garbage.
- (c) No person shall place or install any private mooring facilities in New Bullards Bar Reservoir or on the shores adjacent thereto.
- (d) No person shall swim or float farther than 100 feet from the shoreline, except while engaging in aqua-planing or water skiing, or at designated beach areas where the beach is protected by a floating barrier and so long as the swimmer or floater stays between the beach and the barrier.
- (e) No person shall use any logs or hard or sharp objects while swimming or floating.
- (f) No person shall land any airplane except in an emergency.

(Prior Code, § 8.50.050; Ord. No. 435; Ord. No. 1082)

#### **8.50.060. - New Bullards Bar Reservoir Boating Regulations**

- (a) No owner, operator, or person in command of any vessel propelled by machinery shall use it or permit it to be used at a speed in excess of five miles per hour or at a speed which creates a noticeable wake in any portion of the area from the New Bullards Bar Dam to 100 feet:
  - (1) Beyond the designated houseboat mooring area of the Bullards Bar Marina.
  - (2) In any area which five miles per hour and/or "Flat Wake" signs have been posted.
  - (3) The five-mile-per-hour/flat wake areas shall be marked by signs indicating five miles per hour and/or flat wake displayed in a manner approved by the Agency.
  - (4) The maximum speed limit beyond the five-mile-per-hour/flat-wake designated areas shall be 20 miles per hour between sunset and sunrise. This maximum speed limit does not supersede or alter in any way the state mandated "safe speed" requirement if such safe speed is less than 20 miles per hour given then existing conditions at the Lake.
- (b) No person shall operate any motor-propelled boat upon the waters of New Bullards Bar Reservoir in excess of any posted speed limit, or at a speed in excess of five miles per hour within 200 feet of any boat landing area or landing wharf to which boats are made fast and

which is used for the embarkation or discharge of passengers, or within 200 feet from the shoreline of the New Bullards Bar Reservoir.

- (c) No person shall place in use or operate any boat on New Bullards Bar Reservoir unless such boat is in a sanitary and seaworthy condition.
- (d) No person shall maintain or operate in or upon the waters of New Bullards Bar Reservoir any boat which is equipped with a toilet, sink drain or other equipment constituting a pollution hazard unless such toilet, sink drain or other equipment constituting a pollution hazard is sealed or otherwise rendered inoperable or designed so that no human excreta or other polluting substance can be discharged in the waters of said reservoir.
- (e) No person shall operate any boat, sailboat, rubber raft, or canoe within 30 feet of New Bullards Bar Dam or in any area closed to boating.
- (f) No person shall launch any boat except at approved launching areas designated by the Agency.
- (g) No person shall keep any boat on shore overnight except in areas designated for such purpose. From June 1 to September 30 of each year the water level of New Bullards Bar Reservoir may fluctuate to a maximum of 1½ feet per 24 hours. Between October 1 of each year and May 31 of the succeeding year extreme fluctuations can be expected. Persons desiring to leave their boats overnight shall do so at their own risk and neither the Agency nor the County assumes any liability or bailment obligations pertaining to the care of such boats, damage, loss, or theft thereof.
- (h) No person shall carry passengers for hire or lease or rent any boat without prior authorization in writing issued by the Agency.
- (i) No person shall operate a boat, water skis, or aqua-plane except in compliance with the symbols on all regulatory markers placed on the lake by the Agency.
- (j) No person shall operate a bilge pump in any boat in the waters of New Bullards Bar Reservoir, except at such locations as are designated by the Agency for the operation of bilge pumps and where facilities are available for the disposal of bilge waters without contaminating or polluting the waters of New Bullards Bar Reservoir; provided, however, that the provisions of this Subsection shall be inapplicable in the event the operator of a boat is faced with an emergency where life or property would be imperiled by failure to operate such bilge pumps. It shall be the duty of any person operating a bilge pump at other than an authorized location to report the facts necessitating such use to the Agency.
- (k) No person shall pass through, mutilate, damage, or move from position any buoy or log boom placed or installed on New Bullards Bar Reservoir designating closed areas, speed zones, dangerous projections and submerged rocks and reefs.
- (l) No person shall use any motor or container for oil, gas or other contaminating substance which leaks such substance into the waters of New Bullards Bar Reservoir.
- (m) No person shall engage in, carry on, conduct or cause to be engaged, carried on or conducted any boat racing or water skiing event on established courses in New Bullards Bar Reservoir without having obtained a written permit from the Yuba County Water Agency, or to do so after such permit has expired or has been suspended, canceled, or revoked. Any person, corporation, or organization desiring to engage in, carry on, or conduct such an event in

New Bullards Bar Reservoir shall first procure from the Agency a permit to do so, and for the purpose of procuring such permit shall file an application in writing therefor with the Agency not less than 30 days in advance of the date on which such event is to be conducted, which application shall contain the following information:

- (1) Name and place of resident of the applicant, if a natural person, and, if an organization or corporation, the name and address of the principal office and the name and address of its duly authorized representative.
- (2) The date or dates for which the permit is desired.
- (3) A statement as to whether any permit previously issued to such applicant or any agent thereof or to any person interested, whether as principal, agent, or employee, has ever been canceled or revoked.

All permits issued pursuant to this Subsection shall designate the course and areas over which such event shall be conducted, the conditions under which such event shall be conducted for the protection and preservation of the public health, safety, and general welfare, and shall require the permittee to indemnify and save harmless the Yuba County Water Agency, the County of Yuba, and their respective officers, agents, and employees from any and all claims, causes of action, or suits accruing or resulting from any damage, injury or loss to any person or persons, including all persons to whom the applicant may be liable under any Workers' Compensation Law, or for any loss, damage, cause of action, claims or suits for damages, including but not limited to loss of property, caused by, arising out of or in any way connected with the conduct, operation, or management of such an event, or the exercise of any privilege granted in said permit, and shall require the applicant, at its own expense, to procure and maintain worker's compensation insurance and public liability insurance and property damage insurance with insurers approved by the Agency in such amounts as the Agency deems reasonable and necessary to make effective the indemnity hereinabove set forth and to provide the Agency and the County of Yuba with certificates evidencing the insurance coverage.

- (n) Notwithstanding any other penalty provision in this Chapter, violation of any subsection of Section 8.50.060 shall be an infraction punishable by:
  - (1) A fine not exceeding \$100.00 for a first violation.
  - (2) A fine not exceeding \$200.00 for a second violation of the same provision within one year.
  - (3) A fine not exceeding \$500.00 for each additional violation of the same provision within one year.

(Prior Code, § 8.50.060; Ord. No. 435; Ord. No. 541; Ord. No. 534; Ord. No. 1082; Ord. No. 1315)

#### **8.50.070. - New Bullards Bar Reservoir Houseboats, Rafts, and Floats**

- (a) No person shall place in use, or operate, on the waters of New Bullards Bar Reservoir any houseboat over 60 feet in length or 15 feet in width.
- (b) No person shall place in use, or operate, a houseboat for other than recreational purposes.

- (c) No person shall place in use, or operate, a houseboat which is not self-propelled.
- (d) No person shall place in use, or operate, a houseboat which is not equipped with a flotation device consisting of either steel or aluminum pontoons constructed with internal water tight bulkheads or filled with foam plastic flotation materials or fiberglass (or similar material) pontoons filled with foam plastic or flotation material.
- (e) No person shall place in use, or operate, a houseboat without a valid, annual houseboat permit from the Engineer—Administrator.
  - (1) Every houseboat shall be subject to an annual inspection for safety, cleanliness, seaworthiness, and correct wastewater and sewage system.
  - (2) Every houseboat shall be subject to intermittent inspection of wastewater and sewage hook-up by the U.S. Forest Service or the Engineer—Administrator, for due cause and with prior notice of inspection.
  - (3) Upon the permit of every houseboat shall be a record of wastewater and sewage pumpouts.
  - (4) Pumpouts will be performed by the Marina operator for a fee, at least every six months.
  - (5) Every houseboat shall have a wastewater/sewage holding tank, hard plumbed to and from holding tank of rigid pipe with all fittings and connections glued, brazed, or welded. No threaded drains or clean-outs are permitted.
  - (6) Any houseboat which has had its waste hook-up willfully removed, tampered with, or altered in any way, so as to discharge into the reservoir shall have its permit revoked and shall be permanently barred from the reservoir.
  - (7) The fee for annual inspection shall be set by resolution of the Agency.
  - (8) Any houseboat which fails the annual inspection will again be charged the annual fee prior to re-inspection.

(Prior Code, § 8.50.070; Ord. No. 435; Ord. No. 451; Ord. No. 474; Ord. No. 534; Ord. No. 1082)

#### **8.50.080. - Fire Prevention**

- (a) All of the Bullards Bar Recreation Area hereby is classified as high fire hazard zone.
- (b) Except as otherwise provided in this Chapter, all persons shall comply with the rules and regulations adopted pursuant to the authority of Title 16, Section 551, United States Code, by the Secretary of Agriculture for the protection against destruction by fire and depredation upon the public forests, said rules and regulations being hereby made applicable to the recreation area and incorporated herein by reference.
- (c) It shall be unlawful to light, build or maintain any open fire within the recreation area except in a camp stoves or a fireplace provided, maintained or designated for such purpose, unless by authority of the Fire Protection Agency and authorized permit. Oil, butane, or gasoline camp stoves may be used in established camp sites or picnic areas where other stoves are provided, or in other areas where authorized by permit.

- (d) It shall be unlawful to discharge or set off on or within the recreation area any firecrackers, torpedoes, rockets, or other fire works.
- (e) It shall be unlawful to carry, use or throw away any lighted cigarette, cigar, ashes, or any other flaming or glowing substance except within structures, vehicles, vessels, or posted clear areas.
- (f) The terms and provisions of this Section may be enforced by the Engineer-Administrator, United States Forest Service Personnel, and the Sheriff.

(Prior Code, § 8.50.080; Ord. No. 435; Ord. No. 1082)

### **8.50.090. - Severability**

If any section, subsection, sentence, clause, phrase, provision or portion of this Chapter, or the application thereof to any person or circumstances, is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions or provisions of this Chapter or their applicability to distinguishable situations or circumstances. In enacting this Chapter, it is the desire of the Board of Supervisors to validly regulate to the full measure of its legal authority in the public interest, and to that end, the Board of Supervisors declares that it would have adopted this Chapter and each section, subsection, sentence, clause, phrase, provision, or portion thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses, phrases or portions thereof might be declared invalid or unconstitutional in whole or in part, as applied to any particular situation or circumstances, and to this end the provisions of this Chapter are intended to be severable.



# **Recreation Facilities Plan**

## **Attachment B**

### **Annual Pre-season and Post-season Recreation Facility Condition Assessment Form**

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

June 2017

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<b>Figure No.</b>	<b>List of Figures Description</b>	<b>Page No.</b>
B-1.	Annual Recreation Facility Condition Assessment Form.....	B-1

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# Yuba River Development Project: Annual Pre- & Post-Season Recreation Facility Condition Assessment Form

*[Note: any observed accessibility issues should be noted on this form]*

Facility Name:

Date:

Staff:

## GENERAL AMENITIES

Facility	Feature	Condition*	Site Notes	Facility	Feature	Condition*	Site Notes
Entr- ance	Facility ID sign	1 2 3 Ø		Water Hydrant	Hydrant-overall	1 2 3 Ø	
	Info kiosk-overall	1 2 3 Ø			Hydrant-lever	1 2 3 Ø	
	Info kiosk-panels	1 2 3 Ø			Basin	1 2 3 Ø	
	Info kiosk-approach	1 2 3 Ø			Approach	1 2 3 Ø	
	Entrance building	1 2 3 Ø		Parking Area	Surface	1 2 3 Ø	
	Other:	1 2 3 Ø			Barriers/curbing	1 2 3 Ø	
Toilet	Siding	1 2 3 Ø			Signs	1 2 3 Ø	
	Windows	1 2 3 Ø			Other:	1 2 3 Ø	
	Roof	1 2 3 Ø		Signage	Traffic	1 2 3 Ø	
	Door(s)	1 2 3 Ø			Directional	1 2 3 Ø	
	Access route	1 2 3 Ø			Warning	1 2 3 Ø	
	Interior walls	1 2 3 Ø			Other:	1 2 3 Ø	
	Stalls	1 2 3 Ø		Boat Ramp	Ramp surface	1 2 3 Ø	
	Toilet/riser	1 2 3 Ø			Courtesy dock	1 2 3 Ø	
	Urinal	1 2 3 Ø			Signs	1 2 3 Ø	
	Sink	1 2 3 Ø			Lights	1 2 3 Ø	
	Lighting	1 2 3 Ø			Other:	1 2 3 Ø	
	Info board	1 2 3 Ø			Dump Station	Water hydrant	1 2 3 Ø
	Other:	1 2 3 Ø		Water tower		1 2 3 Ø	
	Trash	Dumpster	1 2 3 Ø			Drain	1 2 3 Ø
Trash cans		1 2 3 Ø		Lights		1 2 3 Ø	
Recycling cans		1 2 3 Ø		Other:	1 2 3 Ø		
Pad		1 2 3 Ø		Interp & Education Displays	Panels	1 2 3 Ø	
Approach		1 2 3 Ø			Approach	1 2 3 Ø	
Other:		1 2 3 Ø			Other:	1 2 3 Ø	

[Note: any observed accessibility issues should be noted on this form]

Staff:

[illegible]

*[Note: any observed accessibility issues should be noted on this form]*

Staff:	
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PICNIC SITE AMENITIES							
Site #	Site Marker	Table	Pedestal Grill	Access Route	Grounds	Other:	Site Notes
1	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	
2	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	
3	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	
4	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	
5	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	
6	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	
7	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	
8	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	
9	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	
10	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	
11	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	
12	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	
13	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	
14	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	
15	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	1 2 3 Ø	

*[Note: any observed accessibility issues should be noted on this form]*

Staff:

[illegible]



Yuba River Development Project: Annual Pre- & Post-Season Recreation Facility Condition Assessment Form

*[Note: any observed accessibility issues should be noted on this form]*

Facility Name:

Date:

Staff:

ADDITIONAL SITE NOTES

ACCESSIBILITY NOTES  
(FSORAG, ABAAS, ADASAD, etc.)

GROUNDS NOTES

MISCELLANEOUS

PHOTOGRAPH LOG:

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# **Recreation Facilities Plan**

## **Attachment C**

### **Site Plans with Proposed Improvements for the Existing Project Recreation Facilities**

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

June 2017

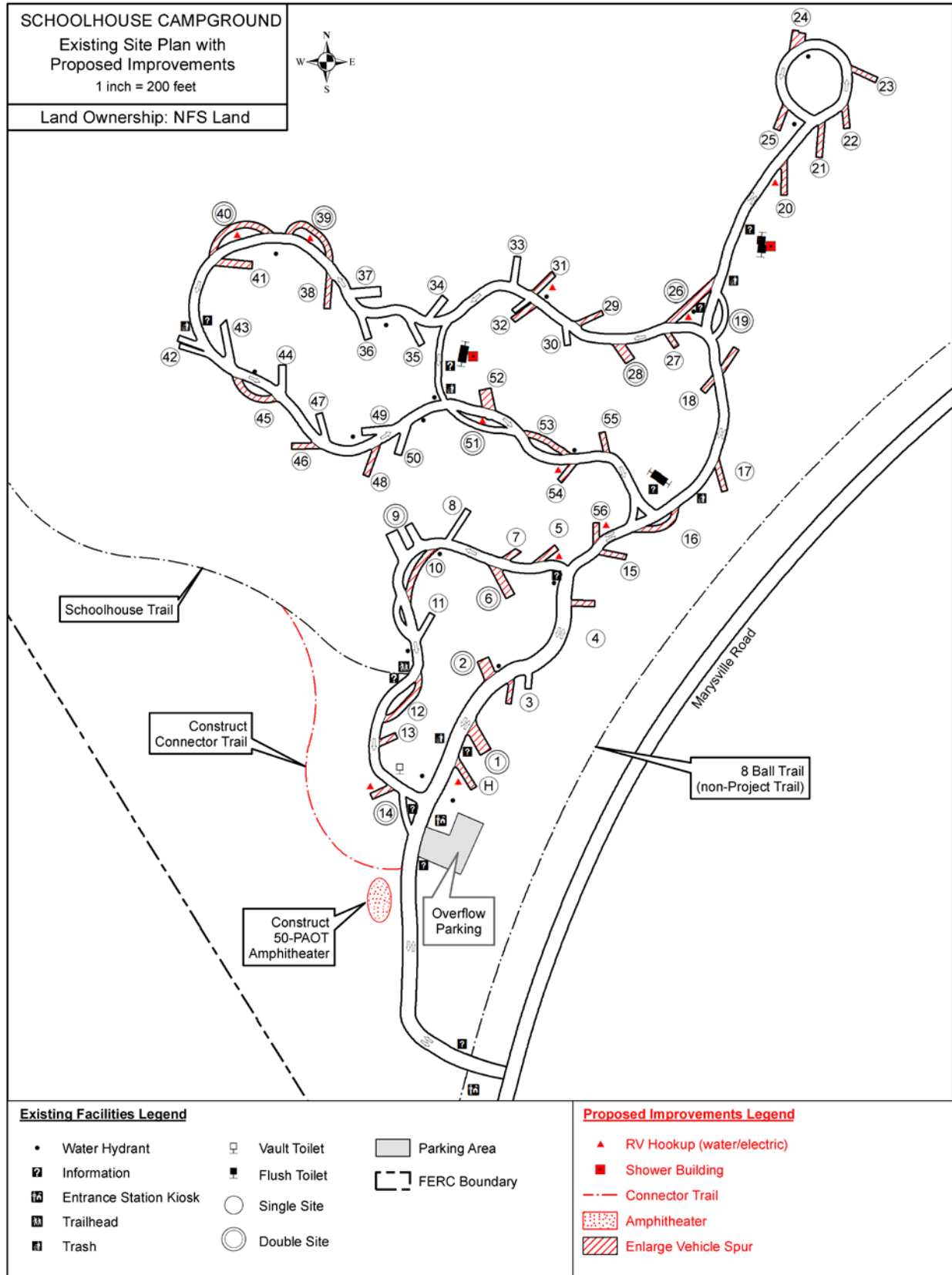
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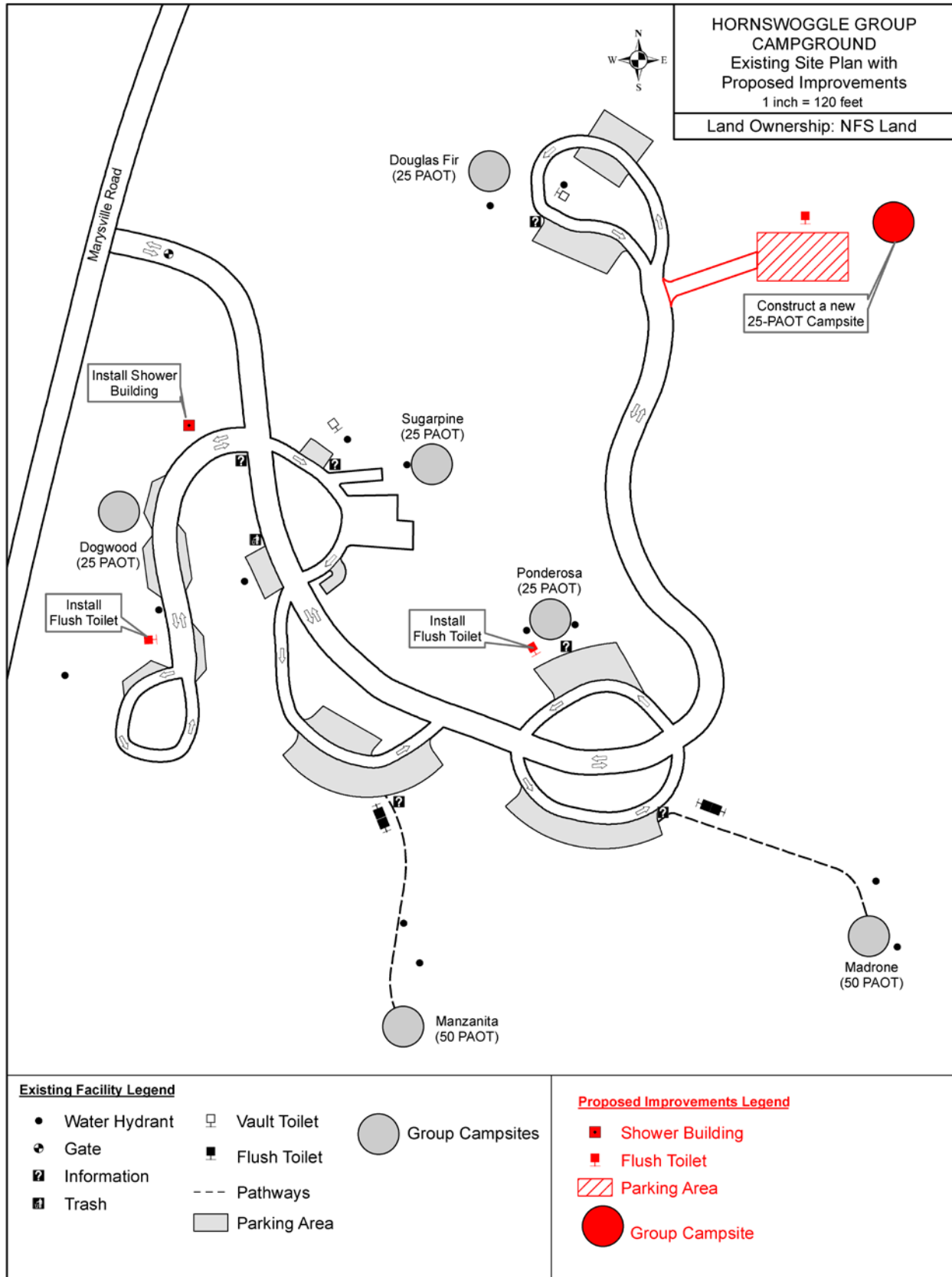
Figure No.	List of Figures Description	Page No.
C-1.	Schoolhouse Campground .....	C-1
C-2.	Hornswoggle Group Campground .....	C-2
C-3.	Cottage Creek Campground.....	C-3
C-4.	Garden Point Boat-in Campground .....	C-4
C-5.	Madrone Cove Boat-in Campground.....	C-5
C-6.	Dark Day Campground, Picnic Site and Boat Launch .....	C-6
C-7.	Cottage Creek Boat Launch and Marina.....	C-7
C-8.	MoranRoad Boating Site.....	C-8
C-9.	Sunset Vista Observation Site.....	C-9
C-10.	Dam Overlook Observation Site .....	C-10

Important: The following figures represent existing facility layouts based on GIS data collection, which are depicted in black ink on the figures. In addition, the figures also identify proposed improvements to the existing layouts, which are conceptual only and are depicted in red on the figures. The main body of the Recreation Facilities Plan provides descriptive details of the major rehabilitation measures in Section 3.2; and improvements (i.e., upgrades, expansions and/or new additions to existing facilities) in Section 3.3. The complexity of some improvements (e.g., major rehabilitation and upgrades to the Dark Day Boat Ramp) precluded depiction on these drawings.

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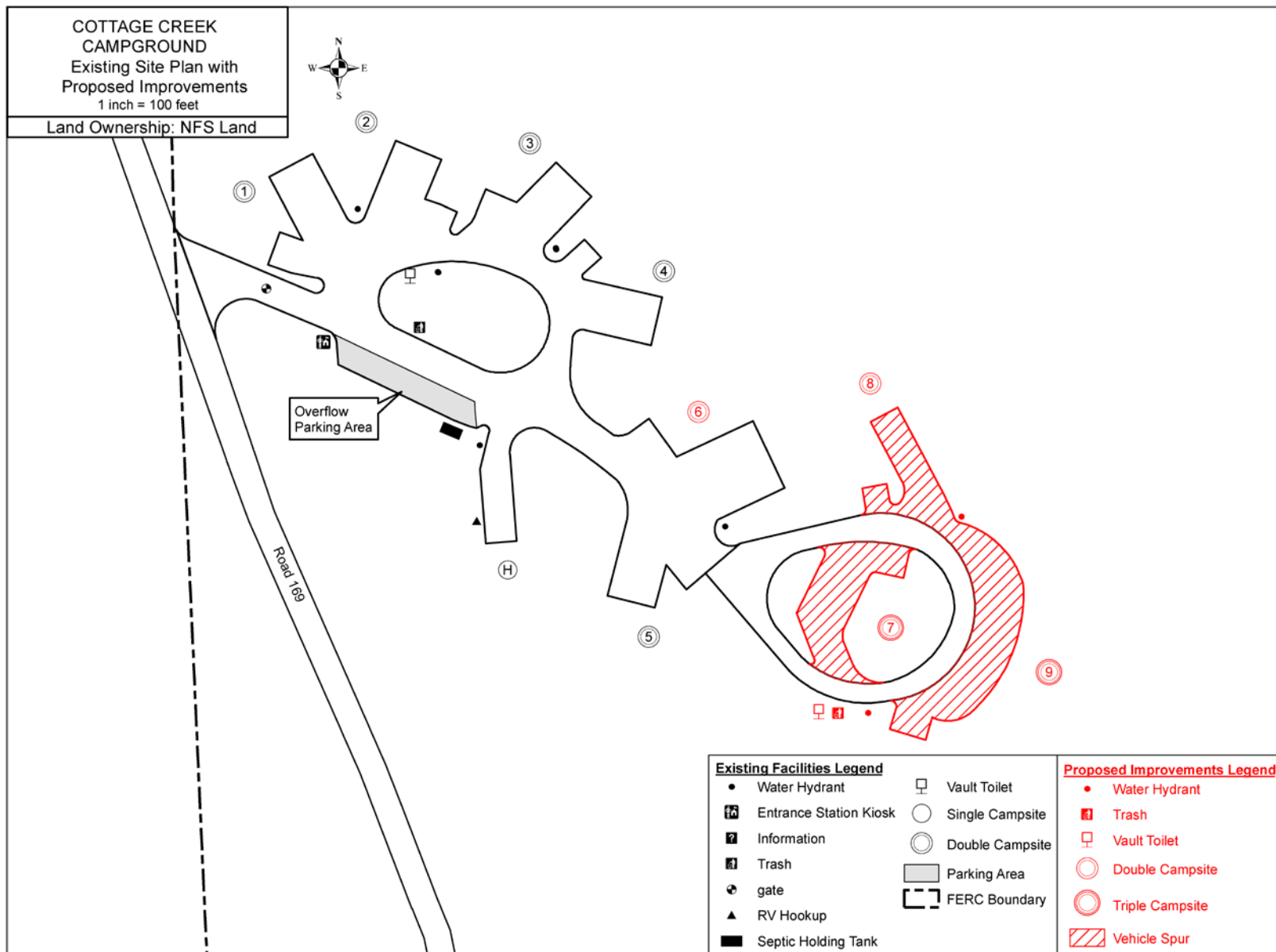


**Figure C-1. Existing site plan with proposed improvements for Schoolhouse Campground.**

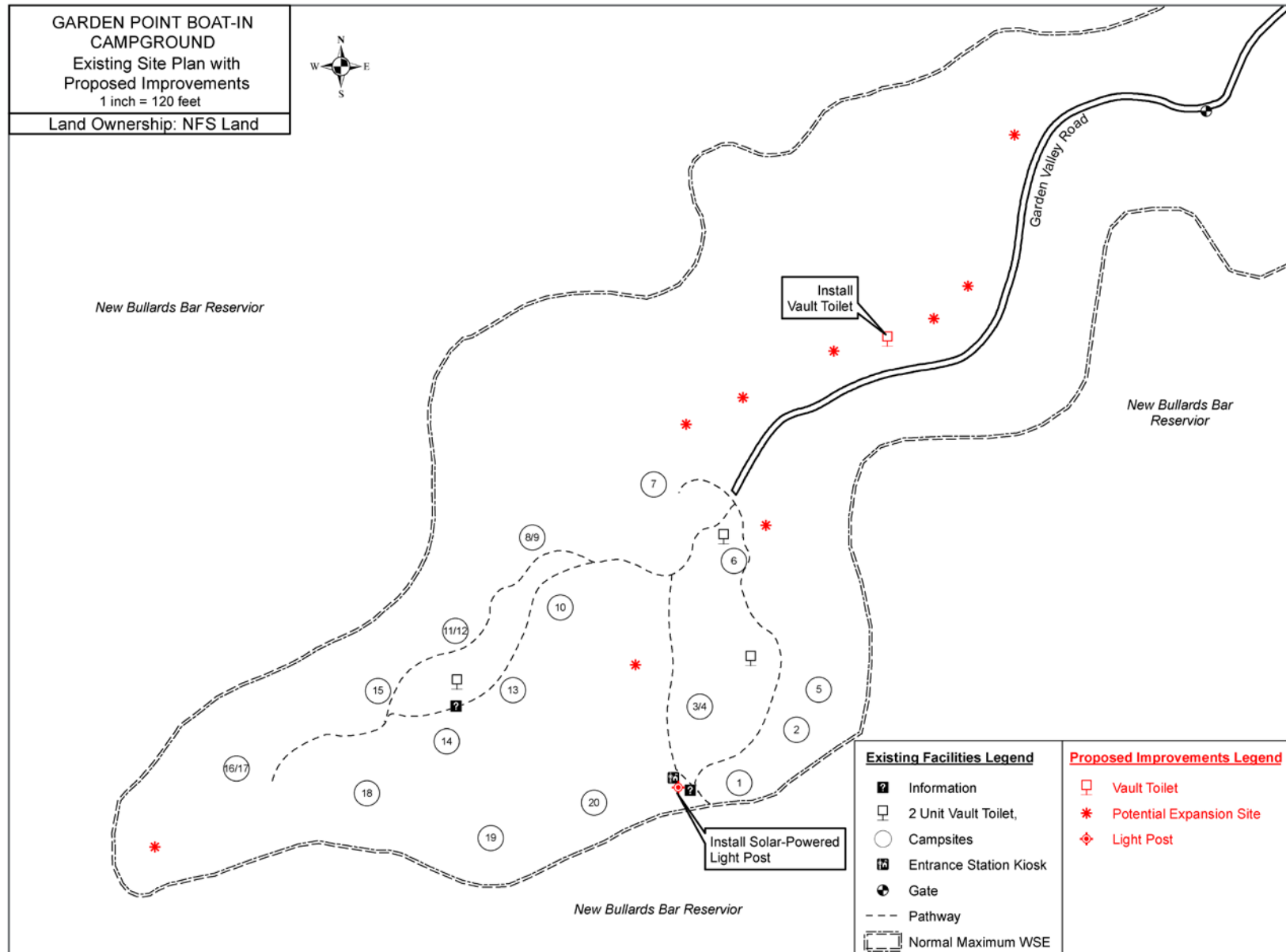


**Figure C-2. Existing site plan with proposed improvements for Hornswoggle Group Campground.**





**Figure C-3. Existing site plan with proposed improvements for Cottage Creek Campground.**



**Figure C-4. Existing site plan with proposed improvements for Garden Point Boat-in Campground.**

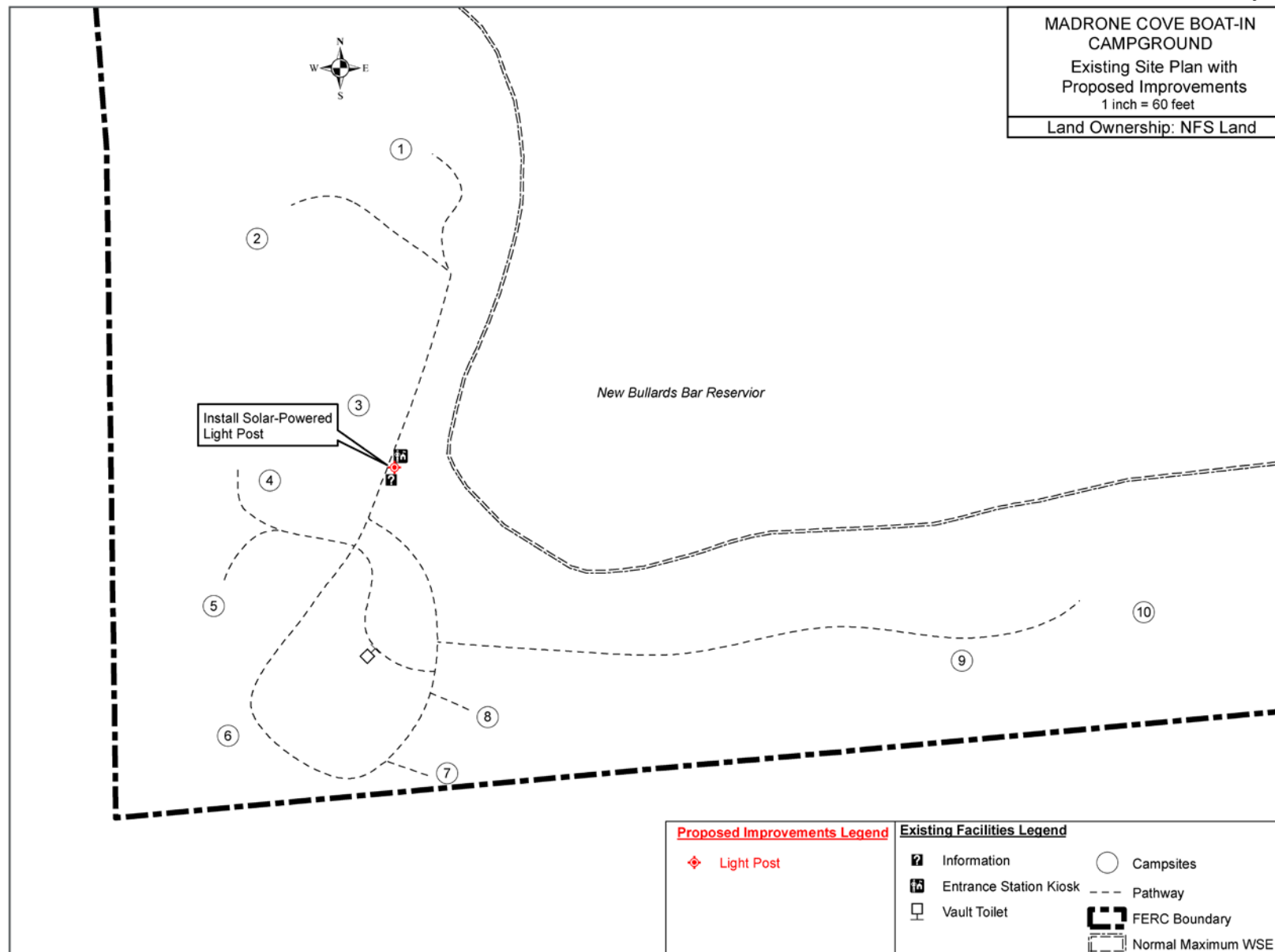
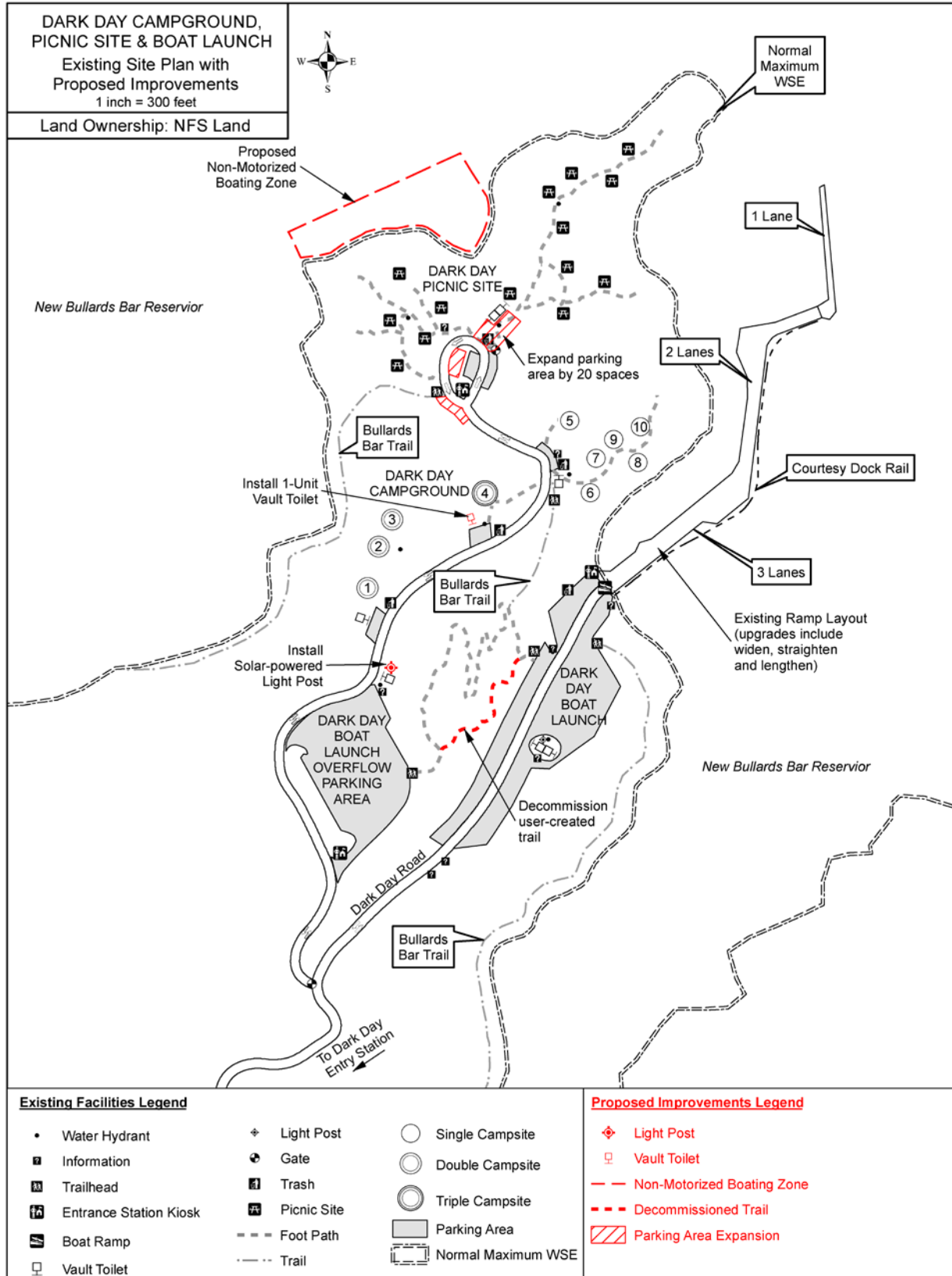
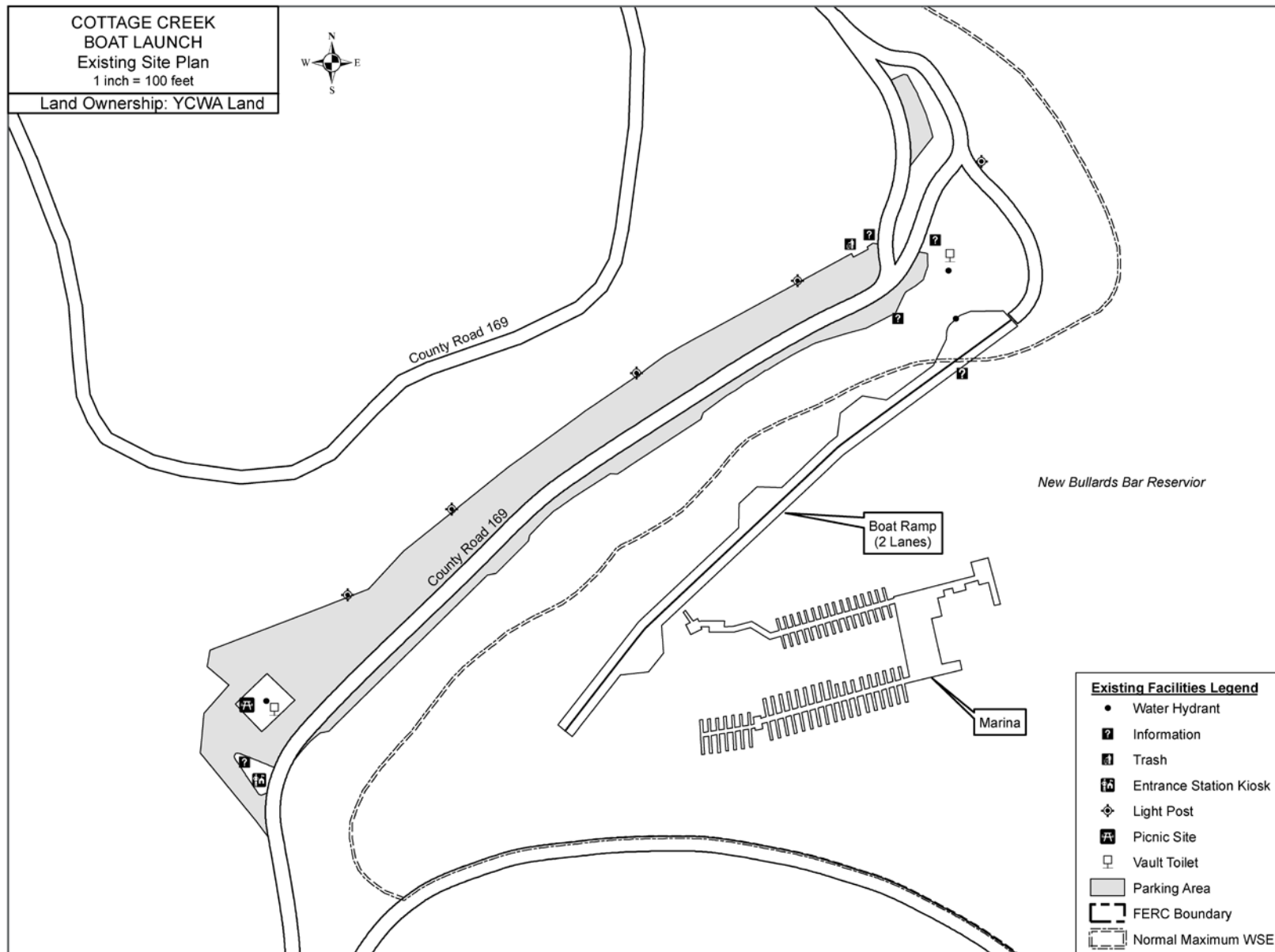


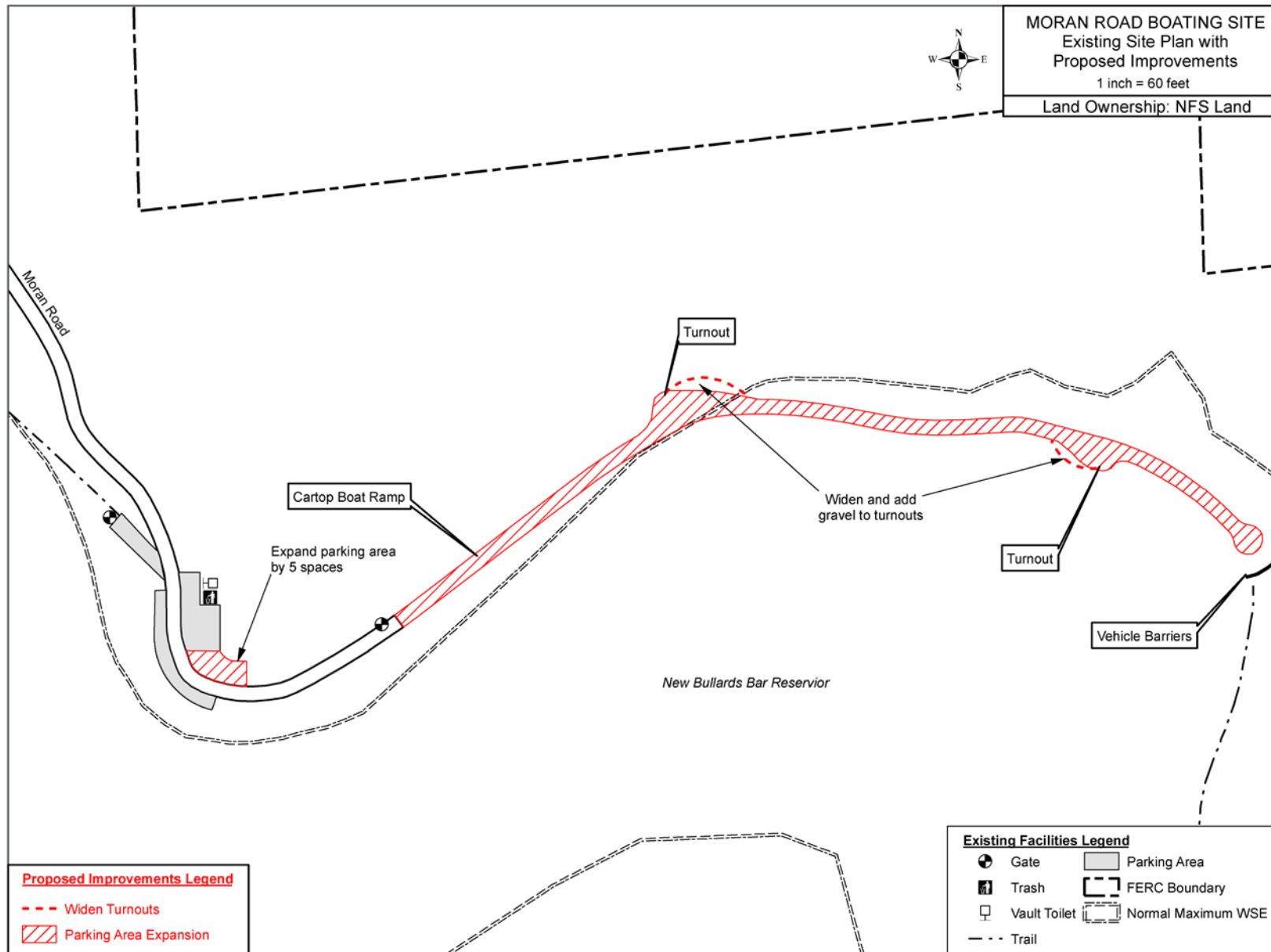
Figure C-5. Existing site plan with proposed improvements for Madrone Cove Boat-in Campground.



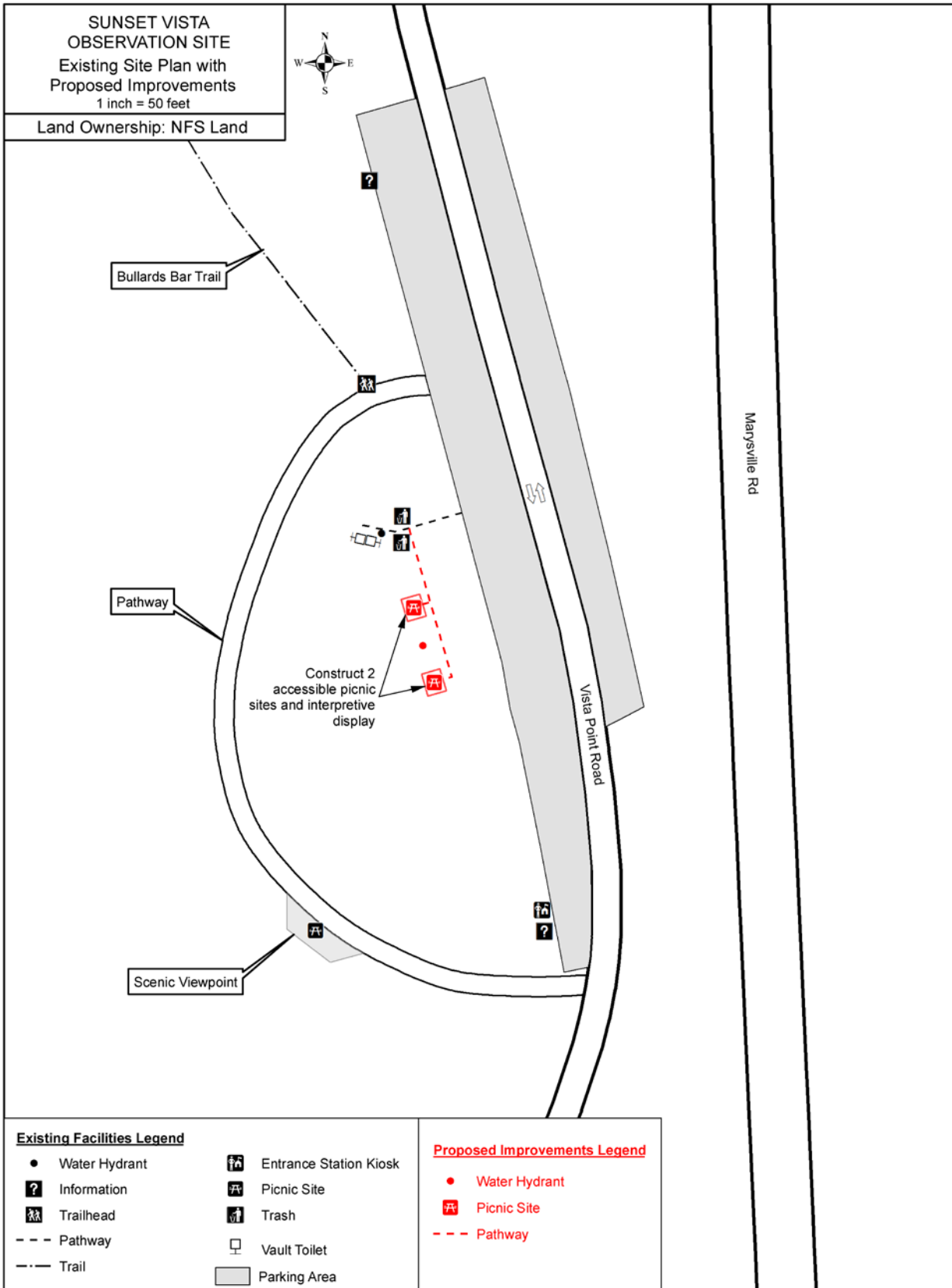
**Figure C-6. Existing site plan with proposed improvements for Dark Day Campground, Picnic Site and Boat Launch.**



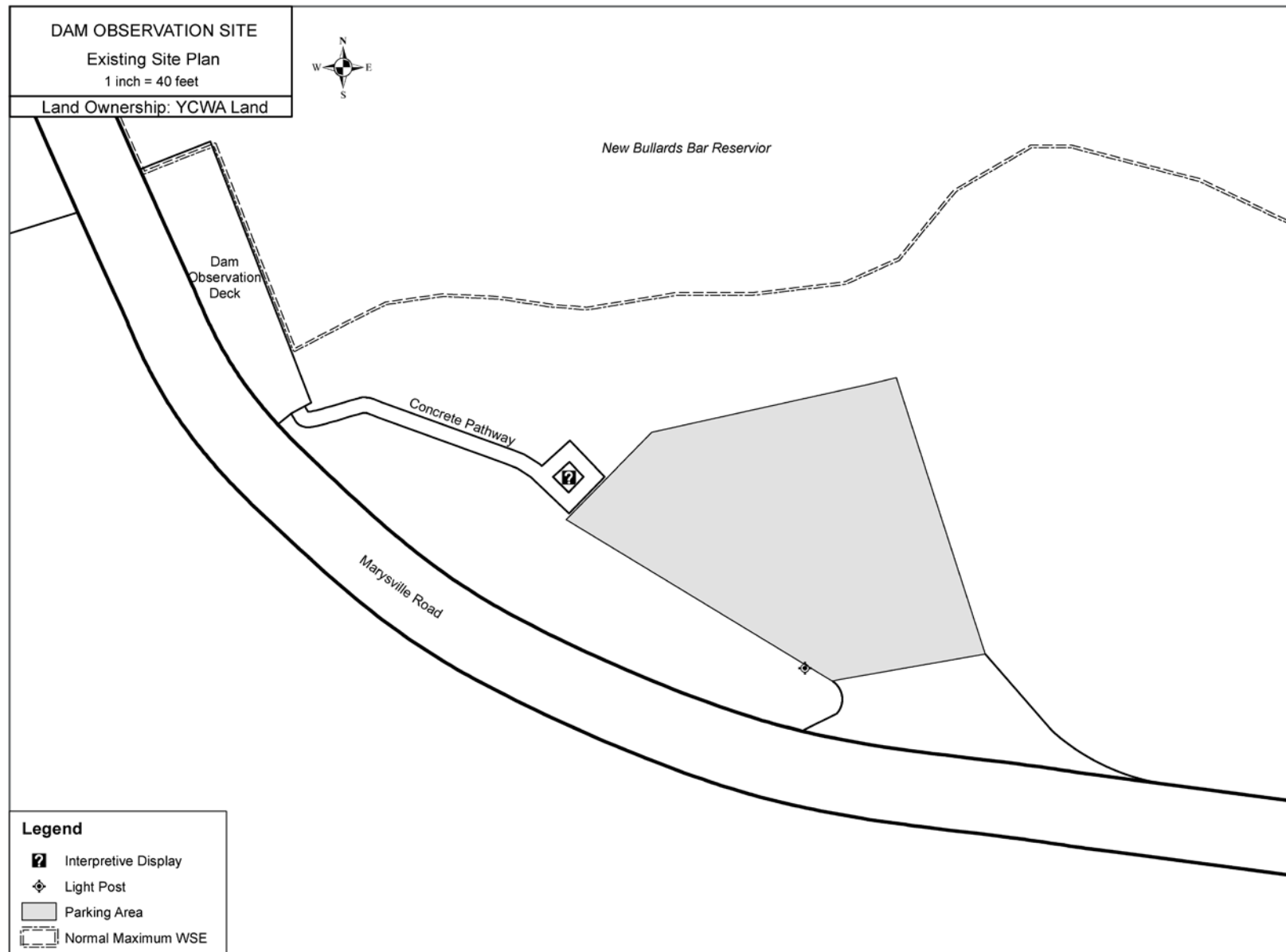
**Figure C-7. Existing site plan with proposed improvements for Cottage Creek Boat Launch and Marina facilities.**



**Figure C-8. Existing site plan with proposed improvements for Moran Road Boating Site.**



**Figure C-9. Existing site plan with proposed improvements for Sunset Vista Observation Site.**



**Figure C-10. Existing site plan with proposed improvements for Dam Overlook Observation Site.**



# **Recreation Facilities Plan**

## **Attachment D**

### **As-Built Drawings for New or Rehabilitated Project Recreation Facilities**

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

June 2017

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**List of Figures**  
**Description**

**Figure No.**

**Page No.**

YCWA will update the List of Figures as new or existing facilities are constructed or rehabilitated, respectively over the new license term.

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This attachment is a placeholder and does not contain any as-built drawings at this time. During the new license following construction work on all new or rehabilitated facilities, YCWA will attach the final as-built drawings in this attachment.

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**Recreation Facilities Plan**

**Attachment E**

**Project Recreation Facilities Map**

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

June 2017

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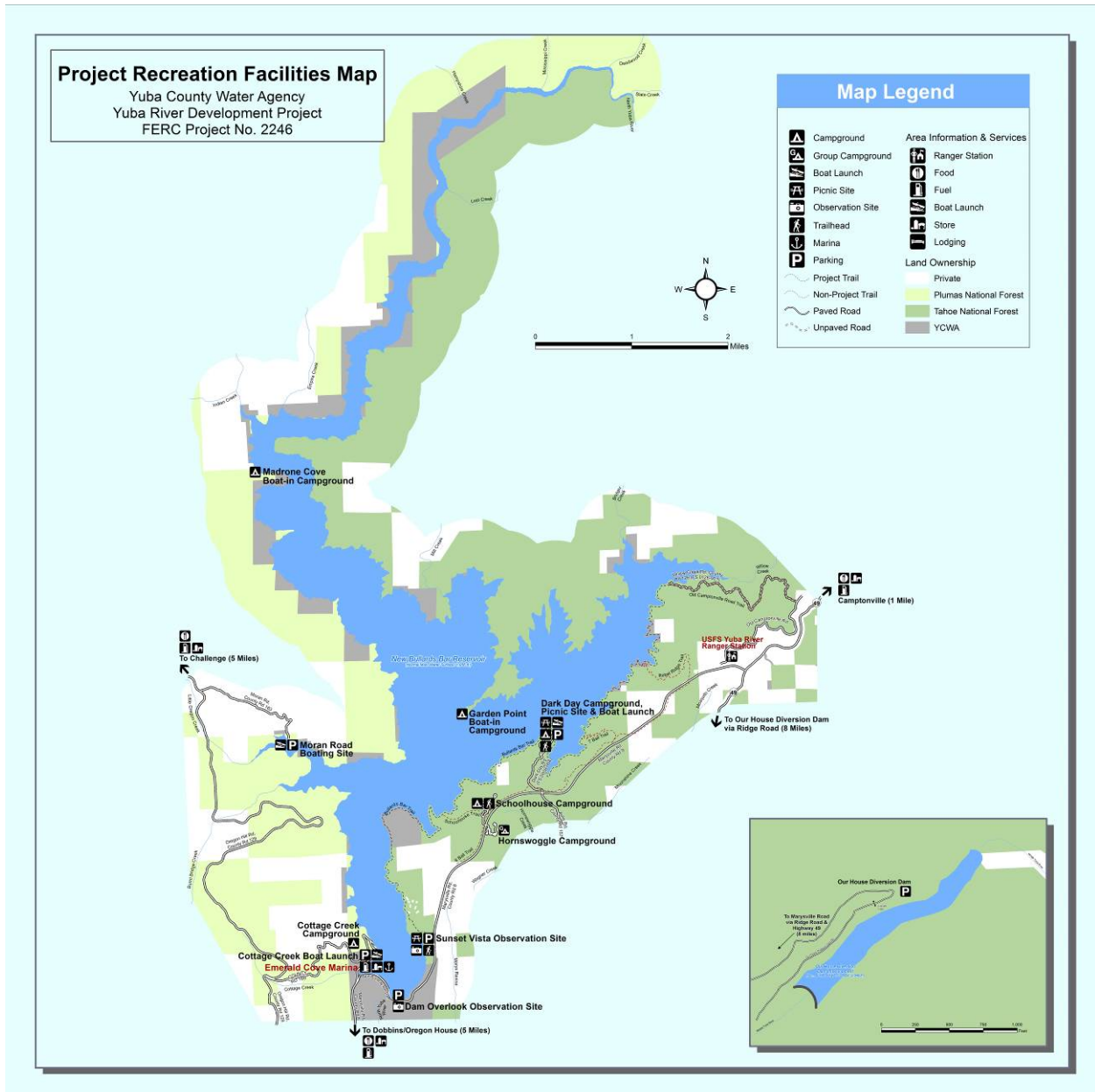




<b>Figure No.</b>	<b>List of Figures Description</b>	<b>Page No.</b>
E-1.	Project Recreation Facilities Map .....	E-1

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*Note: this map is included as an example of how the Project Recreation Facilities Map will look. However, it is designed to be a 4 ft by 4 ft map on the entrance station kiosks and when reduced to fit on this page (6.5 in by 6.5 in) the resolution and details are diminished.*



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