

Placer County Water Agency Middle Fork American River Project (FERC Project No. 2079)

RECREATION PLAN



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List of Acronyms

ac-ft	acre-feet
AIR	Additional Information Request
ASRA	Auburn State Recreation Area
BLM	Bureau of Land Management
BMPs	Best Management Practices
CDEC	California Data Exchange Center
CDFG	California Department of Fish and Game
CDPR	California Department of Parks and Recreation
cfs	cubic feet per second
CPI	Consumer Price Index
ENF	Eldorado National Forest
FERC	Federal Energy Regulatory Commission
FR	Forest Route
GIS	Geographic Information System
HPMP	Historic Properties Management Plan
ILP	Integrated Licensing Process
MFAR	Middle Fork American River
MFARIB	Middle Fork American River Gage and Weir below Interbay Dam
MFP	Middle Fork American River Project
msl	mean sea level
NEPA	National Environmental Policy Act
NFARPS	North Fork American River Gage above American River Pump Station
NFLCC	North Fork Long Canyon Creek Gage and Weir below Diversion Dam
PAD	Pre-Application Document
PAOT	Persons-at-one-time
PCWA	Placer County Water Agency
Project	Middle Fork American River Project
Reclamation	Bureau of Reclamation
RD	Recreation Days
RP	Recreation Plan
RREB	Rubicon River Gage at Ellicott Bridge
RVD	Recreation Visitor Day
SD	Supporting Document
SFLCC	South Fork Long Canyon Creek Gage and Weir below Diversion Dam
SMP	Sediment Management Plan
TNF	Tahoe National Forest
TSMP	Transportation System Management Plan
TSP	Technical Study Plan

List of Acronyms (continued)

TSR	Technical Study Report
TWG	Technical Working Group
USDA-FS	United States Department of Agriculture-Forest Service
USGS	United States Geological Survey
VIPMP	Vegetation and Integrated Pest Management Plan
WSE	water surface elevation
WST	Western States Trail

1.0 INTRODUCTION

The Federal Energy Regulatory Commission (FERC or Commission) requested that Placer County Water Agency (PCWA) develop a Recreation Plan for the Middle Fork American River Project (MFP or Project) (FERC 2008). This Recreation Plan was developed in consultation with the state and federal resource agencies, Native American tribes, county and local governments, non-governmental organizations (NGOs), and members of the public.

This Recreation Plan identifies PCWA's responsibilities related to the management of recreation resources associated with the MFP during the term of the new license. Specifically, this Recreation Plan identifies:

- Purpose of the Recreation Plan;
- Project recreation facilities;
- Measures that PCWA will implement over the term of the new license related to Project recreation facilities, including responsibility for:
 - Reasonable financial support for resource agency administrative oversight and the routine operation and maintenance of Project recreation facilities;
 - Heavy maintenance of Project recreation facilities;
 - Specific modifications or enhancements at existing Project recreation facilities and water supply facilities.
 - New Project Recreation Facilities;
 - Periodic recreational use monitoring, visitor surveys and reporting; and
 - Resource protection measures.
- Measures that PCWA will implement to enhance Project recreation opportunities including:
 - Dissemination of real-time flow information;
 - MFP fall maintenance outage plan distribution;
 - Oxbow Powerhouse day-ahead schedule distribution;
 - Dissemination of reservoir water surface elevation (WSE) information;
 - Development and distribution of recreation opportunity marketing information; and
 - Fish stocking in large Project reservoirs.

- Implementation schedule for completion of Project-related recreation measures;
- Consultation related to Recreation Plan implementation;
- Reporting;
- Future Project recreation facility enhancements;
- Process for updating the Recreation Plan; and
- Dispute resolution.

This Recreation Plan refers to a number of other plans that contain information related to operation and maintenance of the Project recreation facilities. These plans are summarized below.

- Operation and maintenance of Project recreation facility access roads is described in the Transportation System Management Plan, which is included in Supporting Document A (SD A) of PCWA's Application for New License (PCWA 2011a).
- Measures related to the protection of cultural resources during Project recreation facility maintenance is provided in the confidential Draft Historic Properties Management Plan (HPMP) (PCWA 2011b).
- Information on vegetation management, including noxious weed management around Project recreation facilities and associated access roads, fuels reduction, hazard tree removal, and revegetation of previously disturbed areas is provided in the Vegetation and Integrated Pest Management Plan (VIPMP) (PCWA 2011c).
- Information on scheduled flow releases to maintain or enhance stream-based recreation in the bypass and peaking reaches associated with the MFP is provided in the Instream Flow and Reservoir Minimum Pool Measure (PCWA 2011d).
- Information on sediment management, including sediment removal and placement programs, facility modifications to implement passive transport of sediment at small diversion structures, and maintenance of recreation access and parking at Indian Bar River Access is provided in the Sediment Management Plan dated July 2011 (PCWA 2011e).
- Provisions to support reservoir recreation opportunities in Hell Hole and French Meadows reservoirs, including WSE objectives, are included in PCWA's Instream Flow and Reservoir Minimum Pool Measure (PCWA 2011d).

In addition, as required by the California Department of Fish and Game (CDFG), PCWA has developed and is implementing an Invasive Mussel Protection Plan (PCWA 2010).

This plan contains measures to help stop the spread of non-native dreissenid mussels (zebra and quagga mussels) into Project reservoirs and the water conveyance system.

2.0 PURPOSE OF RECREATION PLAN

The purpose of this Recreation Plan is to identify PCWA's responsibilities related to the management of recreation facilities associated with the MFP over the term of the new license. This plan also identifies measures that PCWA will implement to enhance recreation opportunities in the vicinity of the MFP.

3.0 PROJECT RECREATION FACILITIES

The MFP includes a variety of developed recreation facilities, including family and group campgrounds, picnic areas, boat ramps, a vista, and an RV dump station. The existing MFP recreation facilities, and any new recreation facilities proposed in this Recreation Plan, are identified on REC Plan Table 1 and shown on REC Plan Maps 1–5, by geographic area, with respect to land ownership and to the FERC Project boundary.

During the relicensing process, PCWA completed a facility inventory and condition assessment at each of the existing Project recreation facilities, and estimated recreational use. These efforts were carried out in accordance with the REC 1 – Recreation Facilities and Use Technical Study Plan (TSP) (REC 1 – TSP), which was developed in consultation with the Recreation Technical Working Group (TWG) and was included in PCWA's PAD (PCWA 2007). The methods and study results, including detailed descriptions of the Project recreation facilities, visitor survey data, and recreation use and facility capacity data, are documented in detail in the REC 1 – Recreation Facilities and Use Technical Study Report (TSR) (REC 1 – TSR), which is included in Supporting Document B (SD B) of PCWA's Application for New License (PCWA 2011a).

4.0 MEASURES RELATED TO PROJECT RECREATION FACILITIES

This section of the Recreation Plan describes the measures related to Project recreation facilities and features that PCWA will implement over the term of the next license. In addition, it describes how PCWA will periodically monitor recreation use, and the measures that PCWA will implement to ensure resource protection. The discussion is organized by the following subsections:

- Administrative Oversight and Routine Operation and Maintenance of Project Recreation Facilities;
- Heavy Maintenance of Project Recreation Facilities;
- Specific Modifications or Enhancements at Existing Project Recreation Facilities and at Water Supply Facilities;
- New Recreation Facilities;
- Periodic Use Monitoring, Visitor Surveys, and Reporting; and

- Resource Protection Measures.

Additional measures that PCWA will implement to enhance Project recreation opportunities are described in Section 5.0 of this Recreation Plan.

4.1 ADMINISTRATIVE OVERSIGHT AND ROUTINE OPERATION AND MAINTENANCE OF PROJECT RECREATION FACILITIES

All of the existing MFP recreation facilities and new facilities identified in this plan are located on National Forest System (NFS) land or land owned by PCWA. Therefore, PCWA will provide funding to the United States Department of Agriculture-Forest Service (USDA-FS) for reasonable administrative oversight and routine operation and maintenance costs associated with the MFP recreation facilities identified on REC Plan Table 1, and any new Project-related recreation facilities that are constructed on NFS lands during the term of the new license.

PCWA will remit payments to the USDA-FS annually over the license term as specified in the following:

- Payments will be made at the beginning of each calendar year.
- Payments will be adjusted annually based on the U.S. Gross Domestic Product – Implicit Price Deflator (GDP-IDP).
- Payments will be adjusted consistent with increased USDA-FS responsibilities related to future development of MFP recreation facilities.
- Payments may be reduced by the amount of fees collected by the USDA-FS at MFP recreation facilities identified in REC Plan Table 1, based on documentation provided to PCWA by the USDA-FS annually, and with respect to pertinent laws and regulations governing fees collected on NFS lands. Decisions regarding payment adjustments will be discussed during the annual coordination meetings described in Section 7.1 of this document, with the objective of benefiting recreation opportunities and facilities associated with the MFP.
- Unspent funds will be applied to the subsequent year and the subsequent year payment will be adjusted accordingly.
- Payment amounts will be regularly reviewed and modified (increased or decreased) based on the addition, subtraction, or substantial modification of recreation facilities, or the addition or reduction of duties by the USDA-FS, and mutual agreement of PCWA and the USDA-FS.
- Annually, at the end of each calendar year, the USDA-FS will provide PCWA with documentation of the operation and maintenance activities performed by the USDA-FS in association with the MFP recreation facilities identified in REC Plan Table 1. In the event that the USDA-FS does not adequately operate and maintain the MFP recreation facilities identified in REC Plan Table 1, PCWA reserves the option to take over routine operation and maintenance activities of

the MFP recreation facilities and to reduce the amount of funding to the USDA-FS accordingly.

Funding provided by PCWA will be used by the USDA-FS specifically to provide for the administration, operation, and maintenance, of the existing Project recreation facilities, new Project recreation facilities that are constructed as part of this plan, and for USDA-FS oversight activities associated with recreation use adjacent to or in the immediate vicinity of the MFP. This includes managing recreation use within and immediately adjacent to the FERC Project boundary, and performing both regular and annual maintenance. In addition, these funds will be utilized for special use permit administration required for Project recreation facilities operated by a concessionaire. Specific USDA-FS administrative and routine operation and maintenance activities that this funding will cover are itemized in the following subsections.

4.1.1 USDA-FS Administrative Oversight

Funding provided to the USDA-FS by PCWA will be used for administrative oversight of the MFP recreation facilities identified in REC Plan Table 1. For funding purposes, USDA-FS administrative oversight of the MFP facilities will include the following types of activities:

- Coordination and correspondence with FERC and PCWA;
- Participation in FERC inspections;
- Participation in site visits and annual coordination meetings with PCWA;
- Planning, design and budgeting related to the routine maintenance of MFP recreation facilities;
- Program development, oversight and supervision;
- Administration and oversight of concessionaire operations (where appropriate), including prospectus development, inspections, insurance and audits;
- Reservation system maintenance related specifically to the reservable MFP facilities;
- Review and coordination of recreation use monitoring efforts and results;
- Reporting and record keeping;
- Fee collection and compliance monitoring, including associated record keeping;
- Providing public information and enforcing rules and regulations;
- Vehicle use; and
- Law Enforcement activities.

4.1.2 Routine Operation and Maintenance Activities to be Performed by the USDA-FS

Funding provided by PCWA to the USDA-FS will be used for routine operation and maintenance of the Project recreation facilities identified in REC Plan Table 1. For funding purposes, the following activities are considered routine operation and maintenance activities:

- Clean up related to dispersed use in the immediate vicinity of the MFP recreation facilities;
- Conducting patrols in and around the Project recreation facilities;
- Addressing sanitation issues in the immediate vicinity of Project recreation facilities;
- On-site public contact;
- Enforcement of rules and regulations;
- Responding to emergencies;
- Assisting in search and rescue efforts;
- Vehicle use;
- Site cleaning;
- Garbage clean up and disposal;
- Repair and maintenance of water systems, including: potable water tanks, supply and distribution lines, water valves, faucets, and drains;
- Repair and maintenance of septic systems, including septic tanks and lines;
- Repair of site/facility amenities including picnic tables, benches, fire rings, grills, bear resistant food boxes, bear resistant garbage containers, and recycling containers;
- Minor repair and maintenance of boat ramps and retaining walls and removal of debris from boat ramps. ;
- Maintenance and/or replacement of information and regulatory signage;
- Toilet cleaning and restocking of supplies;
- Toilet pumping;
- Removal or painting over graffiti;

- Basic maintenance of MFP recreation facility pathways and trails including: brushing, raking, sweeping, filling holes and repairing or replacing steps, treads and railings;
- Routine testing of potable water supplies;
- Water permits;
- Annual winterizing activities, including shutting off water supplies, draining water lines and water tanks, locking structures and gates, and removing and storing, or covering signage;
- Annual opening activities, including turning on water systems, preparing campsites, removing debris, and dealing with damage that may have occurred over the winter;
- Removal of trees that pose a hazard to the public or their property;
- Fuels reduction, including brushing and thinning, within 100 feet of any site feature such as bathrooms and parking areas;
- Fire prevention;
- Conducting maintenance at facilities that are not operated by a concessionaire;
- Implementing resource protection measures contained in REC Table 3;
- Routine maintenance and basic repair of recreation facility loop roads, spurs, and parking areas, including signage;
- Minor repair of gates and other traffic and parking barriers;
- Restriping paved parking areas and facility roadways;
- Routine maintenance of trails, including brushing, leveling and obstacle removal;
- Painting buildings;
- Painting pre-cast concrete vault toilets and other buildings every 3-5 years;
- Equipment maintenance; and
- Supplies and materials, including paint, cleaning supplies, trash bags, tools, and other materials that are used specifically for the operation and maintenance of MFP facilities.

4.2 HEAVY MAINTENANCE OF PROJECT RECREATION FACILITIES

PCWA will be responsible for 100% of the routine heavy maintenance of Project recreation facilities identified in REC Plan Table 1, and any new facilities constructed as part of this Recreation Plan, for the term of the license. Heavy maintenance activities may be performed by PCWA, PCWA's contractors, or by the USDA-FS with funds provided by PCWA on a Project-specific basis. When it is agreed that USDA-FS will perform the work the annual funding agreement would be adjusted accordingly. Heavy maintenance activities will occur on an as-need basis and will be determined and funded in consultation with the USDA-FS during the annual coordination meetings described in Section 7.1 of this plan. Heavy maintenance and rehabilitation projects will incorporate resource protection measures required at developed recreation facilities and impacted areas adjacent to or associated with Project reservoirs and other Project facilities.

The goal of heavy maintenance is to protect current investments and repair/replace facilities, furnishings and fixtures that do not meet standards. Most of these activities are recurring activities that will be performed periodically over the term of the license. Typical heavy maintenance activities include:

- Resurfacing of parking areas and spurs;
- Regrading gravel parking lots and installing additional crushed rock;
- Replacement of road related drainage features such as culverts and ditches as specified in PCWA's TSMP (PCWA 2011a).
- Replacement of barrier structures and devices, including: fencing, posts and rails, barrier rock, and gates;
- Replacement of site/facility amenities including picnic tables, benches, fire rings, grills, bear resistant food boxes, bear resistant garbage containers, and recycling containers;
- Replacement of damaged signage, information boards, and fee tubes;
- Replacement or retrofitting of bathrooms;
- Replacing the composting unit on composting toilets;
- Replacement of potable water tanks, supply and distribution lines, valves and faucets;
- Replacement of septic systems, including leach fields;
- Replacement or major repair of boat ramps and retaining walls; and
- Site leveling and removal of obstacles, where feasible.

Facility-specific heavy maintenance activities will be prioritized in consultation with the USDA-FS with consideration to the status of the specific projects described in this plan. Most of the facility-specific measures identified in Section 4.3 of this plan involve some or all of the heavy maintenance activities identified above. Therefore, some heavy maintenance activities may be deferred if redesign and reconstruction of the facility is eminent. Conversely, individual elements or measures identified in this plan may be expedited if warranted and approved by the USDA-FS. For compliance purposes, specific activities or measures that are identified in Section 4.3 of this plan but implemented early as part of routine heavy maintenance, including measures that are implemented prior to license issuance, will be considered completed.

4.3 SPECIFIC MODIFICATIONS AND ENHANCEMENTS AT EXISTING PROJECT RECREATION FACILITIES AND WATER SUPPLY FACILITIES

PCWA will implement a variety of facility-specific measures over the term of the license. These facility-specific measures and an associated implementation schedule are summarized on REC Plan Table 2 and described in the following subsections, organized by facility. Certain elements may be implemented sooner than indicated on the schedule as part of PCWA's annual heavy maintenance activities, based on consultation with the USDA-FS, as discussed in Section 4.2 above. For compliance purposes, specific activities or measures that are implemented early, including those that are implemented prior to license issuance, will be considered completed. In such cases, PCWA will notify the FERC that the activity or measure was completed.

PCWA will be 100% responsible for implementing the facility-specific measures identified in this plan. Specifically, PCWA will be responsible for: capital costs including all necessary equipment, supplies, and materials; transport and disposal costs; survey, project planning and design; contract preparation and administration; environmental analysis and documentation, permits, preparation of as-built drawings; and funding for resource agency review. Any new facility or modifications to existing facilities will be constructed to meet current USDA-FS design and accessibility standards, where feasible. All improvements located on NFS land will become the property of the U.S. government upon completion, final inspection, and acceptance by the USDA-FS.

4.3.1 Upper Hell Hole Campground

Upper Hell Hole Campground is located on the southeast shore of Hell Hole Reservoir, about four miles from Hell Hole Boat Ramp (REC Plan Map 1). The overall layout of Upper Hell Hole Campground is shown on REC Plan Map 6. Currently, the campground includes 13 individual campsites, four pit toilets, and other associated amenities that are spread across three contour levels created by the natural topography of the site. Sensitive resources are located within or adjacent to the campground.

Facility Removal

Recreation use and facility capacity data indicates Upper Hell Hole Campground is substantially underutilized. Based on the low use levels and the presence of sensitive resources within or adjacent to the campground, all of the campsites and associated

amenities at Upper Hell Hole Campground will be removed within 7 years of license issuance. As part of this measure, PCWA will:

- Remove all tables, fire rings, masonry stoves, and user-created fire rings from campsites 1–13 (REC Plan Map 6);
- Remove pit toilets 1, 2, 3, and 4 (REC Plan Map 6);
- Remove existing signage, information boards, and frames;
- Remove masonry steps between campground levels;
- Construct drainage control measures (such as waterbars and low rolling dips) along trails and other disturbed areas; and
- Restore paths, barren and/or compacted areas through means agreed to by the FS to return the site to natural conditions.

4.3.2 Hell Hole Campground

Hell Hole Campground is accessible via Eleven Pines Road (Forest Route [FR] 2), and located about 1.3 road miles northwest of Hell Hole Boat Ramp (REC Plan Map 1). The campground was originally constructed in 1967 as a picnic area and was later converted to a campground. Hell Hole Campground currently includes ten family-sized units. All of the units are walk-in tent units, with parking available in a central parking area. The overall layout of the campground is shown on REC Plan Map 7. Sensitive resources are located within or adjacent to the campground.

Facility Enhancements

Within 9 years of license issuance, PCWA will implement the following measures at Hell Hole Campground:

- Construct a loop access road and parking area for better trailer access and boat trailer parking;
- Design, furnish, and install new campground site information signage.
- Provide a reliable and adequate drinking water source and delivery system to the campground.

In addition, PCWA will conduct visitor surveys to determine whether the campground should be retained as a family campground or converted to a group campground consisting of one 25-PAOT site. The surveys may be conducted as part of PCWA's periodic visitor survey effort described in Section 4.5 of this Recreation Plan. Based on a determination by the Forest Service, utilizing the results of the survey and other pertinent information, the licensee shall, within 9 years of license issuance, redesign and reconstruct the campground in consultation with the FS to meet all current FS standards including design for accessibility.

Potential Facility Conversion

If the survey results indicate that the campground should be converted to a group campground, then PCWA will redesign and reconstruct the campground in consultation with the USDA-FS, as follows:

- Construct a level kitchen area with five picnic tables, two serving tables, two group pedestal grills, one group fire ring, and two large bear resistant food lockers;
- Construct five level campsites of approximately 1,200 square feet each. Furnish and install one picnic table, one fire ring, and one bear-resistant food storage container in each. Existing picnic tables, food storage containers, and fire rings that meet current USDA-FS accessibility and condition standards may be refurbished and re-installed;
- Abandon existing faucets and construct three faucet units and sumps to facilitate group campground design;
- Construct accessible compacted aggregate base walkways between parking, campsites and kitchen area;
- Construct a level information area near parking with appropriate signage;
- Re-install bear resistant garbage containers at locations to facilitate group campground design;
- Remove all existing facilities that are not utilized in the design of the group campground;
- Rehabilitate abandoned areas as needed; and
- Install barriers on southeast boundary of the campground to protect nearby sensitive resources.

Potential Facility Reduction

Alternatively, if the survey results indicate that a family campground should be retained, then PCWA will implement the following measures:

- Remove the tables, concrete and steel grills, fire pits, and site markers from Sites 4, 5 and 6 (REC Plan Map 7) and rehabilitate areas as needed;
- Level and remove protrusions from remaining campsites;
- Replace non-accessible tables, refurbish and reset existing accessible tables, fire rings, and bear resistant food storage lockers;

- Reconstruct compacted aggregate base walkway to meet current FS accessibility standards between parking, campsites and information area;
- Reconstruct information area near new parking area;
- Abandon existing faucet units and construct three faucet units with sumps to facilitate new campground layout;
- Re-install bear resistant garbage containers along walkway;
- Install barriers on southeast boundary of the campground to protect nearby sensitive resources;

These modifications will reduce the size of Hell Hole Campground from 10 sites to 7 sites. Maintenance of the remaining campsites and associated support facilities will continue to be the responsibility of PCWA through the term of the new license.

4.3.3 Big Meadows Campground

Big Meadows Campground is accessible from Eleven Pines Road (FR 2) and is located about 2.7 road miles northwest of Hell Hole Boat Ramp (REC Plan Map 1). The campground was originally constructed in 1967. The campground was improved in 1995 as part of a MFP license agreement, and again in 2008 and 2010.

Big Meadows Campground includes 54 family-sized units, 10 of which are fully accessible. Other amenities located within the campground boundaries include bathrooms with flush toilets, vault toilets, bear-proof garbage bins, bear-proof food storage lockers, and faucets with potable water. The overall layout of Big Meadows Campground is depicted on REC Plan Map 8.

Facility Enhancements

Within 9 years of license issuance, PCWA will implement the following measures at Big Meadows Campground:

- Construct an interpretive and informational kiosk with benches and signs, consistent with the USDA-FS cultural resources management plan for this facility;
- Level, remove protrusions and enlarge all campsites to 1200 sq-ft minimum, except at those sites that were previously reconstructed (4, 6, 12, 14, 29, 30, 32, 34, 38, 39, 40).
- Replace tables, grills and fire rings in all campsites except at those sites listed above. (Note: Tables, grills, fire rings and food storage lockers which meet current FS accessibility and good condition standards may be re-furbished and reset.)

4.3.4 Hell Hole Vista and Associated Parking Area

Hell Hole Vista is located northwest of Hell Hole Reservoir and overlooks Hell Hole Reservoir. The vista is located along Eleven Pines Road (FR 2), about 1.7 road miles from the Hell Hole Boat Ramp (REC Plan Map 1). The vista area consists of a parking area, a trail, and a vista point enclosed in a masonry wall (REC Plan Map 9). The parking area is separated from the trail and vista by FR-2. Amenities at this site include: a single-unit, accessible CXT, a double-bin bear-proof garbage bin, a picnic table, and signage.

The vista was originally constructed in 1967 but has since been upgraded. For example, the trail (including the masonry stairs) was upgraded in 2007 and an interpretative sign was installed in the vista area in May 2009.

Facility Enhancements

Within 13 years of license issuance, PCWA will implement the following measures at Hell Hole Vista and its associated parking area:

- Replace the existing picnic table located along the pathway with an accessible table; and
- Construct a level area, free of protrusions, around the picnic table.

4.3.5 Hell Hole Boat Ramp and Associated Parking Areas

Hell Hole Boat Ramp is located on the south west end of the reservoir, northwest of Hell Hole Dam. The ramp is accessible via Forest Route 2, which is also referred to as Eleven Pines Road and/or Forest Road 17N02 (REC Plan Map 1). Hell Hole Boat Ramp is the only boat ramp at Hell Hole Reservoir.

Hell Hole Boat Ramp and the associated parking areas were originally constructed in 1965, improved in 1986, and rehabilitated in 2000 and 2010. The Hell Hole Boat Ramp area includes a lower parking area referred to as the Hell Hole Boat Ramp Parking Area, and an upper parking area referred to as the Hell Hole General Parking Area. The general layout of the Hell Hole Boat Ramp and associated parking areas are shown on REC Plan Map 10.

Facility Enhancements

Within 7 years of license issuance, PCWA will implement the following measures at the Hell Hole General Parking Area;

- Obliterate and restore all portions of the parking area that were not restored in 2010;
- Chipseal parking areas and roadways that were not sealed in 2010; and
- Paint traffic markings.

- Replace the existing chain link fence with black plastisol fencing during the next maintenance cycle.
- In addition, within 5 years of license issuance, PCWA will provide potable water in the vicinity of the Hell Hole Boat Ramp. The exact location of the water faucet will be determined in consultation with the USDA-FS and will depend, in part, upon the location of the water source.
- If feasible, PCWA will also extend the boat ramp so that it is functional for a longer period as specified in the following subsection.

4.3.6 Hell Hole Boat Ramp

In its current configuration, Hell Hole Boat Ramp is approximately 1,000 feet long and about 25 feet wide and constructed of concrete. The ramp is generally “U” shaped and is widened in the apex of the U to provide a low water turn-around area (see REC Plan Map 10).

Hell Hole Boat Ramp was designed to be functional at a range of WSEs. The top of the existing boat ramp is situated at an elevation of 4,638 msl, 8 feet higher than the current maximum operating WSE and spillway crest elevation. The lower end of the existing ramp terminates at an elevation of 4,530 feet.

Facility Enhancements

If feasible, PCWA will extend the boat ramp so that it is functional later into the recreation season and during drier water year conditions. The boat ramp will be extended in two phases. During Phase 1, PCWA will extend the boat ramp up to approximately 250 linear feet, to an elevation of about 4,485 feet, which is 45 vertical feet lower than the bottom of the existing boat ramp. Due to the steep slope, the extension will be constructed per California Department of Boating and Waterways (DBAW) design guidelines which are in compliance with National standards. The extension will include one turn-around area, as shown on REC Plan Map 10. Phase 1 will occur after six years of license issuance, during the first year when the reservoir elevation is projected to be drawn down to below 4,475 feet during the fall (September–October). Necessary planning and permitting will be completed within six years after license issuance. Phase 2 will involve extending the boat ramp further, to an elevation of 4,455 feet. This phase will occur when the reservoir elevation is projected to be drawn down to below 4,455 feet during the fall (September–October). The Phase 2 extension will be constructed per DBAW guidelines and are dependent on reservoir bed conditions. (Note that it may not be possible to extend the boat ramp to an elevation of 4,455 feet due to currently unknown factors such as slope and reservoir bed condition. In this case, PCWA will extend the boat ramp as far as feasible.)

4.3.7 Ahart Campground

Ahart Campground is located along the Middle Fork American River, upstream of French Meadows Reservoir (REC Plan Map 2). The campground consists of 12 sites (REC Plan Map 11). All sites include a native-surface spur, delineated with a

combination of wood posts, barrier bars, and barrier rocks. Other amenities at this campground include two vault toilets and two bear-proof garbage containers. The access roads within the campground are unpaved and potable water is not available.

Facility Reduction

Within 11 years of license issuance, PCWA will remove existing camp site 9, including all site amenities. PCWA will subsequently restore barren and/or compacted areas in a manner approved by the USDA-FS. This measure will reduce the size of Ahart Campground from 12 sites to 11 sites.

Facility Enhancements

Within 11 years of license issuance and concurrent with the facility reduction, PCWA will implement the following measures at Ahart Campground:

- Develop a potable water supply in the campground (vertical well and hand pump). The water supply will be available to Ahart Campground users, and will provide a water source for the recreating public when the water systems at French Meadows and Lewis Campgrounds are turned off for the winter. If a suitable quality potable water source is not available at or near the campground, PCWA will consult with the TNF to determine if an alternative measure is feasible.
- Level and remove protrusions and compact campsites to a minimum of 1,200 square feet;
- Grade walkways and add compacted aggregate base between camp units and spurs/roadway for accessibility;
- Replace all tables and fire rings with accessible tables and fire rings;
- Reset food storage lockers after sites have been graded to meet accessibility standards;
- Replace two double-unit vault toilets with two single unit pre-fabricated concrete vault accessible toilets;
- Construct drainage diversion around sites #1 and #8;
- Replace all wood barriers with rock barriers;
- Place additional barrier rock at sites #1 and #2;
- Repair/install information board and provide applicable signage;
- Remove hazard trees and unacceptable fuel loads within the campground boundaries;

- Reconstruct and surface, with compacted aggregate base, all spurs to meet current accessibility standards;
- Reset rock barriers to allow for access from spurs to units;
- Grade Entrance Road 96-91 and all interior campground roads and surface with compacted aggregate base.
- In addition, PCWA will repair and pave approximately 0.6 mile of FR 96, extending from the end of the existing pavement northeast to a point approximately 200 feet past the Ahart Campground entrance. This road is not a Project road or a Project Recreation facility access road. However, at the request of the USDA-FS, PCWA will repair and pave this road to prevent erosion and provide dust control along FR 96, particularly in areas where the road is adjacent to the Middle Fork American River. This enhancement will be designed and implemented in consultation with TNF road specialists.

4.3.8 French Meadows Campground

French Meadows Campground is located on the south side of French Meadows Reservoir, east of French Meadows Boat Ramp and Picnic Area (REC Plan Map 2). As shown on REC Plan Map 12, this campground currently consists of 75 sites organized along two loops, an east loop (Sites 1-31) and a west loop (Sites 32-75). Two sites are used as host sites.

Each site includes a heavy wood picnic table, a steel fire ring with adjustable grill, and a bear-proof food storage locker (bear box). All sites include a paved parking spur, typically delineated with a combination of wood posts, barrier bars and barrier rocks. Other amenities at this campground include bathrooms with flush toilets, vault toilets, bear-proof garbage containers, bear-proof recycling containers, and faucets with potable water.

Facility Reduction

Within five years of license issuance, PCWA will implement the following measures, which will reduce the size of French Meadows Campground from 75 sites to 67 sites:

- Remove sites 16, 55, 65, 69, 72.
- Combine the following sites to become pull through double sites sized to be a minimum of 2400 square feet each: sites 61 and 62; site 33 and 2; and sites 19 and 20.

Barren and/or compacted areas will subsequently be restored in a manner approved by the USDA-FS.

Facility Enhancements

Within 5 years of license issuance and concurrent with the facility reduction, PCWA

will redesign and reconstruct select elements of French Meadows Campground to meet current FS standards including design for accessibility, as specified in the following:

- Level, remove protrusions, and compact campsites to a minimum of 1,200 square feet, where feasible;
- Modify the following sites and/or spurs:
 - Enlarge the living areas at sites 24, 34, 66, sized to be a minimum of 1200 square feet each;
 - Relocate sites 6, 11, 43, and 71 to the end of the spur; and
 - Move site 8 away from the road.
- Replace bear resistant food lockers at sites 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28 with larger bear resistant food lockers with a minimum of 30 cubic feet storage space;
- Replace all non-accessible tables with accessible ones. Existing tables meeting current accessibility standards may be refurbished and re-installed;
- Replace all non-accessible fire rings with accessible ones. Existing fire rings meeting current accessibility standards may be refurbished and re-installed;
- Construct trash bin pads with paved approaches, and purchase or retrofit refuse containers for accessibility and bear resistance;
- Replace/and or relocate fifteen faucet units with sumps and provide level paved pads at front and side of the faucet units to provide for accessibility;
- Grade walkways between camp units and spurs for accessibility, where feasible.
- Move the entry gate to between site 1 and the intersection for the east loop road;
- Slurry seal access and all interior campground roads; mark with directional information;
- Reconstruct interior campground roads; replace or repair culverts and other drainage structures;
- Reconstruct and pave all spurs to meet current accessibility standards. Reset barriers to allow for access from spurs to units;
- Replace message boards and information boards;
- Replace all fee station signage;

- Furnish and install one accessible single unit toilet between sites 59 and 61;
- Replace two double-unit vault toilets with 4 single-unit vault toilets and the four double-unit flush toilets in kind with pre-fabricated concrete accessible units. Relocate toilets close to roads and construct accessible turnout at each location. Construct accessible walkways from turnouts/roads to the toilets;
- Replace septic system;
- Install holding tanks at two campground host units' sites # 3 and 32; and
- Remove hazard trees and unacceptable fuel loads within campground boundaries.

4.3.9 Lewis Campground

Lewis Campground is located at the northeast end of French Meadows Reservoir (REC Plan Map 2). As shown on REC Plan Map 13, this campground currently consists of 40 sites, with one host site.. Each site includes a heavy wood picnic table, a steel fire ring with adjustable grill, and a new, large bear-proof food storage locker (bear box). Other amenities at this campground include bathrooms with flush toilets, vault toilets, bear-proof garbage containers, and faucets with potable water.

Facility Reduction

Within nine years of license issuance, PCWA will implement the following measures, which will reduce the size of Lewis Campground from 40 sites to 37 sites:

- Remove sites 7 and 36.
- Combine sites 27 and 29 to become a pull through double site sized to be a minimum of 2400 square feet.

Barren and/or compacted areas will subsequently be restored in a manner approved by the USDA-FS.

Facility Enhancements

Within nine years of license issuance and concurrent with the facility reduction, PCWA will redesign and reconstruct select elements Lewis Campground to meet current FS standards including design for accessibility, as specified in the following:

- Level and remove protrusions and compact campsites to a minimum of 1,200 square feet;
- For accessibility reset bear resistant food storage lockers after sites have been graded;
- Modify the following sites and/or spurs in consultation with the Forest Service:

- Enlarge living area in sites 5 and 20 to be a minimum of 1200 square feet in size each;
- Widen site 37 to 16 feet;
- Widen sites 21, 38 and 39 to 20 feet;
- Lengthen spur for site 13 to 50 feet and move the site;
- Move the spur into sites 25, 38;
- Move sites and spurs for 19, 26, 28; and
- Move site 17 to the northern side.
- Replace all non-accessible tables with accessible tables. (Existing tables meeting current accessibility standards may be refurbished and re-installed);
- Replace non-accessible fire rings with accessible ones. (Existing fire rings meeting current accessibility standards may be refurbished and re-installed.)
- Construct trash bin pads with paved approaches, and purchase or retrofit refuse containers for accessibility and bear resistance;
- Replace message and information boards;
- Grade walkways between camp units and spurs/roadway for accessibility;
- Slurry seal access and all interior campground roads;
- Reconstruct and pave all spurs to meet current accessibility standards. Reset barriers to allow for access from spurs to units;
- Replace and/or relocate eleven faucet units with sumps, and provide level paved pads at front and sides of the faucet units for accessibility;
- Perform maintenance or minor reconstruction on interior campground roads;
- Replace two double-unit vault and two double-unit flush toilets in kind with pre-fabricated concrete vault accessible units.
- Relocate toilets close to road and construct an accessible turnout at each location;
- Construct accessible walkways from turnouts/roads to the toilets;
- Install holding tank at the campground host site # 1; and
- Remove hazard trees and unacceptable fuel loads within the campground boundaries.

4.3.10 Poppy Campground

Poppy Campground is located on the north shore of French Meadows Reservoir (REC Plan Map 2). The campground is only accessible by trail or by boat. Parking is available at an area referred to as the Poppy Campground Trailhead Parking Area (discussed below). Currently, the campground consists of 12 sites (REC Plan Map 14). The only other amenities at this campground are two single-unit pit toilets and signage. The campground is managed as a “pack-it-in, pack-it-out” campground. Therefore, there are no garbage containers in the campground. Potable water is not available in the campground but is available at the Poppy Campground Trailhead Parking Area.

Facility Reduction

Within 13 years of license issuance, PCWA will implement the following measures, which will reduce the size of Poppy Campground from 12 sites to 8 sites:

- Remove all tables, fire rings, stoves, and user-created fire rings from campsites 6, 9, 11, and 12 (REC Plan Map 14); and
- Barren and/or compacted areas will subsequently be restored in a manner approved by the USDA-FS.

Facility Enhancements

Within 13 years of license issuance and concurrent with the facility reduction, PCWA will redesign and reconstruct Poppy Campground to meet current FS standards including design for accessibility, as specified in the following:

- Level, remove protrusions, and compact the remaining campsites to a minimum of 1,200 square feet;
- Install bear resistant food storage lockers at each site;
- Replace all heavy wood tables with accessible tables;
- Replace all fire rings with accessible fire rings;
- Replace two single unit toilets with one accessible single unit toilet. The type of toilet will be determined at the time of construction and approved by the USDA-FS based on advances in technology that address low/no maintenance issues;
- Replace all signs and bulletin boards;
- Place a Poppy Campground sign at maximum water surface elevation to be seen from the reservoir;
- Place signs within Poppy Campground along the Western States Trail (16E10) directing hikers to the trailhead at Poppy/McGuire Parking and to Red Star Ridge (to the southwest);

- Reconstruct the access trail from Poppy campground to its terminus at the lower McGuire parking area to meet FS design standards (see Section 4.3.16); and
- Remove hazard trees and unacceptable fuel loads within the campground boundaries.

4.3.11 Coyote Group Campground

Coyote Group Campground is located east of French Meadows Reservoir, on the north side of the Middle Fork American River (REC Plan Map 2). The campground includes four group camp sites referred to as: Prairie Wolf, Brush Wolf, Little Wolf, and Black Bear. As shown on REC Plan Map 15, Prairie Wolf, Brush Wolf, and Little Wolf are located in the same general area and are accessible via FR-96. Black Bear is separated from the other sites and accessible via the North Shore Access Road (42.2), off of FR-96.

Each campsite includes heavy wood picnic and serving tables, accessible double pedestal grills, large bear boxes, bear-proof garbage bins, a group fire ring with benches, vault toilets, and water faucets. In addition, an accessible bathroom with flush toilets is available at Black Bear. None of the sites are designated as accessible. The sites may be used by reservation only.

Facility Enhancements

Within 13 years of license issuance, PCWA will redesign and reconstruct the four group campsites to meet all current USDA-FS standards including design for accessibility, as specified below, by camp site. In addition to these specific measures identified below by campsite, PCWA will remove all hazard trees and unacceptable fuel loads within the campground boundaries. Hazard trees and fuel loads will be identified in consultation with the USDA-FS.

Little Wolf Group Site (25 Persons at One Time [PAOT]):

- Reconstruct the existing four RV spurs to meet current accessibility standards and paint traffic markings after reconstruction;
- Repave walkway to campsite to meet current accessibility standards;
- Level and remove protrusions and compact kitchen area and tent area to accommodate twelve 2-person tents;
- Refurbish and reinstall serving tables, and reset pedestal grill, benches, and food storage lockers;
- Replace picnic tables;
- Replace group fire ring; and
- Replace two faucet units and sumps.

Brush Wolf Group Site (25 PAOT):

- Reconstruct the existing four RV spurs to meet current accessibility standards and paint traffic markings after reconstruction;
- Replace barrier posts with barrier rocks;
- Grade and surface walkway to campsite with compacted aggregate base to meet current accessibility standards;
- Level and remove protrusions and compact kitchen area and tent area to accommodate twelve 2-person tents;
- Refurbish and reinstall serving tables; reset pedestal grill and food storage lockers; and
- Replace picnic tables, benches, and group fire ring.

Prairie Wolf Group Site (25 PAOT):

- Reconstruct the existing six RV spurs to meet current accessibility standards and paint traffic markings after reconstruction;
- Grade and surface walkway to campsite with compacted aggregate base to meet current accessibility standards;
- Remove faucet units and sumps in kitchen area;
- Replace picnic tables, benches, grill, and fire ring;
- Refurbish and re-install serving tables; and
- Replace 2-unit vault toilet with 2-unit pre-cast concrete accessible toilet.

Black Bear Group Site (50 PAOT):

- Reconstruct the existing seven RV spurs to meet current accessibility standards and paint after reconstruction;
- Level and remove protrusions and compact kitchen area and tent area to accommodate 25 2-person tents;
- Refurbish and re-install serving tables and accessible benches, reset food storage lockers;
- Replace picnic tables, non-accessible benches, and fire ring; and
- Replace two faucet units and sumps.

4.3.12 Gates Group Campground

Gates Group Campground is located east of French Meadows Reservoir, on the south side of the Middle Fork American River (REC Plan Map 2). The campground is accessible via FR 68, off of FR 96. The campground includes three group campgrounds referred to as Ponderosa, Lodgepole, and Aspen. The configuration of these campgrounds is shown on REC Plan Map 16.

Each campsite includes heavy wood picnic and serving tables, concrete stoves with steel grills, accessible double pedestal grills, large bear resistant food storage lockers, bear-proof garbage bins, a group fire ring with new benches, vault toilets, and water faucets. None of the sites are designated as accessible. The group sites may be used by reservation only.

Facility Enhancements

Within 11 years of license issuance, PCWA will redesign and reconstruct the three group campsites to meet all current FS standards including design for accessibility, as specified below, by camp site. In addition to the specific measures identified below PCWA will remove all hazard trees and unacceptable fuel loads within the campground boundaries. Hazard trees and fuel loads will be identified in consultation with the USDA-FS. In addition, PCWA will construct and sign a trail from the group camps to the Middle Fork American River that can be accessed by all Gates group visitors.

Ponderosa Group Site (75 PAOT):

- Reconstruct the existing twelve RV spurs to meet current accessibility standards and paint traffic markings after reconstruction;
- Grade and surface walkway to campsite with compacted aggregate base to meet current accessibility standards;
- Remove protrusions (e.g., stumps, rocks) from campsites;
- Remove concrete stoves and replace with group pedestal grills;
- Replace picnic tables, heavy wood benches, and group fire ring;
- Refurbish and re-install existing serving tables and benches;
- Install all resistant food storage lockers onto concrete pads for accessibility;
- Remove one and replace two faucet units and sumps within kitchen area; and
- Replace one faucet unit and sump near each toilet.

Aspen Group Site (25 PAOT):

- Reconstruct the existing four RV spurs to meet current accessibility standards and paint traffic markings after reconstruction;
- Grade and surface walkway to campsite with compacted aggregate base to meet current accessibility standards;
- Remove protrusions (i.e., stumps, rocks) from campsite;
- Remove concrete stoves and replace with group pedestal grills;
- Replace picnic tables and group fire ring;
- Refurbish and re-install existing serving tables and benches;
- Install all resistant food storage lockers onto concrete pads for accessibility; and
- Replace three faucet units with sumps.

Lodgepole Group Site (25 PAOT):

- Reconstruct the existing four RV spurs to meet current accessibility standards and paint traffic markings after reconstruction;
- Grade and surface walkway to campsite with compacted aggregate base to meet current accessibility standards;
- Remove protrusions (e.g., stumps, rocks) from campsite;
- Remove concrete stoves and replace with group pedestal grills;
- Replace picnic tables and group fire ring;
- Refurbish and re-install existing serving tables and benches;
- Install all resistant food storage lockers onto concrete pads for accessibility;
- Add barrier rocks; and
- Replace three faucet units with sumps.

4.3.13 French Meadows Picnic Area and Boat Ramp

French Meadows Picnic Area is located on the south shore of French Meadows Reservoir, adjacent to the French Meadows Boat Ramp (REC Plan Map 2). The general layout of the French Meadows Boat Ramp, French Meadows Picnic Area, and the associated parking areas is shown on REC Plan Map 17. As indicated, the boat ramp and picnic area are accessible via the same access road. In general, the French Meadows Boat Ramp area includes the boat ramp and a large parking area. A paved road connects the parking area to the boat ramp. A bathroom with flush toilets and

sinks is available between the ramp and the parking area. In addition, potable water is available at a faucet located adjacent to the bathroom.

The French Meadows Picnic Area consists of a paved parking area and a four-site picnic area connected by an unpaved trail. According to the USDA-FS, the picnic area formerly consisted of seven sites but was down sized in 2000 due to lack of use and to reduce maintenance costs. Each of the four remaining picnic sites includes a table and a pedestal grill. Other amenities in the picnic area include: a two-unit vault bathroom; a bear-proof garbage container; and two water faucets.

Facility Reduction

French Meadows Picnic Area is underutilized in its current location. Accordingly, at the request of the USDA-FS, within seven years of license issuance, the existing picnic area will be fully decommissioned and relocated. Two picnic sites will be relocated to an alternative location adjacent to the existing paved parking area near the upper most boat ramp parking area, near the existing flush bathroom. Barren and/or compacted areas in the existing picnic area will be restored in a manner approved by the USDA-FS.

Facility Enhancements

The following enhancement measures will be implemented within seven years of license issuance and concurrent with the picnic area reduction and relocation:

- Install two accessible picnic tables and fire rings south of the boat ramp parking across from existing toilet building;
- Construct accessible walk ways to the picnic tables and fire rings;
- Replace flush toilet with accessible double unit pre-cast vault concrete toilet;
- Replace and relocate the existing faucet unit with sump to an accessible location if current location can't be made accessible;
- Construct accessible walkways between parking, toilets, and faucet units;
- Replace bulletin board;
- Replace all regulatory signs;
- Replace "no camping" and boat ramp parking signs;
- Re-establish entry road clearing limits;
- Asphalt overlay entry road;
- Reconstruct the drainage ditch;

- Paint traffic markings in temporary parking area to meet current accessibility standards;
- Replace wood parking barriers with barrier rock;
- Replace metal post and cable barriers with barrier rock; and
- Thin trees adjacent to all parking areas, picnic areas, buildings, roads and trails.

In addition, PCWA will extend the French Meadows Boat Ramp as described in the following subsection.

4.3.14 French Meadows Boat Ramp

The existing boat ramp is approximately 20 feet wide and approximately 600 feet long, as measured from the maximum normal operating WSE to the end of the ramp. The existing ramp is constructed of concrete and includes three turn-around areas that may be used as water levels recede (see REC Plan Map 17).

The existing boat ramp was designed to be functional at a wide range of water levels. The top of the ramp is at an elevation of about 5,262 feet mean sea level (msl), which is the current maximum operating WSE. The lower end of the existing concrete ramp terminates at an elevation of 5,200 feet.

Facility Enhancements

PCWA will extend the boat ramp so that it is functional for a longer period. Specifically, PCWA will extend the boat ramp up to approximately 365 linear feet, to an elevation of about 5,175 feet, which is 25 vertical feet lower than the bottom of the existing boat ramp. The extension will be constructed per California Department of Boating and Waterways (DBAW) design guidelines which are in compliance with National standards and include turn-around areas, as shown on REC Plan Map 17. It may not be possible to extend the boat ramp to an elevation of 5,175 feet due to currently unknown factors such as slope and reservoir bed condition. In this case, PCWA will extend the boat ramp as far as feasible.

The boat ramp will be constructed after six years of license issuance, during the first year when the reservoir elevation is projected to be drawn down to below 5,165 feet during the fall (September–October). Necessary planning and permitting will be completed within six years after license issuance. The ramp will subsequently be maintained as part of PCWA's heavy maintenance program as described in Section 4.2 of this Recreation Plan.

4.3.15 French Meadows RV Dump Station

The French Meadows RV Dump Station is located at the northeast end of French Meadows Reservoir, on the south side of FR 96, across from the French Meadows Administrative Station (REC Plan Map 2).

Facility Enhancements

Within four years of license issuance, PCWA will implement the following measures at the French Meadows RV Dump Station:

- Remove unused concrete pad;
- Stripe parking lot;
- Replace faucet unit and sump; and
- Reconstruct the route to faucet unit to meet current FS accessibility standards.

4.3.16 McGuire Boat Ramp and Associated Parking Areas

McGuire Boat Ramp is located on the north shore of French Meadows Reservoir (REC Plan Map 2). The McGuire Boat Ramp area includes a concrete boat ramp and three large, relatively unimproved parking areas, one of which serves as a parking area for the Poppy Campground trailhead (REC Plan Map 18). A paved road connects the parking areas to the boat ramp. A double-unit vault is available, located along the access road to the boat ramp. In addition, a bathroom with flush toilets is available nearby at the Poppy Trailhead parking area. Potable water is not available at the boat ramp or in the associated parking areas. However, potable water is available at two faucets located behind the bathroom in the Poppy Trailhead parking area.

Facility Enhancements

Within 13 years of license issuance, PCWA will implement the following measures to enhance the condition of McGuire Boat Ramp.

- Replace fair and poor condition signage;
- Repair concrete turn around at top of the boat ramp.

Facility Consolidation

Poppy Campground is accessible via a .75-mile-long trail that begins at the Poppy Campground Trailhead Parking Area. As shown on REC Plan Map 18, this parking area is located in the immediate vicinity of two large parking lots that serve McGuire Boat Ramp. The USDA-FS expressed an interest in consolidating the Poppy Campground Trailhead Parking Area and the McGuire Boat Ramp Parking Areas and the associated support facilities (e.g., bathrooms and faucets). Accordingly, within 13 years of license issuance PCWA will remove the Poppy Campground Trailhead Parking Area and will consolidate the support facilities, as specified in the following:

- Remove the Poppy Campground Trailhead Parking Area and Poppy Campground Trailhead Parking Area Access Road:

- Prepare the surface of the access road and the parking area to allow for revegetation;
- Restore barren and/or compacted areas to natural conditions using methods to be determined in consultation with the USDA-FS
- Remove post and cable barriers; and
- Install barrier rock at the entrance to the Poppy Campground Parking Area Access Road to prohibit motorized vehicle entry.
- Remove the flush toilet building, faucet, and drains located at the southeast end of the Poppy Campground Trailhead Parking Area;
- Remove the existing vault toilet building located between the flush toilet building and the French Meadows Reservoir North Shore Access Road;
- Improve the existing southeast McGuire Boat Ramp Parking area as follows:
 - Pave the closest six parking spaces to the North Shore Access Road, paint traffic markings and sign as reserved for Poppy Campground Trailhead Parking;
 - Install barrier rock around the perimeter of the entire Southeast McGuire Parking lot;
 - Sign the remainder of the Southeast McGuire Parking lot for boat ramp parking; and
 - Provide an accessible walkway between the boat ramp parking and the boat ramp/shoreline with appropriate signage.
- Referencing REC Plan Map REC 1-18, near the Recreation Road Reference Point F:
 - Remove the southern loop of the Parking NE Lot parking lot access road;
 - Widen “E” to accommodate two way traffic; and
 - Restore barren and/or compacted areas through means agreed to by the FS to return the sites to natural conditions.
- In a centralized place between the Poppy Campground Parking, Poppy Trailhead sign, and near the North Shore road:
 - Construct trash bin pads with paved approaches, and purchase or retrofit one double refuse container and one recycling container for accessibility and bear resistance;
 - Furnish and install fee station and information boards;

- Furnish and install a pre-fabricated, double-unit, accessible vault toilet;
- Construct one accessible faucet unit with sump near toilet and trash container; and
- Provide accessible walkways between facilities (toilet, trash, faucet units, parking, and information board).
- Extend the Poppy Trail to the new trailhead location; and
- Install signage along the trail between the new trailhead location and Poppy Campground.

PCWA will continue to be responsible for the maintenance of the remaining parking areas and associated support facilities through the term of the new license.

4.3.17 McGuire Picnic Area and Beach

McGuire Picnic Area and Beach is located on the north shore of French Meadows Reservoir, east of McGuire Boat Ramp (REC Plan Map 2). The area includes a small beach area, a picnic area (10 sites), a parking area, two bathrooms with flush toilets and sinks, and potable water. The general layout of the beach, picnic area and parking area is shown on REC Plan Map 18.

McGuire Picnic Area and Beach are substantially underutilized as a day-use facility. The picnic area is a suitable location for a group campground. Accordingly, within nine years of license issuance PCWA will convert McGuire Picnic Area to a group campground and will allow the beach to return to natural conditions, as described below.

Facility Conversion

To facilitate the facility conversion, PCWA will first remove all existing facilities associated with the picnic area and beach. Specifically, PCWA will:

- Remove the steel buoys and identification signs adjacent to McGuire Beach and allow the beach to return to natural conditions;
- Remove the changing pavilion located along pathway to beach; and
- Remove all heavy wood picnic tables and concrete/steel cooking grills from all ten of the existing picnic sites (REC Plan Map 18)

Immediately following, PCWA will construct a group campground consisting of one 25 PAOT accessible site and one 50 PAOT accessible site, in the area that was previously occupied by picnic sites, as specified in the following:

25 PAOT Accessible Group Site

- Level tent area to accommodate 12 two-person tents;

- Purchase and install the following furnishings:
 - 4 accessible picnic tables;
 - 2 accessible serving tables;
 - 2 accessible group cooking grills;
 - 1 group fire ring;
 - 6 benches (wood on steel posts mounted in ground around fire ring);
 - 2 large (group) bear-resistant food storage lockers;
 - 2 bear-resistant garbage containers installed on trash bin pads with accessible approaches;
 - Appropriate informational signage;
 - 1 accessible flush precast toilet structure; and
 - 2 accessible faucet units with sumps;

50 PAOT Accessible Group Site

- Level tent area to accommodate 25 two-person tents;
- Purchase and install the following furnishings:
 - 8 accessible picnic tables;
 - 4 accessible serving tables;
 - 4 accessible group cooking grills;
 - 1 group fire ring;
 - 12 benches (wood on steel posts mounted in ground around fire ring);
 - 4 large (group) bear-resistant food storage lockers;
 - 4 bear-resistant garbage containers installed on trash bin pads with accessible approaches;
 - Appropriate informational signage;
 - 2 accessible precast toilet structures; and
 - 3 accessible faucet units with sumps.

In addition to converting the picnic sites to two group campsites, PCWA will improve the access road and parking area as follows:

- Asphalt overlay the McGuire Picnic Area and Beach Access Road (see REC Plan Map 18);
- Repair, resurface (asphalt overlay), and stripe the existing parking area;
- Paint traffic markings and sign for accessibility;
- Delineate the parking areas between the group campsites with barrier rock; and
- Provide accessible pathways from the parking area to the group sites.

Upon completion, PCWA will be responsible for 100% of the routine operation and maintenance of the group campground and associated support facilities through the term of the new license.

4.3.18 Ralston Picnic Area

Ralston Picnic Area is located at the east end of Ralston Afterbay, along the Middle Fork American River arm of the afterbay (REC Plan Map 5). Ralston Afterbay Picnic Area is a day-use facility consisting of a parking area, five picnic sites, a single-unit vault toilet, and a small, unimproved boat ramp referred to as the Ralston Afterbay Car Top Boat Ramp. Four of the five picnic sites are located in relative proximity to each other. The fifth site is isolated from the other picnic area and is located upriver via a steep, 350-foot-long trail (REC Plan Map 19).

Facility Reduction

Based on the use data and capacity information, this picnic area is substantially under-utilized. Therefore, within five years of license issuance, PCWA will implement the following measures, which will reduce the size of Ralston Picnic Area from five sites to three sites:

- Remove table, pedestal grill, and signage from Sites 1 and 5 (REC Plan Map 19); and
- Subsequently restore barren and/or compacted areas in a manner approved by the USDA-FS.

Facility Enhancements

Within five years of license issuance and concurrent with the facility reduction, PCWA will reconstruct the remaining elements of the picnic area to meet current FS standards including design for accessibility, as specified in the following:

- Level, remove protrusions, and increase living area size at remaining three picnic sites to 400 sq-ft minimum;

- Replace the tables and pedestal grills with accessible tables and grills;
- Provide accessible walkways between picnic sites, toilet, information board, and garbage facilities;
- Pave the parking area and paint traffic markings;
- Install an information board;
- Install “day use only” and “no overnight camping” signs;
- Install signage regarding boat launching opportunities at Ralston Afterbay Sediment Access Point (Section 4.4.1);
- Provide, maintain, and sign a non-motorized access trail from the Ralston Picnic Area to the gage located on the Middle Fork American River approximately 0.5 miles upstream of Ralston Afterbay; and
- Install traffic barriers to prohibit motorcycle use on the trail upstream of Ralston Picnic Area. The specific locations of these traffic barriers will be determined in consultation with the TNF.

4.3.19 Indian Bar River Access

Indian Bar River Access (also referred to as the Oxbow Put-in by California State Parks) is located immediately downstream of Ralston Afterbay, adjacent to the Oxbow Powerhouse (REC Plan Map 5). This area has several uses primarily used as a put-in by whitewater boaters running the Tunnel Chute Run, a 15.2-mile run that extends from the Indian Bar River Access to the Ruck-a-Chucky Recreation Area. Support facilities include a large unloading area, approximately nine to ten unmarked parking spaces, a boat ramp, and three vault toilet buildings (REC Plan Map 20).

Facility Enhancements

Within four years of license issuance, PCWA will implement the following measures, in consultation with the USDA-FS, at the Indian Bar River Access:

- Either install an additional accessible, vault, pre-fabricated concrete toilet or modify the existing vault CXTs to accommodate peak use in consultation with the USDA-FS;
- If determined to be necessary, install powered ventilation systems in the existing CXTs;
- Install a changing pavilion (minimum of 2-sided, gender assigned) in a location to be determined in consultation with the USDA-FS;
- Replace or refurbish existing information boards;

- Reconstruct the existing boat ramp;
- Install a supplemental raft slide ramp downstream of the existing boat ramp. The new ramp will be designed and installed in consultation with the USDA-FS;
- Provide signage indicating that overnight camping is allowed at the designated parking area from October through March;
- Provide signage indicating overnight camping is prohibited at the designated parking area from April through September (e.g., during the peak whitewater boating season); and
- Provide and install signage, including the appropriate regulation so that citation is possible, that notifies the public that the area is closed to mineral withdrawal.

4.3.20 French Meadows South Shore Water Supply (French Meadows Campground Water Supply)

This water supply serves three Project recreation facilities: French Meadows Campground; French Meadows Picnic Area; and French Meadows Boat Ramp. The water source is a horizontal groundwater well that was installed in 1993 and activated up to the storage tank in 1994. Flow from the well is approximately 1.7 gallons per minute. Water is conveyed from the well head to a 10,000 gallon concrete storage tank via an approximately 1,950 feet long, 1-inch black plastic pipe. It takes approximately 4-days to fill the storage tank due to the low flow rate of the well. The approximate location of the distribution supply line to the recreation facilities is shown on REC Plan Map 2.

Within five years of license issuance, PCWA will replace the entire French Meadows Campground South Shore Water Supply infrastructure including drains, valves, pipe, and other items. In addition, PCWA will bring the access road up to current Forest Service standards. The road will be improved as specified in the PCWA's TSMP, which is available in Supporting Document A of PCWA's Application for New License (PCWA 2011a).

PCWA will be responsible for 100% for the costs of implementing the water supply improvements, including planning and design, environmental review construction, permitting, capital costs, and maintenance over the term of the license. All improvements will be constructed in consultation with the USDA-FS and will meet current USDA-FS and State of California design standards for the specified use.

4.3.21 French Meadows North Shore Water Supply (Dolly Creek Water Supply)

The French Meadows North Shore Water Supply serves the following Project recreation facilities:

- Lewis Campground
- Gates Group Campground (3 sites)

- Coyote Group Campground (4 sites)
- McGuire Picnic Area
- McGuire Boat Ramp
- French Meadows RV Dump Station

In addition, this water supply serves the French Meadows Administrative Site (13 person barracks, 3 bedroom house, 7 unit trailer park), which is not a Project recreation facility.

The water source is a 575 feet deep groundwater well. Flow is approximately 11.75 gallons per minute. Water is pumped by an electrical submergible pump powered by a propane generator. Water is pumped directly into a 20,000 gallon concrete storage tank. The distribution supply line to the facilities is a 6-inch diameter concrete asbestos fiber pipe, 2.5 miles long. The approximate location of the distribution line is shown on REC Plan Map 2.

Within nine years of license issuance, PCWA will replace the entire French Meadows North Shore Water Supply infrastructure including drains, valves, pipe, and other items. In addition, PCWA will bring the access road up to current Forest Service standards. Road improvements will be conducted as specified in PCWA's TSMP, which is available in Supporting Document A of PCWA's Application for New License (PCWA 2011a).

PCWA will be responsible for 100% for the costs of implementing the water supply improvements, including planning and design, environmental review construction, permitting, capital costs, and maintenance over the term of the license. All improvements will be constructed in consultation with the USDA-FS and will meet current USDA-FS and State of California design standards for the specified use.

4.4 NEW PROJECT RECREATION FACILITIES

As part of this Recreation Plan, PCWA will implement improvements at select dispersed use areas and will improve or construct five trails in the vicinity of the MFP. These measures and an associated implementation schedule are summarized on REC Plan Table 2 and described in the following subsections.

4.4.1 Improvements at Select Dispersed Use Areas

PCWA will implement a number of improvements to select dispersed recreation use areas, primarily to address sanitation issues and to protect environmental resources. Specifically, PCWA will:

- Develop a primitive recreation site near the Duncan Creek Diversion Pool;
- Improve the Ralston Afterbay Sediment Access Point to facilitate boat launching; and

- Design and construct a parking area and install a toilet adjacent to the Rubicon River at Ellicott Bridge.

These improvements are described in the following subsections.

PCWA will be responsible for 100% of these improvements, including the cost of design, planning, construction, equipment, materials, and labor. These activities may be performed by PCWA, PCWA's contractors, or by the USDA-FS with funds provided by PCWA.

Duncan Creek Diversion Primitive Recreation Site

Duncan Creek Diversion is located on Duncan Creek, a tributary to the Middle Fork American River. It is located at an elevation of 5,275 feet msl, about 1.5 miles northwest of French Meadows Dam (REC Plan Map 2). The primary Project facility in the Duncan Creek area is the Duncan Creek Diversion Dam, which impounds Duncan Creek forming the Duncan Creek Diversion Pool. The pool is relatively small, with a gross storage capacity of approximately 20 acre-feet (ac-ft) and a maximum surface area of approximately 3 acres.

There are no developed Project recreation facilities in the Duncan Creek Diversion area. However, a limited amount of dispersed use occurs in the vicinity of the diversion dam and impoundment. To address sanitation issues and to reduce potential resource impacts related to dispersed recreation use near the Duncan Creek Diversion Pool, PCWA will install the following features:

- One single-unit vault, accessible, pre-fabricated vault toilet in a location to be determined in consultation with the USDA-FS;
- Barrier rocks around the perimeter of the recreation area to limit vehicle use and camping to specific areas to be determined in consultation with the USDA-FS;
- One, two-bin bear resistant garbage container; and
- One information board.

In addition, PCWA will remove hazard trees and reduce fuel loads within the designated primitive site boundaries. Hazard trees and fuel loads will be identified in consultation with the USDA-FS.

Implementation of this measure will be timed to coincide with the Duncan Creek Diversion Modifications, which is currently scheduled to occur within three years of license issuance. Additional information about the Duncan Creek Diversion Modifications is available in Volume 3, Exhibit E, Section 4.0 of PCWA's Application for New License (PCWA 2011a).

Ralston Afterbay Sediment Removal Access Point Boat Ramp

The Ralston Afterbay Sediment Removal Access Point is located along FR 23, about 700 feet south of the Ralston Afterbay Picnic Area. As shown on REC Plan Map 19, PCWA's Ralston Afterbay Sediment Removal Access Point is located at the confluence of the Middle Fork American and Rubicon rivers within Ralston Afterbay, where water levels are typically deeper than those at the Ralston Afterbay Picnic Area Car Top Boat Launch. The ramp is generally unimproved. Launching from a trailer is possible from this point. A limited amount of parking is available in the adjacent turnouts.

Currently, this ramp is not a Project recreation facility and PCWA does not prohibit its use by the public. According to the USDA-FS and PCWA's REC 3 - Reservoir Recreation Opportunities Technical Study Report (PCWA 2011a), recreation visitors sometimes utilize PCWA's Sediment Removal Access Point as an informal boat ramp to access Ralston Afterbay (REC Plan Map 19). PCWA has also observed and recorded use of this facility by the public. Therefore, PCWA will formalize this access point as a public boat launching point by:

- Delineating the boat ramp and parking area with barrier rocks or other barrier devices;
- Grading the ramp to remove large cobbles and rocks;
- Stabilize the surface of the boat ramp and parking area to control surface erosion.
- Installing signage and barriers to limit parking; and
- Installing signage directing visitors to the Ralston Afterbay Picnic Area for additional parking.

The Ralston Sediment Removal Access Point will be enhanced in conjunction with the first sediment management removal effort at Ralston Afterbay after license issuance. PCWA's sediment management program is described in the Sediment Management Plan (SMP), which is included in SD A of PCWA's Application for New License (PCWA 2011a).

Ellicott Bridge Parking Area

Within 14 years of licensee issuance, PCWA will design and construct a six-vehicle river access parking area along Forest Road 14N08 at the Ellicott's Bridge crossing of the Rubicon River. The parking area will be located on the west side of the Rubicon River, south of the Ellicott Bridge, on public land managed by the USDA-FS. The exact boundaries of this parking area will be determined in consultation with the USDA-FS and the parking areas will be designed and constructed to meet current USDA-FS standards including design for accessibility. The following describes the specific elements of this measure:

- Grade and a parking area of sufficient size to accommodate six vehicles and harden the parking area surface;
- Install barrier rocks to restrict vehicle access beyond the parking area;
- Install one pre-cast concrete toilet;
- Construct an accessible walkway from the parking area to toilet; and
- Install an informational bulletin board.

4.4.2 Trail Improvements

The MFP does not currently include any Project recreation trails. However, as part of this Recreation Plan, PCWA will implement the following measures to enhance trail opportunities in the vicinity of the MFP:

- Reconstruct and rehabilitate the Hell Hole Reservoir Trail (Forest Trail 14E02);
- Reconstruct and rehabilitate the Poppy Trail (Forest Trail 16E10);
- Construct a new trail along French Meadows Reservoir, between French Meadows Campground and French Meadows Dam (also referred to as LL Anderson Dam);
- Upgrade the existing unimproved trail between the Ralston Afterbay Picnic Area and the Middle Fork American River Gage Upstream of Ralston Afterbay;
- Upgrade the existing Duncan Creek Gage access trail below Diversion Dam Trail (13E33); and
- Construct a trail to provide access to the Middle Fork American River below Middle Fork Interbay Dam.

These measures and an associated implementation schedule are summarized on REC Plan Table 2 and described in the following subsections, organized by trail.

All trails will be constructed in consultation with the USDA-FS to meet current USDA-FS design standards for the specified use. PCWA will be responsible for 100% for the costs of implementing these trail improvements, including planning and design, environmental review construction, permitting, capital costs, and maintenance over the term of the license.

Hell Hole Reservoir Trail

Within 14 years of licensee issuance, PCWA will reconstruct and rehabilitate the Hell Hole Reservoir Trail (Forest Trail 14E02) from Hell Hole Reservoir Dam to its junction with the McKinstry Trail (Forest Trail 15E02). This trail will be designed, constructed and maintained to meet USDA-FS standards for public pedestrian use.

In addition, PCWA will develop, install, and maintain signage identifying the Hell Hole Reservoir Trail including replacing the existing signage. One sign will be placed near the west end of Hell Hole Dam and the other sign will be located at the east end of Hell Hole Dam. The information contained on these signs, mounting methods and specific mounting locations will be determined in consultation with the USDA-FS.

Poppy Trail

Within 13 years of licensee issuance, PCWA will extend the Poppy Trail (Forest Trail 16E10) from its current terminus at the Poppy Campground Trailhead Parking area to its new terminus at the McGuire Boat Ramp Parking Area (see Section 4.3.16). In addition, PCWA will rehabilitate the existing trail to Poppy Campground. This trail will be designed, constructed and maintained to meet FS standards for public pedestrian use. Motorized use of this trail will be prohibited.

As specified in Section 4.3.16, PCWA will develop, install, and maintain signage identifying the Poppy Trail to replace the existing signage. One sign will be placed in the McGuire Boat Ramp Parking Area and another sign will be placed in Poppy Campground. In addition, directional signage will be installed along the trail between the trailhead and the campground. The information contained on these signs, mounting methods and specific mounting locations will be determined in consultation with the USDA-FS.

French Meadows Reservoir Trail

Within 14 years of licensee issuance, PCWA will design and construct a trail between French Meadows Campground and French Meadows Dam. The trail will be situated on the south side of French Meadows Reservoir between the reservoir and the Forest Road 96 and will be constructed by connecting previously cleared and graded roadways. This trail will be designed, constructed and maintained to meet FS standards for public pedestrian and bicycle use. Motorized use of this trail will be prohibited with signage and barriers.

Middle Fork American River Gage above Ralston Afterbay Access Trail

Within five years of licensee issuance, PCWA will upgrade the Middle Fork American River Gage above Ralston Afterbay Access Trail, from the Ralston Afterbay Picnic Area to the Middle Fork American River Gage above Ralston Afterbay. (Note that this gage is not a Project gage.) This trail will be designed, constructed and maintained to meet USDA-FS standards for public pedestrian use. Motorized use of this trail will be prohibited with signage and barriers as described in Section 4.3.18 above.

Duncan Creek Gage below Diversion Dam Access Trail (13E33)

This trail is currently used by PCWA to access the gage below Duncan Creek Diversion Dam and is identified as a Project trail. It is currently maintained to facilitate PCWA access to the gage. Within three years of licensee issuance, PCWA will upgrade the Duncan Creek Gage access trail below Diversion Dam Trail (13E33) for public pedestrian use. This upgrade will occur concurrent with the Duncan Creek Dam

Modifications.

This trail will be designed, constructed, and maintained to meet minimum USDA-FS standards for public pedestrian use. Motorized use of this trail will be prohibited with signage and barriers.

Middle Fork American River Access Trail below Middle Fork Interbay

Within three years of license issuance, PCWA will construct a trail to provide access to the Middle Fork American River below Middle Fork Interbay Dam. This trail will be constructed concurrent with the installation of a new Project gage to be located approximately 900 feet downstream of Middle Fork Interbay Dam. The trail will extend from an existing unpaved turnout located along Middle Fork Interbay Dam Road (Forest Road 96-17), approximately 200 feet to the Middle Fork American River Gage below Interbay Gage.

This access trail will be designed, constructed and maintained to facilitate PCWA access to the gage and to meet minimum (primitive) USDA-FS standards for public pedestrian use, with consideration to the site-specific design constraints (e.g. steep slopes). Motorized use of this trail will be prohibited with signage and barriers.

4.5 PERIODIC RECREATION USE MONITORING, VISITOR SURVEYS, AND REPORTING

Beginning in the second year following license issuance (2014), and every six years thereafter consistent with the Form 80 reporting cycle, PCWA will: conduct a Recreational Survey and Recreation Demand Assessment, and prepare a Report on Recreational Resources that is approved by the USDA-FS.

- The Recreational Survey shall include, but not be limited to, changes in kinds of use and use patterns, levels of use, user survey as to preferences in recreation activities, kinds and sizes of recreational vehicles, preference for day use versus overnight use, carrying capacity information sufficient to indicate changes in capacity, and recreation user trends within the MFP area.
- The Recreation Demand Assessment shall include, but not be limited to, use information and occupancy rates at each of the recreation facilities.
- The Report on Recreational Resources shall be provided to the USDA-FS for review and comment prior to being filed with FERC. Within 1 year of submission of the Report on Recreation Resources, PCWA will meet with the USDA-FS to discuss the results of the report and make recommendations to address the findings.

Combined, this information will be utilized to determine use levels at each of the MFP recreation facilities and to assess the demand (need) for additional facilities and/or amenities. The USDA-FS reserves the authority to propose changes in the Project and its operation to accomplish protection and utilization of National Forest System lands and resources identified as a result of these surveys. These efforts are described in the following subsections.

4.5.1 Recreation Use Monitoring

PCWA will collect and compile recreation use data to estimate recreation use at each of the MFP recreation facilities identified in REC Plan Table 1 and any new facilities developed as part of this plan. Recreation use will be estimated using the following data sources, if available, and depending upon completeness:

- Recreation use and campground occupancy data that may be available from the TNF, ENF, and/or concessionaires; and
- Iron ranger data for campgrounds.

If use data is not available from these sources, then PCWA will conduct vehicle counts to estimate recreation use, except in the following cases where use will be estimated using data collected at self-registration boxes and staff observations.

- Poppy Campground and Trail;
- Hell Hole Reservoir Trail;
- Dispersed Use in Vicinity of Former Upper Hell Hole Campground; and
- French Meadows Reservoir Trail.

These efforts are described in the following subsections.

Vehicle Counts

The vehicle counts will be conducted according to the same timing and protocols that were used in 2007 and 2008, when PCWA conducted vehicle counts as part of the MFP relicensing studies. Using similar protocols will facilitate comparison between data sets.

To capture the peak recreation season, the vehicle counts will be conducted for approximately a 14-week period extending from the Friday before Memorial Day to Labor Day Monday. This period may be modified from survey year to survey year, depending upon road conditions (e.g., presence of snow, road closures).

The vehicle count sampling schedule will be pre-established based on a random selection process in consultation with the TNF and ENF. Sampling days, starting points, and route direction will all be randomly selected. The selection of vehicle count days and time blocks will be selected in accordance with the following criteria:

- One weekday per week;
- One weekend day per week; and
- One additional day during each of the three day holiday periods (Memorial Day, Fourth of July, and Labor Day).

Sampling will occur during two six-hour time blocks. The AM time block will be defined as 8:00 AM to 2:00 PM. The PM block will be defined as 2:00 PM to 8:00 PM. The vehicle counts will be conducted by field technicians who will be instructed to visit every sampling site in accordance with the pre-established schedule. The field technicians will record the numbers of vehicles by type at every location and will record the data on pre-established forms.

The vehicle count data will be entered into Microsoft Excel or other similar software, tabulated by survey day and subsequently checked for data entry errors. Ultimately, the vehicle count data will be used to estimate use in Recreation Days (RD). An RD is a visit to a development for recreational purposes during any portion of a 24-hour day.

Self Registration Boxes

Poppy Campground and the Upper Hell Hole Campground area are not accessible by motor vehicle. Therefore, PCWA will monitor use in these two locations using self registration boxes. Similarly, PCWA will monitor use along the Poppy Trail, the Hell Hole Reservoir Trail, and French Meadows Reservoir Trail using self registration boxes. These efforts are described in the following subsections.

Poppy Campground and Poppy Trail

To estimate use at Poppy Campground, PCWA will install and maintain a self-registration box at the new Poppy Campground Trail trailhead. The self registration box will consist of a painted steel weatherproof box mounted on a painted steel post. The box will contain forms and writing implements. The forms will be used to collect the following information: name, date, number in party, destination, and length of stay. The forms will be collected and compiled by PCWA staff and provided to the USDA-FS.

Availability of the registration forms will be maintained from Memorial Day through Labor Day, weather and access permitting. The information will be collected in coordination with the periodic recreation use surveys and Form 80 reporting cycle described above.

Dispersed Use in the Vicinity of Upper Hell Hole Campground and Along Hell Hole Reservoir Trail

The USDA-FS expressed an interest in monitoring dispersed use in the vicinity of the Upper Hell Hole Campground after it is removed. This area is only accessible by foot or by boat. Therefore, dispersed recreation use in the vicinity of the former Upper Hell Hole Campground will be estimated using self-registration boxes, augmented by staff observations. Specifically, PCWA will install and maintain self-registration boxes at the Hell Hole Reservoir Trailhead and in the Hell Hole Boat Ramp Parking area. The self registration boxes and forms will be similar to those described above. The forms will be collected and compiled by PCWA staff and provided to the USDA-FS. Use data collected at the Hell Hole Reservoir Trailhead will also be used to estimate use of the Hell Hole Reservoir Trail.

Availability of the registration forms will be maintained from Memorial Day through Labor Day, weather and access permitting. The information will be collected in coordination with the periodic recreation use surveys and Form 80 reporting cycle described above.

French Meadows Reservoir Trail

To estimate use along the French Meadows Reservoir Trail, PCWA will install and maintain a self-registration box at both ends of the trail (e.g., the trailhead located at French Meadows Campground and a trailhead located near French Meadows Dam). The self registration boxes and forms will be similar to those described above. The forms will be collected and compiled by PCWA staff and provided to the USDA-FS. Availability of the registration forms will be maintained from Memorial Day through Labor Day, weather and access permitting. The information will be collected in coordination with the periodic recreation use surveys and Form 80 reporting cycle described above, augmented by staff observations.

4.5.2 Visitor Surveys

PCWA will also conduct visitor surveys in conjunction with the vehicle counts. In general, the visitor surveys will be conducted at the developed MFP recreation facilities identified in REC Plan Table 1 and at any new recreation facilities developed as part of this plan. However, the survey effort may be expanded to include select dispersed concentrated use areas, if needed, based on observations made by either PCWA or USDA-FS staff and on information needs. In general, the survey effort will focus on facilities and areas where observations and anecdotal information suggest a need for more information. To capture the peak recreation season, the visitor surveys will be conducted for approximately a 14-week period extending from the Friday before Memorial Day to Labor Day Monday. This period may be modified from survey year to survey year, depending upon road conditions (e.g., presence of snow, road closures).

The specific locations to be surveyed will be identified in consultation with the USDA-FS during the annual coordination meetings described in Section 7.1. In addition, the survey instrument and administration protocols (e.g., sampling frequency, number of surveys to be collected, sampling schedule) will be developed in consultation with the USDA-FS. Development of the survey instrument and administration protocols will be initiated at the annual coordination meeting one year prior to the surveys, but is expected to be an iterative process that may involve additional meetings with the USDA-FS.

4.5.3 Reporting of Recreation Use and Survey Data

The recreation use and survey data collection methods and results will be incorporated into a Report on Recreation Resources, which is described in Section 8.2. In addition, the recreation use and survey data will be used to fulfill and support PCWA's Form 80 filing requirements, as described in Section 8.3.

4.6 RESOURCE PROTECTION MEASURES

Avoidance and protection measures were developed to address potential effects related to the specific measures contained in this Recreation Plan. This includes potential effects on water quality from erosion, sedimentation, hazardous materials, and bacteria and chemicals associated with solid waste disposal; effects on biological resources during construction activities and from powerline design; and effects on personnel and

surrounding land use and vegetation communities/habitats from fire. In general, the approach for avoiding potential effects was to develop measures that:

- Incorporate applicable USDA-FS Best Management Practices (BMPs) (USDA-FS 2000);
- Define work areas to avoid sensitive environmental or cultural resources;
- Establish limited operation periods;
- Develop protective buffer areas; and
- Establish preventative measures.

A list of resource protection measures that PCWA will implement in relation to the specific measures outlined in this Recreation Plan is presented in REC Plan Table 3. The BMPs contained in REC Plan Table 3 are based on the USDA-FS Water Quality Management for Forest System Lands in California – Best Management Practices (2000). PCWA understands that this document is currently under revision. Any activities that are implemented as part of this Recreation Plan will utilize the USDA-FS BMPs that are in place when the activity is implemented.

4.6.1 Revegetation

This plan includes the removal of Project recreation facilities. Accordingly, PCWA will treat barren and compacted areas in a manner approved by the USDA-FS to promote natural revegetation. PCWA will subsequently monitor natural revegetation and for the presence of noxious weeds in each area where facilities or amenities are removed. Monitoring will occur once annually after the modifications are completed until it is determined in consultation with the USDA-FS that a site has been successfully revegetated. Annual monitoring reports will be submitted to the USDA-FS no later than 60 days following completion of monitoring for review and comment. In the event that revegetation is unsuccessful or noxious weeds become established, PCWA will consult with the USDA-FS to identify alternative revegetation and/or noxious weed control measures.

5.0 MEASURES TO ENHANCE PROJECT RECREATION OPPORTUNITIES

This section describes the recreation measures/commitments that PCWA will implement over the term of the license to enhance Project recreation opportunities including:

- Dissemination of real-time flow information in the bypass and peaking reaches;
- MFP fall maintenance outage plan distribution;
- Oxbow Powerhouse day-ahead schedule distribution;
- Dissemination of reservoir WSE information;

- Development and distribution of recreation opportunity marketing information; and
- Fish stocking in large Project reservoirs.

These measures are described in the following subsections.

5.1 DISSEMINATION OF REAL-TIME FLOW INFORMATION

PCWA will provide real-time flow information to the public in 15-minute recording intervals using data available from ten stream gages, which are shown on REC Plan Map 21 and identified as follows:

- Rubicon River Gage above Ellicott Bridge (RREB);
- Rubicon River Gage above Ralston Powerhouse (RRRP);
- South Fork Long Canyon Creek Gage below Diversion Dam (SFLCC);
- North Fork Long Canyon Creek Gage below Diversion Dam (NFLCC);
- Duncan Creek Gage below Diversion Dam (USGS Gage No. 11427750);
- Middle Fork American River Gage at French Meadows Dam (USGS Gage No. 11427500);
- Middle Fork American River Gage above Middle Fork Powerhouse (USGS Gage No. 11427760);
- Middle Fork American River Gage below Interbay Dam (MFARIB);
- Middle Fork American River Gage near Foresthill (USGS Gage No. 11433300) also known as Middle Fork American River Gage below Oxbow Powerhouse and referred to by the California Data Exchange Center (CDEC) as OXB; and
- North Fork American River Gage above American River Pump Station (NFARPS).

PCWA will provide real-time (15-minute) flow data for each of these sites on a website to be developed and maintained by PCWA. PCWA will also make the data available to CDEC but cannot guarantee that CDEC will post the data. Real-time flow data for one of the above gages, USGS Gage No. 11433300 is already collected and provided to the public via the internet by CDEC.

The data provided on PCWA's website will be similar in format to data available from the U.S. Geological Survey (USGS). Specifically, the flow data on PCWA's webpage will show the most recent 14 days of flow information in 15-minute recording increments. Previously collected data will be provided as daily mean flow. In addition, the website will include a tool that allows viewers to select and graph flow data for specific time

periods. It is important to note that this data will not have been checked for accuracy by PCWA or the USGS before posting. Therefore, the data may be subject to change. All streamflow values may be rounded to the nearest cubic feet per second (cfs), and any plots or tables showing these data may be labeled with the following or similar language: "These provisional stream flow data have not been reviewed or edited for accuracy and may be subject to significant change."

In addition to providing flow information, PCWA will provide the following information on the website:

- Notification that one (or more) of the Project reservoirs is spilling or that a spill event is eminent (if projectable);
- Notification of a special release, for example pulse flows released for channel and riparian maintenance purposes, as far in advance as feasible;
- A matrix showing when hydro-generation flows released from Oxbow Powerhouse will arrive downstream at the following specific locations in the peaking reach: Fords Bar, Ruck-a-Chucky Recreation Area, Mammoth Bar, Poverty Bar, the Confluence, Birdsall Access, and Oregon Bar Access Point. The matrix will be developed using travel time information developed as part of the MFP relicensing studies. An example travel time matrix is shown on REC Plan Table 4. This example matrix was developed using a travel time of 2.5 miles per hour, a base flow of 200 cfs, and a peak flow of 1,000 cfs. The new matrix will be adjusted based on the flow regime specified in PCWA's new license.
- Links to pertinent websites, for example, the CDEC, USGS, and USDA-FS websites.

In addition, PCWA will provide the public with the MFP fall maintenance outage plan and an Oxbow day-ahead schedule as described in the following subsections.

5.2 MFP FALL MAINTENANCE OUTAGE PLAN DISTRIBUTION

By May 1, PCWA will post to the MFP Recreation website, the timing and duration of the annual planned maintenance outage for the Middle Fork, Ralston and Oxbow powerhouses. PCWA will update its proposed outage schedule as necessary in order to provide predictability for recreational uses and special events (e.g., Horseshoe Bar Wounded Warrior Event, angling, hiking, equestrian riding, and whitewater boating). PCWA will update the planned outage information on the website if conditions or maintenance requirements change between May 1 and the beginning of the outage. PCWA will post a final fall outage schedule by September 1.

5.3 OXBOW POWERHOUSE DAY AHEAD SCHEDULE DISTRIBUTION

The objective of this measure is to provide forecasting of flows for the following day to inform the public about flow changes to help recreation users identify recreation

opportunities for activities such as angling, water play, whitewater boating, and equestrian use.

By 6 PM on Monday, Tuesday, Wednesday, and Thursday, PCWA will post to its MFP Recreation website a flow schedule based on the generation schedule submitted to the California Independent System Operator (CAISO) for Oxbow Powerhouse for the 24 hour period beginning at 12:01 AM of the subsequent day. By 6 PM on Friday, Licensee will post to its MFP Recreation website a flow schedule based on the generation schedule submitted to the CAISO for Oxbow Powerhouse for the period beginning at 12:01 AM Saturday and continuing through 11:59 PM Monday.

This condition will be in effect when Oxbow Powerhouse is in operation. The published schedule is subject to change based on electrical demand and market conditions, changes in inflow to Ralston Afterbay due to project operations, CAISO instructions, weather events, or any unforeseen events that affect energy production or energy dispatch planning. This condition will become null and void should there be a change in the CAISO energy scheduling rules or protocols that dictate altered scheduling practices by generation asset owners. In this case, PCWA will consult with the resource agencies to develop a revised generation schedule notification process consistent with the objectives of this measure.

5.4 DISSEMINATION OF RESERVOIR WATER SURFACE ELEVATION (WSE INFORMATION)

PCWA will provide daily WSE information at French Meadows and Hell Hole reservoirs to the public on a PCWA website. The information provided on the internet will be based on data collected at the following two gages:

- French Meadows Reservoir Gage (USGS Gage No. 11427400); and
- Hell Hole Reservoir Gage (USGS Gage No. 11428700).

The WSE data on PCWA's webpage will show the most recent six months of daily information.

In addition to providing WSE information, PCWA will provide the following information on the website:

- Example photographs or other appropriate technology, showing the reservoir conditions at various WSEs; and
- Information about whether the boat ramps are functional based on the current WSE. This information will be provided until the boat ramps are extended, at which point PCWA will discontinue posting this information because it will no longer be relevant.
- Links to pertinent websites, for example, the CDEC, USGS, and USDA-FS websites.

5.5 RECREATION OPPORTUNITY MARKETING INFORMATION

Within 3 years of license issuance, PCWA will develop marketing materials regarding recreation opportunities available in the vicinity of the MFP in consultation with the appropriate land management agencies. The marketing material will include: (1) Geographic Information System (GIS)-based maps showing the locations of the developed Project recreation facilities and the access roads and trails in the vicinity of the MFP; (2) Project vicinity trail maps; and (3) information brochures as specified in the following subsections.

5.5.1 GIS-Based Maps

PCWA has developed a GIS-based, color map showing the locations of developed Project recreation facilities and the access roads and trails in the vicinity of the MFP. In addition, PCWA has developed GIS-based maps that graphically depict the layout of each of the developed Project recreation facilities on an orthophothographic background. Following approval by the appropriate land management agencies, PCWA will provide electronic copies of these maps to the following organizations for posting on their respective websites the following information sites:

- USDA-FS, ENF;
- USDA-FS, TNF;
- Bureau of Reclamation (BOR);
- Bureau of Land Management (BLM);
- California Department of Parks and Recreation (CDPR);
- Auburn Chamber of Commerce;
- Foresthill Divide Chamber of Commerce; and
- Georgetown Divide Chamber of Commerce.

In addition, these maps will be posted on a PCWA website, under a link titled "Recreation Opportunities in the Vicinity of the MFP."

5.5.2 Trail Maps

PCWA will develop a GIS-based map showing the locations of the primary trails in the vicinity of the MFP. This map will be developed in consultation with the USDA-FS, BOR, and BLM. Upon approval, the map will be laminated and posted on existing information kiosks located at the developed Project recreation facilities. The purpose of this measure is to provide recreation users with information about trail opportunities in the vicinity of the MFP. In addition, PCWA will provide electronic copies of these maps to the FS, BLM, Reclamation, and CDPR for posting on their respective websites.

5.5.3 Brochure

PCWA will create a color brochure highlighting the recreation resources in the vicinity of the MFP, including travel routes and information about the MFP Project facilities, and resources protection concerns. The brochure will be developed in consultation with the USDA-FS, the BLM, BOR, the Auburn Chamber of Commerce, the Foresthill Divide Chamber of Commerce, and the Georgetown Divide Chamber of Commerce. The brochure will be approved by the land management agencies prior to publishing.

PCWA will provide electronic copies of the brochure to the ENF, the TNF, the BLM, the BOR, and to each of the Chambers listed above for posting on their information web sites. In addition, each year, PCWA will provide paper copies of the brochure to the ENF, the TNF, and to each of the Chambers for distribution to the public through their local offices, in the following quantities.

- ENF Supervisor's Office – 100 copies;
- ENF, Georgetown District Office –150 copies;
- TNF, Foresthill District Office – 250 copies;
- BOR Central California Area Office – 250 copies;
- CDPR Auburn Sector Office – 500 copies;
- Auburn Chamber of Commerce – 250 copies;
- Foresthill Divide Chamber of Commerce – 250 copies;
- Georgetown Divide Chamber of Commerce – 100 copies; and
- California Welcome Center in Auburn – 100 copies.

PCWA will provide the paper copies of the brochures to each entity by May 1 of each year so that the brochures are available to the public by the beginning of the peak recreation season. Before printing, PCWA will consult with the USDA-FS, the BOR, the BLM, and the Chambers to determine whether the quantity of brochures being supplied is appropriate based on the previous year's distribution. The number of copies produced and supplied to the USDA-FS and the Chambers may be adjusted based on this consultation. Project recreation brochures will be provided to other entities upon request.

5.6 FISH STOCKING

PCWA will fund the stocking of fish in Hell Hole and French Meadows Reservoirs on an annual basis during the term of the new license. The fish stocking program will be supported at a rate equivalent to 100 percent of CDFG's annual management targets

for Hell Hole and French Meadows reservoirs or 100 percent of the historical average stocking into these reservoirs (2001-2009)¹, whichever is less. Fish species and size class stocking targets shall be determined by CDFG. If new regulatory requirements result from the American River Watershed Methylmercury TMDL and Basin Plan Amendment, or other regulatory actions related to fish stocking/species in French Meadows or Hell Hole reservoirs, then PCWA and CDFG will consult to determine the appropriate course of action.

At the PCWA's discretion, PCWA will either: (1) acquire the fish directly from private fish hatcheries approved by CDFG; or (2) reimburse CDFG for the cost of the stocking program in Hell Hole and French Meadows reservoirs based on the criteria described above. PCWA will consult with the CDFG annually to determine fish species and stocking targets, fish acquisition, and verify the completion of the previous year's stocking commitment.

6.0 IMPLEMENTATION SCHEDULE

The measures described in this Recreation Plan will be implemented as described in the individual sections of this Recreation Plan and in accordance with the implementation schedule shown on REC Plan Table 2. The implementation schedule assumes that a new license is issued in 2013 and considers the time required to conduct the following activities in coordination with the USDA-FS:

- Develop design narrative, conceptual drawings, and conduct resource check-in (typically a 1 month process);
- Conduct site surveys and develop AutoCad drawings (typically conducted over a 2 - 3 month period during the summer);
- Develop detailed designs and contract package (typically a one year process);
- Contract advertisement and award (typically a 3–6 month process); and

¹ The average annual number of fish stocked in Hell Hole and French Meadows reservoirs from 2001 through 2009 is shown on REC Plan Table 6 and REC Plan Table 7, respectively and summarized in the following:

Hell Hole Reservoir

Brown Trout – During the 2001–2009 period, an annual average of 5,500 (approximately 2,750 pounds) catchable brown trout were stocked.

Kokanee salmon – During the 2001–2009 period, an annual average of approximately 24,600 fingerling Kokanee salmon were stocked.

French Meadows Reservoir

Rainbow Trout – During the 2001–2009 period, an annual average of 10,500 (approximately 5,250 pounds) catchable rainbow trout were stocked.

- Construction (primarily do be conducted during the summer or late fall, except at lower elevations where weather conditions may allow for construction during the spring and fall periods).

The implementation schedule will be maintained and updated, as appropriate, as facility improvements are made, and to reflect changes that may be required based on: (1) the results of the recreation use monitoring and visitor surveys described in Section 4.5 of this plan; or (2) mutually agreed upon adjustments that are made during the Annual Coordination Meeting (Section 7.1). Where feasible, recreation facility improvements will be scheduled to coincide with other MFP facility improvements such as diversion dam modifications or new gage installation. Minor adjustments to the implementation schedule are expected and will not trigger a Recreation Plan revision. Major changes to the implementation schedule will be documented in a Revised Recreation Plan, as discussed in Section 10.0.

7.0 CONSULTATION

The measures identified in the Recreation Plan will be implemented in consultation with the appropriate land and resource management agencies, as specified in the following:

- PCWA will consult with the USDA-FS annually to discuss the upcoming year's operations, routine annual and heavy maintenance activities, and appropriate resource protection measures;
- PCWA will consult with the CDFG on an annual basis regarding fish stocking at French Meadows and Hell Hole reservoirs; and
- PCWA will consult with the USDA-FS regarding the need for facility modifications, conversions, or new recreation facilities. This consultation will occur every six years (i.e., on the Form 80 reporting cycle), when use and survey data results are available.

7.1 ANNUAL COORDINATION MEETING

Each year, during the term of the license, PCWA will arrange to meet with the USDA-FS to discuss the following topics:

- Review the measures outlined in this plan and the associated implementation schedule;
- Identify activities accomplished during the previous year;
- Discuss work to be accomplished during the upcoming year, including design, survey, contracting, and construction activities;
- Discuss potential adjustments to the implementation schedule, if necessary;

- Discuss routine operation, maintenance and administration accomplishments, adequacy of routine O&M funds, and any modifications needed to the funding provided, and
- If available, review current recreation use and visitor survey data with respect to the measures outlined in this plan.

The date of the meeting will be mutually agreed to by PCWA and the appropriate agencies but, in general, will be held within the first 60 days of each calendar year.

PCWA will document the meeting discussion in the form of a meeting summary. The meeting summary will document the discussion and any agreements. PCWA will provide the USDA-FS with a draft version of the meeting summary within two weeks of the meeting for review and approval. Upon approval, PCWA will file the meeting summary with the FERC within 30 days.

8.0 REPORTING

PCWA will document progress related to implementation of this recreation plan on an annual basis. In addition, every six years PCWA will develop and file with the FERC: (1) a Report on Recreation Resources; and (2) Form 80. The contents of these reports are described in the following subsections.

8.1 ANNUAL REPORTING

The purpose of the annual report is to document implementation of and compliance with the Recreation Plan. Beginning two years after license issuance, PCWA will prepare a brief annual report documenting the implementation of the Recreation Plan and any other activities involving or related to recreation resources, including the results of the annual coordination meeting described above. The annual report will be distributed for review and comment to the ENF, the TNF, and other pertinent land and resource management agencies and subsequently filed with the FERC within 30 days of obtaining approval by the pertinent land and resource management agencies.

8.2 REPORT ON RECREATION RESOURCES

Every six years, PCWA will prepare a Report on Recreation Resources. At a minimum the report will include the following information:

- An overview of the recreation resources in the vicinity of the MFP for contextual purposes;
- A brief description of the MFP recreation facilities, including current capacity information;
- A summary of recreation use associated with the MFP recreation facilities, as determined through vehicle counts or through occupancy and use records provided by the land management agencies;

- Recreation facility capacity utilization information;
- Recreation visitor survey methods and results; and
- Visitor trends and preference information as derived through the survey effort and other data sources.

A draft version of the Report on Recreation Resources will be provided to the appropriate land management agencies by December 1st of the reporting year for a 60-day review and comment period, ending on or around February 1st. Comments on the draft report will be addressed in a final report, as appropriate, and subsequently filed with the FERC, along with Form 80, by April 1st. The final Report on Recreation Resources will be concurrently distributed to the appropriate land and resource management agencies.

The results of the report will be discussed with the USDA-FS the subsequent Annual Coordination Meeting (Section 7.1). The results of the report will be utilized to determine whether changes to the Recreation Plan are warranted.

8.3 FORM 80

Current FERC regulations (CFR 18 § 8.11) require that PCWA prepare and file a Form 80 Licensed Hydropower Development Recreation Report every six years after license issuance. According to the FERC's regulations, this report should be based on data compiled during the previous calendar year. PCWA filed a Form 80 Recreation Report in 2009. Accordingly, the next Form 80 Report will be filed in 2015 (by April 1), and every six years thereafter. Form 80 will be filed along with the Report on Recreation Resources so that the report can be used as supporting information.

9.0 FUTURE PROJECT RECREATION FACILITY ENHANCEMENTS

There may be a need to reduce, expand, or convert an existing Project recreation facility or to construct new facilities, based on changing recreation use levels or needs over the term of the license. These types of changes will be determined in consultation with the ENF and the TNF. The need for future Project recreation facility enhancements will be determined based on "triggers" and will not be implemented until the appropriate environmental review is completed, as discussed in the following subsections.

9.1 TRIGGERS FOR ENHANCEMENT ACTIONS

Use data provided by the land management agencies and use estimates developed by PCWA will be used along with facility capacity information to determine when facility enhancements are necessary in the future. In addition, the following types of information will be considered:

- Current demographic data;
- Current, locally pertinent, published trends information regarding recreation use patterns and needs; and

- Data collected through site-specific visitor surveys.

Use estimates and site occupancy (facility capacity) information will be used to determine whether any of the existing facilities are at or approaching capacity. If the use monitoring data indicates that the seasonal occupancy rate of any of the developed Project recreation facilities has reached 75% capacity on weekends from Memorial Day through Labor Day (inclusive), PCWA will collect additional use data at that facility the following year. If the use data indicates that capacity of that facility has reached 75% during the second year, PCWA will collect a third year of data at that facility. This effort may be combined with site-specific visitor surveys if additional information is needed regarding visitor needs and the types of improvements that may be necessary.

When the seasonal occupancy rate on weekends from Memorial Day weekend through Labor Day weekend (inclusive) reaches 75% for three consecutive years, or if the seasonal occupancy rate in the third year does not exceed 75 percent but is above 50 percent and there is a clear reason for the lower occupancy rate, PCWA will enter into discussions with the USDA-FS about the appropriate improvements needed to expand facility capacity. Capacity could be increased by expanding the capacity of the facility in question, by converting a nearby under-utilized facility, or by constructing a new facility.

Potential recreation facility expansions or conversions will be discussed with the appropriate land management agencies during the Annual Coordination Meeting, with consideration to the applicable use and survey data. Any agreed upon actions will be documented in an amendment to this Recreation Plan, and after approval by the USDA-FS, will be filed with the FERC for approval. PCWA will be responsible for the design and construction of any facility expansions or conversions identified in the Revised Recreation Plan and potential increases to administrative and/or operations and maintenance funding.

9.2 ENVIRONMENTAL REVIEW

Future Project activities not evaluated in FERC's National Environmental Policy Act (NEPA) document regarding issuance of a new license for the MFP will need to undergo separate environmental review.

10.0 PROCESS FOR UPDATING THE RECREATION PLAN

PCWA will consult with the appropriate land and resource management agencies to determine if modification of the Recreation Plan is appropriate, based on the use data, survey data, and facility assessment information. Upon agreement, PCWA will develop a Revised Recreation Plan and Revised Implementation Schedule, and will provide a draft version of the revised plan and schedule to the appropriate land and resource management agencies for review, comment, and approval. Upon completion of the review and approval process, PCWA will file the Revised Recreation Plan and Revised Implementation Schedule with FERC for approval along with consultation documentation and any other pertinent information that supports the plan revisions. The Revised Recreation Plan and schedule will be in effect upon approval by FERC.

11.0 DISPUTE RESOLUTION

The measures contained in this Recreation Plan enhance recreation resources and opportunities on National Forest Lands and other public lands in the vicinity of the MFP, while protecting nearby resources. Therefore, PCWA does not expect to substantially revise the Recreation Plan or modify the measures contained in this Recreation Plan. Potential revisions to the Recreation Plan will be considered in consultation with the appropriate land and resource management agencies during the Annual Coordination Meeting, based on recreation use and survey data. However, if during the term of the license, a land or resource management agency requests or identifies new facilities or measures that are not identified in this Recreation Plan, PCWA will schedule a meeting to discuss the measure and the basis for the measure. If reasonable, PCWA will revise the Recreation Plan as appropriate, in accordance with the procedures identified in Section 10.0.

If at any time during implementation of this Recreation Plan a land management agency objects to any action or failure to act pursuant to this Recreation Plan they may file written objections with PCWA and/or FERC. PCWA will consult with the objecting agency to resolve the objection. PCWA will take into account any agency recommendations for resolution of the objections and if deemed feasible and appropriate will implement the recommendations to resolve the objection. If the objection is resolved, no further action is necessary. All records of any dispute and resolution will be filed with FERC.

If the objection cannot be resolved, PCWA will notify the FERC and will request the FERC to intervene regarding the dispute, and will provide the FERC with supporting information, as needed.

12.0 LITERATURE CITED

Federal Energy Regulatory Commission (FERC). April 11, 2008. Letter from FERC to PCWA. Request for Additional Information.

Placer County Water Agency (PCWA). 2007. Placer County Water Agency – Middle Fork American River Project – Pre-Application Document.

_____. 2010. Invasive Mussel Protection Plan. Middle Fork American River Project (FERC No. 2079).

_____. 2011a. Application for New License – Middle Fork American River Project (FERC Project No. 2079). Filed February 23, 2011.

_____. 2011b. Draft Historic Properties Management Plan. Filed with FERC May 12, 2011.

_____. 2011c. Vegetation and Integrated Pest Management Plan (VIPMP). July 2011.

_____. 2011d. Instream Flow and Reservoir Minimum Pool Measure. July 2011.

_____. 2011e. Sediment Management Plan. July 2011.

United States Department of Agriculture-Forest Service, Pacific Southwest Region.
September 2000. Water Quality Management for Forest System Lands in
California – Best Management Practices.

TABLES



REC Plan Table 1. Project Recreation Facilities and Features.

Existing Project Recreation Facilities
French Meadows Reservoir Area
Ahart Campground
Coyote Group Campground
French Meadows Boat Ramp
French Meadows Picnic Area
French Meadows Campground
French Meadows RV Dump Station ¹
Gates Group Campground
Lewis Campground
McGuire Picnic Area and Beach (To be converted to McGuire Group Campground as part of Recreation Plan.)
McGuire Boat Ramp and Associated Parking
Poppy Campground
Hell Hole Reservoir Area
Big Meadows Campground
Hell Hole Campground
Hell Hole Boat Ramp
Hell Hole General Parking Area and Hell Hole Boat Ramp Parking Area
Hell Hole Vista
Upper Hell Hole Campground (To be removed as part of Recreation Plan.)
Ralston Afterbay Area
Ralston Afterbay Picnic Area and Cartop Boat Ramp
Ralston Afterbay Sediment Removal Access Point Boat Launch (Existing Project facility to be upgraded for public use.)
Indian Bar River Access
Long Canyon Area
Middle Meadows Group Campground
Project Recreation Facility Water Supplies
Big Meadows Campground Water Supply
French Meadows Reservoir North Shore Water Supply (Dolly Creek Water Supply)
French Meadows Reservoir South Shore Water Supply (French Meadows Campground Water Supply)
Middle Meadows Group Campground Water Supply
New Project Recreation Facilities, Features, or Trails Identified in Recreation Plan
Duncan Creek Diversion Area
Duncan Creek Diversion Primitive Recreation Site (New)
Duncan Creek Gage below Diversion Dam Access Trail (13E33) (Existing Project trail to be upgraded for public pedestrian)
French Meadows Reservoir Area
McGuire Group Campground (Formerly McGuire Picnic Area and Beach)
Ralston Afterbay Sediment Removal Access Point Boat Ramp (Existing Project facility to be upgraded for public recreation)
Poppy Trail (16E10) (Existing trail, added to Project)
French Meadows Reservoir Trail (New)
Hell Hole Reservoir Area
Hell Hole Reservoir Trail (14E02.3) (Existing trail, added to Project)
Ellicott Bridge Parking Area (New)
Middle Fork Interbay Area
Middle Fork American River Access Trail below Middle Fork Interbay (New)
Ralston Afterbay Area
Middle Fork American River Gage above Ralston Afterbay Access Trail (Existing unimproved trail, added to Project)

¹Facility was maintained under the current license, but was not listed as a Project facility.

REC Plan Table 2. Summary of Recreation-related Measures and Implementation Schedule.

Facility Name	Measure									Implementation Schedule (Years After License Issuance)															
	Facility Enhancements	Redesign/Reconstruct Select Elements	Facility Removal	Facility Reduction	Facility Conversion	Facility Consolidation	Replace Infrastructure	New Facility or Trail	Trail Improvements	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
French Meadows RV Dump Station	X																								
French Meadows South Shore Water Supply (French Meadows Campground Water Supply)							X																		
French Meadows Campground	X	X		X																					
Ralston Picnic Area and Cartop Boat Ramp	X	X		X																					
Middle Fork American River Gage above Ralston Afterbay Access Trail									X																
Ralston Afterbay Sediment Removal Access Point Boat Launch	X													(To be implemented after first sediment removal activity)											
French Meadows Picnic Area	X	X		X																					
French Meadows Boat Ramp Extension	X																			(Construct 6 yrs after license issuance, when WSE = 5,165' MSL)					
Hell Hole Boat Ramp Extension	X																			(Construct 6 yrs after license issuance, when WSE = 4,475' MSL)					
Hell Hole General Parking Area and Hell Hole Boat Ramp Parking Area	X																								
Hell Hole Boat Ramp Potable Water	X																								
Upper Hell Hole Campground			X																						
Duncan Creek Diversion Primitive Recreation Site (Schedule coincides with Duncan Creek Diversion Modification)								X																	
Duncan Creek Gage below Diversion Dam Access Trail (13E33) (Schedule coincides with Duncan Creek Diversion Modification)									X																
Indian Bar River Access	X																								
McGuire Picnic Area and Beach (To be converted to McGuire Group Campground)					X																				
French Meadows North Shore Water Supply (Dolly Creek Water Supply)							X																		
Lewis Campground	X	X		X																					
Hell Hole Campground (Conversion or reduction dependant upon surveys.)	X			P	P																				
Big Meadows Campground	X																								
Gates Group Campground	X	X																							
Ahart Campground	X	X		X																					
Hell Hole Vista	X																								
Poppy Campground	X	X		X																					
Poppy Trail									X																
McGuire Boat Ramp	X																								
McGuire Boat Ramp and Associated Parking Areas	X		X			X																			
Coyote Group Campground	X	X																							
Hell Hole Reservoir Trail									X																
Middle Fork American River Access Trail below Middle Fork Interbay									X	X															
Ellicott Bridge Parking Area									X																
French Meadows Reservoir Trail									X	X															

Color Codes
 Planning and Design 
 Construct 
Notes
 P = Potential

REC Plan Table 3. USDA-FS Best Management Practices and Avoidance and Protection Measures.

	Routine Annual (A) and/or Heavy (H) Maintenance	Modification and Enhancement of Existing Project Recreation Facilities																				Improvements at Select Dispersed Use			Trail Improvements													
		Upper Hell Hole Campground	Hell Hole Campground	Big Meadows Campground	Hell Hole Vista and Associated Parking Area	Hell Hole Boat Ramp and Associated Parking Areas	Hell Hole Boat Ramp Extension	Anart Campground	French Meadows Campground	Lewis Campground	Poppy Campground	Coyote Group Campground	Gates Group Campground	French Meadows Picnic Area and Boat Ramp	French Meadows Boat Ramp Extension	French Meadows RV Dump Station	McGuire Boat Ramp and Associated Parking Areas	McGuire Picnic Area and Beach	Ralston Picnic Area	Indian Bar Rafting Access	French Meadows South Shore Water Supply (FM CG Water Supply)	French Meadows North Shore Water Supply (Dolly Creek Water Supply)	Duncan Creek Diversion Primitive Recreation Site	Ralston Afterbay Sediment Access Point Boat Launch	Ellicott Bridge Parking Area	Middle Fork American River Access Trail below Middle Fork Interbay	Hell Hole Reservoir Trail	Poppy Trail	French Meadows Reservoir Trail	Middle Fork American River Gage above Ralston Afterbay Trail	Duncan Creek Gage below Diversion Dam Trail (13E33)							
Road and Building Site Construction BMPs																																						
Timing of Construction Activities (Practice 2-3): This BMP requires project proponents to minimize erosion by conducting operations during periods of minimal runoff.																																						
The Licensee will conduct construction activities within the minimal runoff periods (i.e., during the dry season or when rain and runoff are unlikely, typically during the summer or fall).	H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
Construction activities will be scheduled to minimize erosion and sedimentation.	H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
The amount of area being graded at any one time will be limited and the amount of time that the area is bare will be limited.	H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Construction of drainage facilities or other work to control erosion or sedimentation will be required in conjunction with earthwork.	H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Timely Erosion Control Measures on Incomplete Roads and Stream Crossing Projects (Practice 2-9): This BMP requires minimizing erosion and sedimentation from disturbed ground on incomplete projects.																																						
The Licensee will apply protective measures to all areas of disturbed, erosion-prone, unprotected ground that is not to be further disturbed in the present year.	H	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Other prevention measures include the installation of structures such as temporary culverts, flumes, cross drains, diversion ditches, energy dissipaters, dips, sediment basins, berms, debris racks, or other facilities to prevent erosion.	H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Servicing and Refueling of Equipment (Practice 2-12): This BMP requires implementation of measures to prevent pollutants (e.g., fuels, lubricants, or other hazardous materials) from being discharged into river, streams, or impoundments.																																						
A designated fueling site, if necessary, will be established outside of the reservoir or diversion. Absorbent spill clean-up materials and spill kits will be available to absorb small spills. All used absorbent materials will be properly disposed.	H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Temporary fuel tanks will have adequate local containment consisting of berms and plastic sheeting to protect against accidental spills or leaks.	H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
A spill response kit will be maintained at each site.	A/H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
If any accidental releases of sediment, fuels, or oil occur, immediate containment and cleanup will be implemented, and resource agencies notified in accordance with project permits.	A/H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
If fuel spills on the soil of the reservoir bed, the soil will be removed from the reservoir and properly disposed.	H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Hazardous waste products such as grease cartridges and oil absorbents will be placed in proper containers and transported from the job site to an authorized Hazardous Waste Collections Site.	A/H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
All equipment will be thoroughly cleaned of dirt, grease, etc., prior to entering the National Forest, and will be inspected to ensure that is in proper functioning condition. All suspect hoses and hydraulic lines will be replaced prior to entering the National Forest.	H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Control of Construction and Maintenance Activities to SMZs (Practice 2-13): This BMP requires water quality protection activities to occur when construction and maintenance activities occur in stream management zones (SMZs).																																						
The Licensee will keep construction and maintenance fills, sidecast, and end haul materials will be kept out on the SMZs except at designated sites to minimize impacts to the aquatic environment.	H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Surface Erosion Control at Facility Sites (Practice 2-28): This BMP requires a reduction in the amount of surface erosion at developed sites and the amount of soil entering streams.																																						
Erosion control methods will be implemented to keep soil in place including applying grass seed, erosion blankets, tackifiers, hydromulch, paving or rocking of roads, water bars, cross drains, or retaining walls.	H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Natural drainage patterns will not be changed. Sediment basins and sediment filters will be established to filter surface runoff and division ditches and berms could be built to divert surface runoff around bare areas.	H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Recreation-Related BMPs																																						
Provide Safe Drinking Water Supplies (Practice 4-2): This BMP ensures safe drinking water at Forest Service facilities such as campgrounds, picnic grounds, trailheads, and developed roadside facilities.																																						
Preventive measures (location, construction, operation and maintenance) will be taken to minimize the possibilities of contamination of the water supply system.	A/H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

REC Plan Table 3. USDA-FS Best Management Practices and Avoidance and Protection Measures (continued).

	Routine Annual (A) and/or Heavy (H) Maintenance	Modification and Enhancement of Existing Project Recreation Facilities																		Improvements at Select Dispersed Use			Trail Improvements													
		Upper Hell Hole Campground	Hell Hole Campground	Big Meadows Campground	Hell Hole Vista and Associated Parking Area	Hell Hole Boat Ramp and Associated Parking Areas	Hell Hole Boat Ramp Extension	Ahart Campground	French Meadows Campground	Lewis Campground	Poppy Campground	Coyote Group Campground	Gates Group Campground	French Meadows Picnic Area and Boat Ramp	French Meadows Boat Ramp Extension	French Meadows RV Dump Station	McGuire Boat Ramp and Associated Parking Areas	McGuire Picnic Area and Beach	Ralston Picnic Area	Indian Bar Rafting Access	French Meadows South Shore Water Supply (FM CG Water Supply)	French Meadows North Shore Water Supply (Dolly Creek Water Supply)	Duncan Creek Diversion Primitive Recreation Site	Ralston Afterbay Sediment Access Point Boat Launch	Ellicott Bridge Parking Area	Middle Fork American River Access Trail below Middle Fork Interbay	Hell Hole Reservoir Trail	Poppy Trail	French Meadows Reservoir Trail	Middle Fork American River Gage above Ralston Afterbay Trail	Duncan Creek Gage below Diversion Dam Trail (13E33)					
Recreation-Related BMPs (continued)																																				
Control of Sanitation Facilities (Practice 4-4): This BMP protects surface and subsurface water from bacteria, nutrients, and chemical pollutants resulting from sewage at Forest Service sites.																																				
Sanitation facilities will be planned, located, designed, constructed, operated, inspected and maintained to minimize the possibility of contamination of water.	H		X	X	X	X		X	X	X	X	X	X	X		X	X	X	X	X	X	X		X												
Protection of Water Quality Within Developed and Dispersed Recreation Areas (Practice 4-9): This BMP protects water quality by regulating the discharge and disposal of potential pollutants.																																				
The licensee will prohibit the placement of substances that may degrade water quality in or near a stream, lake or other water body. Prohibited items include human and animal waste, petroleum products, other hazardous substances and sediment eroded from the site.	A/H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Fire Prevention and Suppression Avoidance and Protection Measures																																				
The contractor, its employees, and subcontractors and their employees, will make all reasonable efforts to prevent and suppress wild fires, and will exercise diligence in protecting from damage the land and property of the United States.	H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
No burning of any kind will occur as part of heavy facility maintenance, recreation facility modification, and construction of new facilities.	H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
The following fire equipment will be on site at all times: One shovel, one axe and one fire extinguisher UL rated at 4 BC or more on each truck, personnel vehicle, tractor, grader, and any other heavy equipment used. One shovel and on back-pack five gallon water filled tank with pump with each welder. One shovel and one chemical pressurized fire extinguisher (fully charged) located at a point no greater than a distance of 25-feet from the work site, for each gasoline powered tool, including but not limited to chain saws, rock drills, etc.	H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Air Quality Measures																																				
Fugitive Dust Reduction Measures																																				
Require contractors to comply with provisions of the Placer County Air Pollution Control District Rule 228 - Fugitive Dust, including Section 300 limits on visible emissions, PM ₁₀ concentrations, track-out onto paved public roadways, and other applicable requirements.	A/H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Stabilize unpaved areas subject to vehicle traffic by watering, treating with a non-toxic chemical dust suppressant, or covering.	A/H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Limit the speed of any vehicles and equipment traveling across unpaved areas no more than 15 miles per hour unless the road surface and surrounding area is sufficiently stabilized.	A/H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Stabilize storage piles and disturbed areas not subject to vehicular traffic by keeping wet, treating with a non-toxic chemical dust suppressant, or covering when material is not being added to, or removed from, the pile.	A/H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Prior to any ground disturbance, including grading, excavating, and land clearing, apply sufficient water to the area to be disturbed to limit dust and minimize emissions from crossing the boundary line.	A/H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Clean construction vehicles leaving the site to prevent dust, silt, mud, and dirt, from being released or tracked offsite.	A/H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Remove significant accumulations of mud or dirt from paved, public streets at the end of each work day using wet sweeping or a HEPA filter equipped vacuum device. Do not use blower devices.	A/H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Suspend grading and earthmoving operations if wind speeds are high enough to result in dust emissions crossing the boundary line, despite the application of dust mitigation measures.	A/H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Prevent spillage from materials transported off-site by either covering with tarps, or wetting loads such that the material does not touch the front, back, or sides of the cargo compartment at any point less than six inches from the top and that no point of the load extends above the top of the cargo compartment.	A/H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

REC Plan Table 3. USDA-FS Best Management Practices and Avoidance and Protection Measures (continued).

	Routine Annual (A) and/or Heavy (H) Maintenance	Modification and Enhancement of Existing Project Recreation Facilities																				Improvements at Select Dispersed Use			Trail Improvements										
		Upper Hell Hole Campground	Hell Hole Campground	Big Meadows Campground	Hell Hole Vista and Associated Parking Area	Hell Hole Boat Ramp and Associated Parking Areas	Hell Hole Boat Ramp Extension	Ahart Campground	French Meadows Campground	Lewis Campground	Poppy Campground	Coyote Group Campground	Gates Group Campground	French Meadows Picnic Area and Boat Ramp	French Meadows Boat Ramp Extension	French Meadows RV Dump Station	McGuire Boat Ramp and Associated Parking Areas	McGuire Picnic Area and Beach	Ralston Picnic Area	Indian Bar Rafting Access	French Meadows South Shore Water Supply (FM CG Water Supply)	French Meadows North Shore Water Supply (Dolly Creek Water Supply)	Duncan Creek Diversion Primitive Recreation Site	Ralston Afterbay Sediment Access Point Boat Launch	Ellicott Bridge Parking Area	Middle Fork American River Access Trail below Middle Fork Interbay	Hell Hole Reservoir Trail	Poppy Trail	French Meadows Reservoir Trail	Middle Fork American River Gage above Ralston Afterbay Trail	Duncan Creek Gage below Diversion Dam Trail (13E33)				
Air Quality Measures (continued)																																			
Fugitive Dust Reduction Measures (continued)																																			
If any naturally occurring asbestos, ultramafic rock, or serpentine is disturbed: (1) wash all equipment before moving from the property onto a paved public road, and (2) upon completion of the project, stabilize disturbed surfaces using one or more of the following methods: (a) establishment of a vegetative cover; (b) placement of at least one foot of non-asbestos-containing material, or (c) paving.	A/H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Diesel Emissions Reduction Measures																																			
Depending on equipment availability, require that all diesel construction engines with a rating of 50 horsepower or greater meet, at a minimum, the Tier 2 California emission standards for off-road engines (13 CCR 2423 per 40 CFR 89.112).	A/H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Require contractors to limit idling of construction vehicles and equipment on site to 15 minutes or less, unless idling is necessary for effective work progress or equipment operation.	A/H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Require contractors to maintain construction equipment in proper working order, and in accordance with manufacturer specifications.	A/H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Fuel Emissions Measures																																			
Comply with the use of ultra-low sulfur diesel fuel for all construction equipment, as required by the state of California, to minimize diesel particulate matter emissions.	A/H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Biological Resource Avoidance and Protection Measures																																			
Vegetation and Noxious Weed Management Measures																																			
Revegetation and seeding will be implemented consistent with measures outlined in the VIPMP.	H	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	
The Licensee will implement measures to prevent the introduction or spread of noxious weeds during implementation as defined in the VIPMP.	A/H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Riparian Measures																																			
Riparian vegetation will not be removed or destroyed. If it is determined that riparian vegetation must be removed, the Licensee will consult with USDA-FS and CDFG.	A/H	X	X			X				X			X					X	X				X	X										X	X
Special-Status Plant Measures																																			
If a new special-status plant population that could be affected by heavy maintenance, facility modification, or new facility construction is detected during required inventory (baseline) surveys, the Licensee will consult with USDA-FS, USFWS, and CDFG, as appropriate, to determine a site-specific protective buffer around the population considering the special-status plant species, location of the population, and topography of the site.	H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Stebbins' Phacelia Site-Specific Measures																																			
The Licensee will implement measures to protect Stebbins' phacelia (PHST) populations. Population specific measures are provided below:																																			
Hell Hole Campground: Heavy maintenance activities will not occur within 50 feet of PHST population HH09. Plants will be avoided during site removal activities.	A/H		X																																
Upper Hell Hole Campground: Site removal activities will not occur within 50 feet of PHST populations HH36-38.	A/H	X																																	
Hell Hole Vista: Heavy maintenance activities will be restricted to the area necessary for public use of the vista (i.e., developed pathway, picnic site, viewing area, and parking lot.)	A/H				X																														
Hell Hole Reservoir Trail: Trail enhancement activities will be restricted to the developed pathway.																												X							
Hell Hole Boat Ramp General Parking Area: Heavy maintenance activities within 50 feet of PHST population HH07 will be restricted to developed parking area and adjacent shoulder.	A/H					X																													

REC Plan Table 3. USDA-FS Best Management Practices and Avoidance and Protection Measures (continued).

	Routine Annual (A) and/or Heavy (H) Maintenance	Modification and Enhancement of Existing Project Recreation Facilities																				Improvements at Select Dispersed Use			Trail Improvements								
		Upper Hell Hole Campground	Hell Hole Campground	Big Meadows Campground	Hell Hole Vista and Associated Parking Area	Hell Hole Boat Ramp and Associated Parking Areas	Hell Hole Boat Ramp Extension	Ahart Campground	French Meadows Campground	Lewis Campground	Poppy Campground	Coyote Group Campground	Gates Group Campground	French Meadows Picnic Area and Boat Ramp	French Meadows Boat Ramp Extension	French Meadows RV Dump Station	McGuire Boat Ramp and Associated Parking Areas	McGuire Picnic Area and Beach	Ralston Picnic Area	Indian Bar Rafting Access	French Meadows South Shore Water Supply (FM CG Water Supply)	French Meadows North Shore Water Supply (Dolly Creek Water Supply)	Duncan Creek Diversion Primitive Recreation Site	Ralston Afterbay Sediment Access Point Boat Launch	Ellicott Bridge Parking Area	Middle Fork American River Access Trail below Middle Fork Interbay	Hell Hole Reservoir Trail	Poppy Trail	French Meadows Reservoir Trail	Middle Fork American River Gage above Ralston Afterbay Trail	Duncan Creek Gage below Diversion Dam Trail (13E33)		
Biological Resource Avoidance and Protection Measures (continued)																																	
Raptor Measures																																	
The Licensee will implement the following measures to avoid disturbance of special-status raptor nests during implementation of periodic maintenance or non-routine special projects that require ground disturbing activities or hazard tree removal:																																	
– Ground disturbing construction activities will not be conducted within 500 feet of an active raptor nest during the non-breeding season for raptors (February 15 through September 15).																																	
– If ground disturbing and construction activities must occur during the breeding season, a pre-construction survey shall be conducted by a qualified biologist to determine if there are active nests present. The survey shall be conducted no more than 30 days prior to implementation of the activity.	A/H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
– If the biologist determines that the area surveyed does not contain any active nests, then activities may be implemented.																																	
– If active raptor nests are found, activities shall not occur within 500 feet of an active nest until the end of the breeding season or until the Licensee receives written authorization from resource agencies to proceed.																																	
Cultural Resource Avoidance and Protection Measures																																	
The Licensee will implement measures for the protection of cultural resources consistent with the Historic Properties Management Plan (HPMP).	A/H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

REC Plan Table 4. Example Travel Time Matrix.

Release Time	Indian Bar Rafter Access	OXB Gage	Fords Bar	Ruck-a-Chucky	Poverty Bar	Mammoth Bar	Confluence	Birdsall Access	Oregon Bar Access
12:00 AM	12:00 AM	12:30 AM	4:04 AM	6:03 AM	7:13 AM	8:53 AM	9:44 AM	11:12 AM	11:52 AM
2:00 AM	2:00 AM	2:30 AM	6:04 AM	8:03 AM	9:13 AM	10:53 AM	11:44 AM	1:12 PM	1:52 PM
4:00 AM	4:00 AM	4:30 AM	8:04 AM	10:03 AM	11:13 AM	12:53 PM	1:44 PM	3:12 PM	3:52 PM
6:00 AM	6:00 AM	6:30 AM	10:04 AM	12:03 PM	1:13 PM	2:53 PM	3:44 PM	5:12 PM	5:52 PM
8:00 AM	8:00 AM	8:30 AM	12:04 PM	2:03 PM	3:13 PM	4:53 PM	5:44 PM	7:12 PM	7:52 PM
10:00 AM	10:00 AM	10:30 AM	2:04 PM	4:03 PM	5:13 PM	6:53 PM	7:44 PM	9:12 PM	9:52 PM
11:00 AM	11:00 AM	11:30 AM	3:04 PM	5:03 PM	6:13 PM	7:53 PM	8:44 PM	10:12 PM	10:52 PM
12:00 PM	12:00 PM	2:04 PM	4:04 PM	6:03 PM	7:13 PM	8:53 PM	9:44 PM	11:12 PM	11:52 PM
2:00 PM	2:00 PM	2:30 PM	6:04 PM	8:03 PM	9:13 PM	10:53 PM	11:44 PM	1:12 AM	1:52 AM
4:00 PM	4:00 PM	4:30 PM	8:04 PM	10:03 PM	11:13 PM	12:53 AM	1:44 AM	3:12 AM	3:52 AM
6:00 PM	6:00 PM	6:30 PM	10:04 PM	12:03 AM	1:13 AM	2:53 AM	3:44 AM	5:12 AM	5:52 AM
8:00 PM	8:00 PM	8:30 PM	12:04 AM	2:03 AM	3:13 AM	4:53 AM	5:44 AM	7:12 AM	7:52 AM
10:00 PM	10:00 PM	10:30 PM	2:04 AM	4:03 AM	5:13 AM	6:53 AM	7:44 AM	9:12 AM	9:52 AM
12:00 AM	12:00 AM	12:30 AM	4:04 AM	6:03 AM	7:13 AM	8:53 AM	9:44 AM	11:12 AM	11:52 AM
Distance	0	1.25	10.15	15.13	18.05	22.20	24.35	28.00	29.65
Travel Time (hour:min)	0	0:30	4:04	6:03	7:13	8:53	9:44	11:12	11:52

Note: Travel time is 2.5 mph and assumes a base flow of 200 cfs and a peak flow of 1,000 cfs.
 Travel time is faster when either base flow or peak flow increases.

REC Plan Table 5. Historical Fish Stocking Records for Hell Hole Reservoir.

Year	Brown Trout		Kokanee	
	Number	Fish per Pound	Number	Fish per Pound
2001	6,380	2.2	26,600	266
2002	8,100	2.7	25,272	312
2003	7,500	2.5	24,960	192
2004	4,200	2.1	22,275	135
2005	4,400	2.2	25,000	520
2006	3,600	1.8	14,350	128
2007	3,800	1.9	16,416	456
2008	4,700	1.7	37,950	154
2009	7,200	2.4	28,272	114
Average	5,542	2.2	24,566	253

REC Plan Table 6. Historical Fish Stocking Records for French Meadows Reservoir.

Year	Rainbow Trout		Eagle Lake Trout	
	Number	Fish per Pound	Number	Fish per Pound
2001	10,050	2.0		
2002	12,500	1.8	4,000	2.0
2003	9,700	1.9		
2004	5,200	1.7		
2005	5,500	1.8		
2006	5,900	2.0		
2007	7,200	1.8	1,500	1.5
2008	12,800	2.6		
2009	20,300	2.9		
Average	9,906	2.1	611	1.8

MAPS

PCWA Facilities and Features

- Dam
- Ancillary and Other Facilities
- Powerhouse
- Gage
- Penstock
- Tunnel
- Pipeline
- Gate
- Closure
- Access Point
- Public Safety Fence
- Water Supply Line (above ground)
- Water Supply Line (buried)
- Project Power and Communication Lines:
 - Communication
 - Power
 - Power (underground)
 - Communication/Power
 - Communication/Power (underground)

Transportation

- Non-Project General Access Road
- Project Road
- Project Trail
- Recreation Access Road
- Recreation Water Supply Facility Access Road or Trail
- Proposed Project Trail
- Other Road

Project Recreation Facilities

- Picnic Area
- Boat Ramp
- Scenic Viewpoint
- Developed Campground
- Recreation Facility Footprints

Other Facilities

PG & E Transmission Lines:

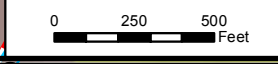
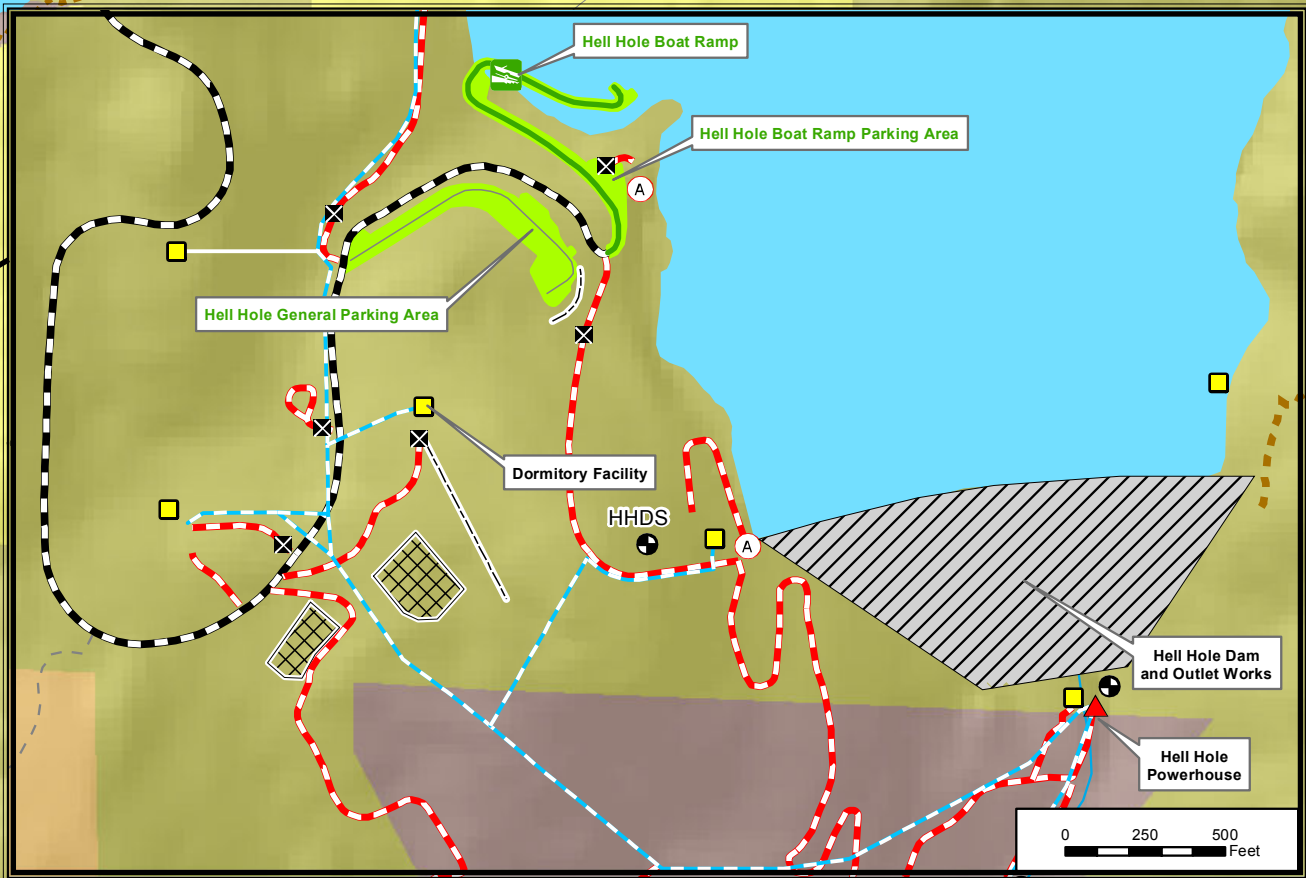
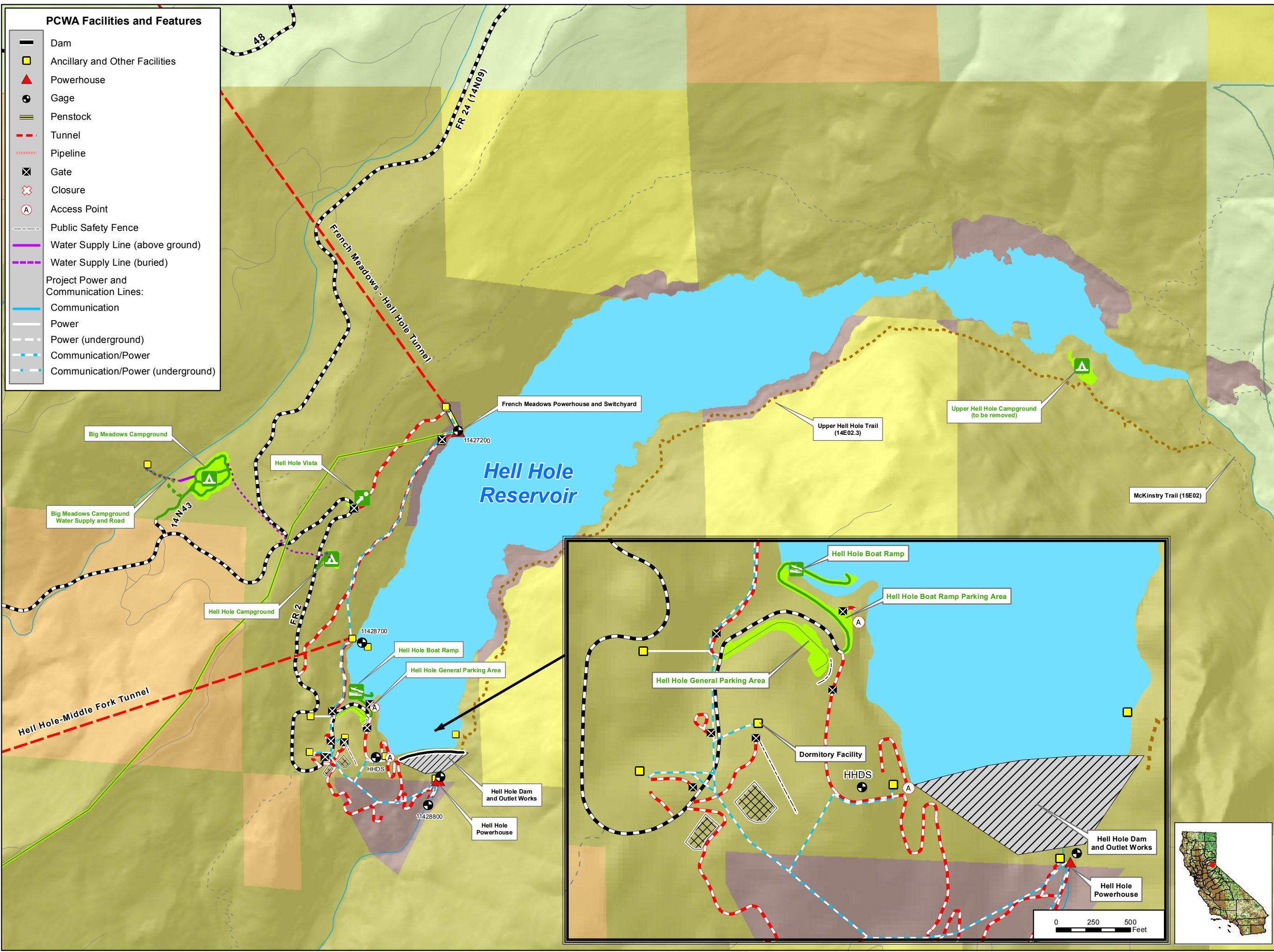

- 230 kV
- 60 kV

Land Jurisdictions / Ownership*

- Eldorado National Forest
- Tahoe National Forest
- PCWA
- Lone Star Timber
- Sierra Pacific Industries**
- Other Private (Blank)


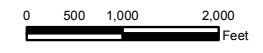
** Includes former properties of R.H. Emmerson & Son, LLC

* PARCEL DATA SOURCES:
 Placer County, September 2009,
 El Dorado County, September 2009,
 USFS Region 5, October 2010.
 Some data has been modified to account for known errors
 and is to be used for general planning purposes only.

Placer County Water Agency
 Middle Fork American River Project

REC Plan Map 1
Recreation Facilities and Land Ownership
in the Hell Hole Reservoir Area

Projection: Ca. Stateplane, Zone 2
 Datum: NAD 83

Date: 7/28/11

PCWA Facilities and Features

- Dam
- Ancillary and Other Facilities
- Powerhouse
- Gage
- Penstock
- Tunnel
- Pipeline
- Gate
- Closure
- Access Point
- Public Safety Fence
- Water Supply Line (above ground)
- Water Supply Line (buried)
- Project Power and Communication Lines:**
- Communication
- Power
- Power (underground)
- Communication/Power
- Communication/Power (underground)

Transportation

- Non-Project General Access Road
- Project Road
- Project Trail
- Recreation Access Road
- Recreation Water Supply Facility Access Road or Trail
- Proposed Project Trail
- Other Road

Project Recreation Facilities

- Picnic Area
- Boat Ramp
- Scenic Viewpoint
- Developed Campground
- Trailer Sanitary Station
- Recreation Facility Footprints

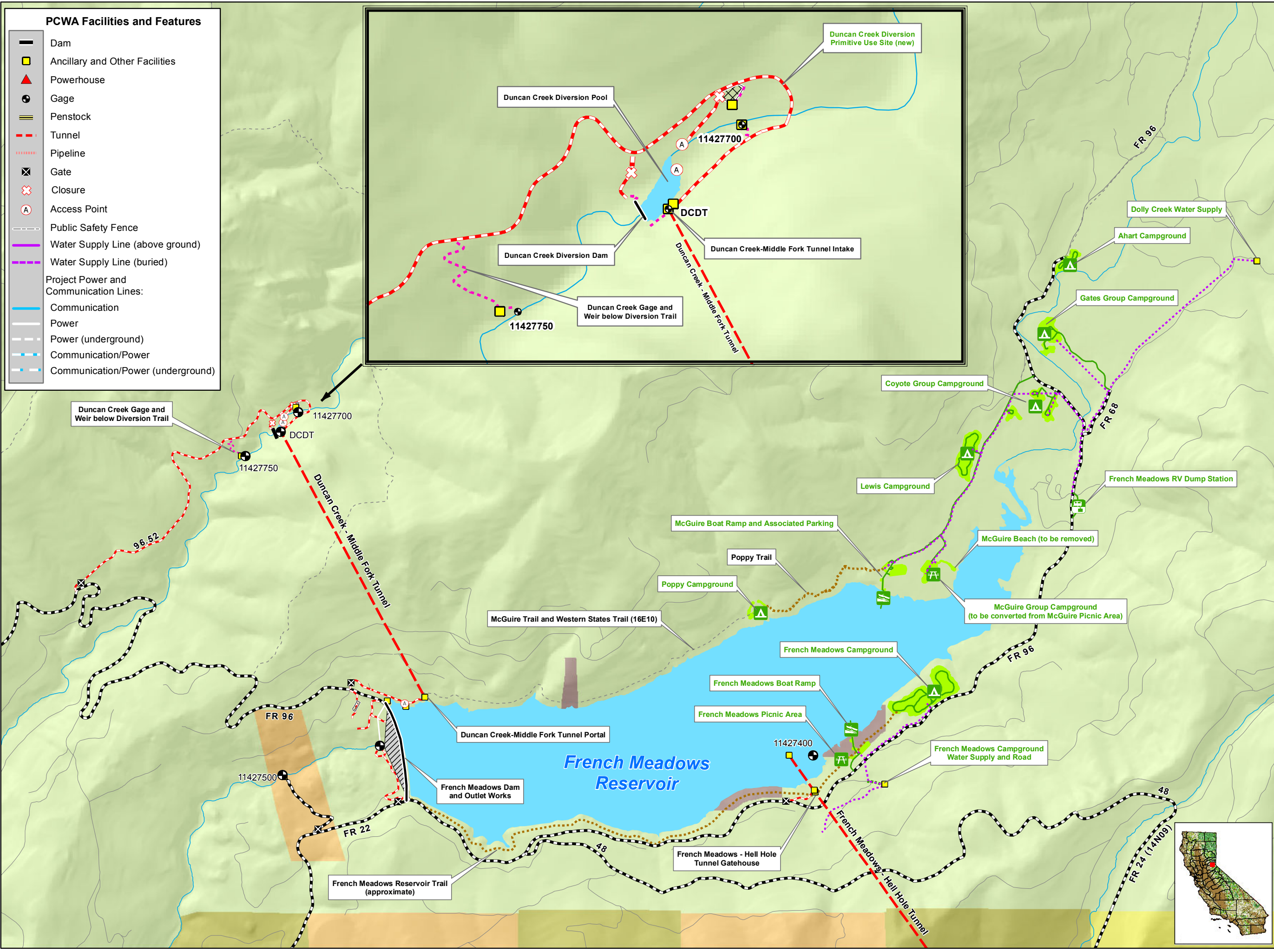
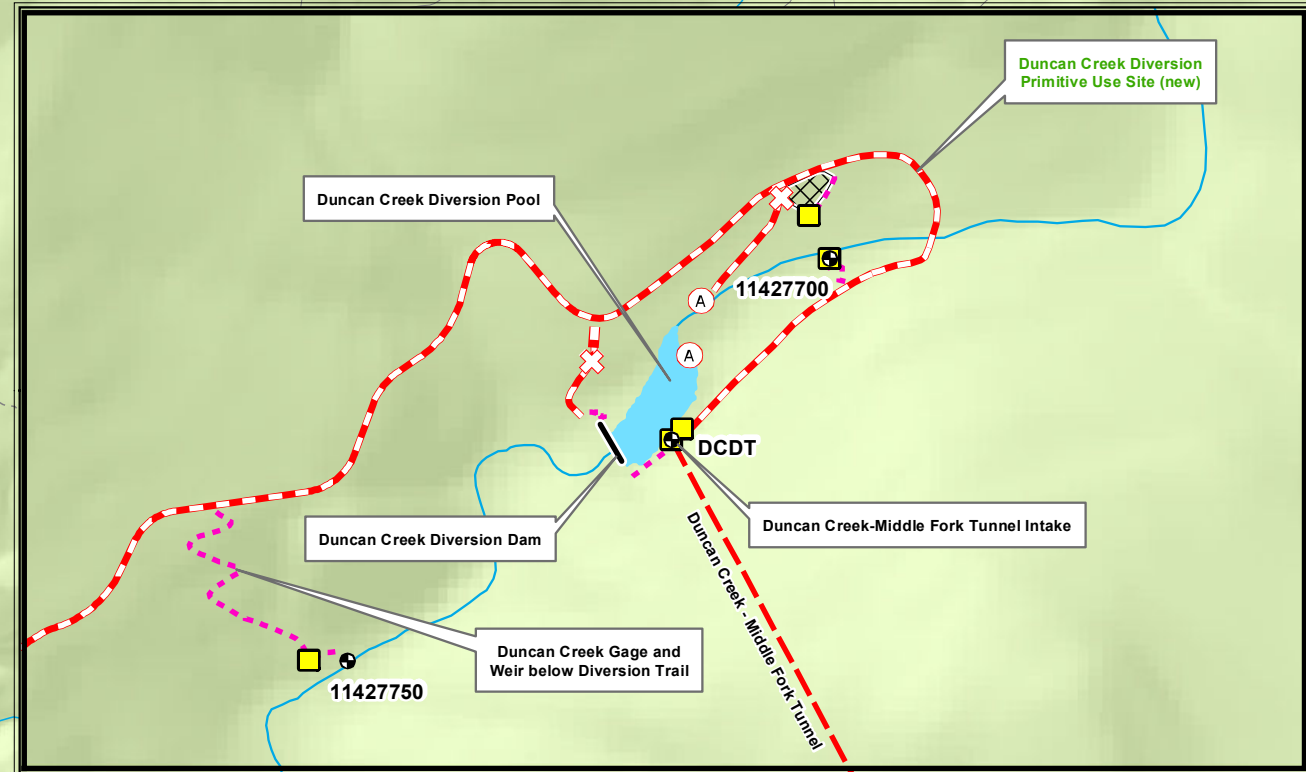
Other Facilities

- PG & E Transmission Lines:**
- 230 kV
 - 60 kV

Land Jurisdictions / Ownership*

- Eldorado National Forest
 - Tahoe National Forest
 - PCWA
 - Lone Star Timber
 - Sierra Pacific Industries**
 - Other Private (Blank)
- ** Includes former properties of R.H. Emmerson & Son, LLC

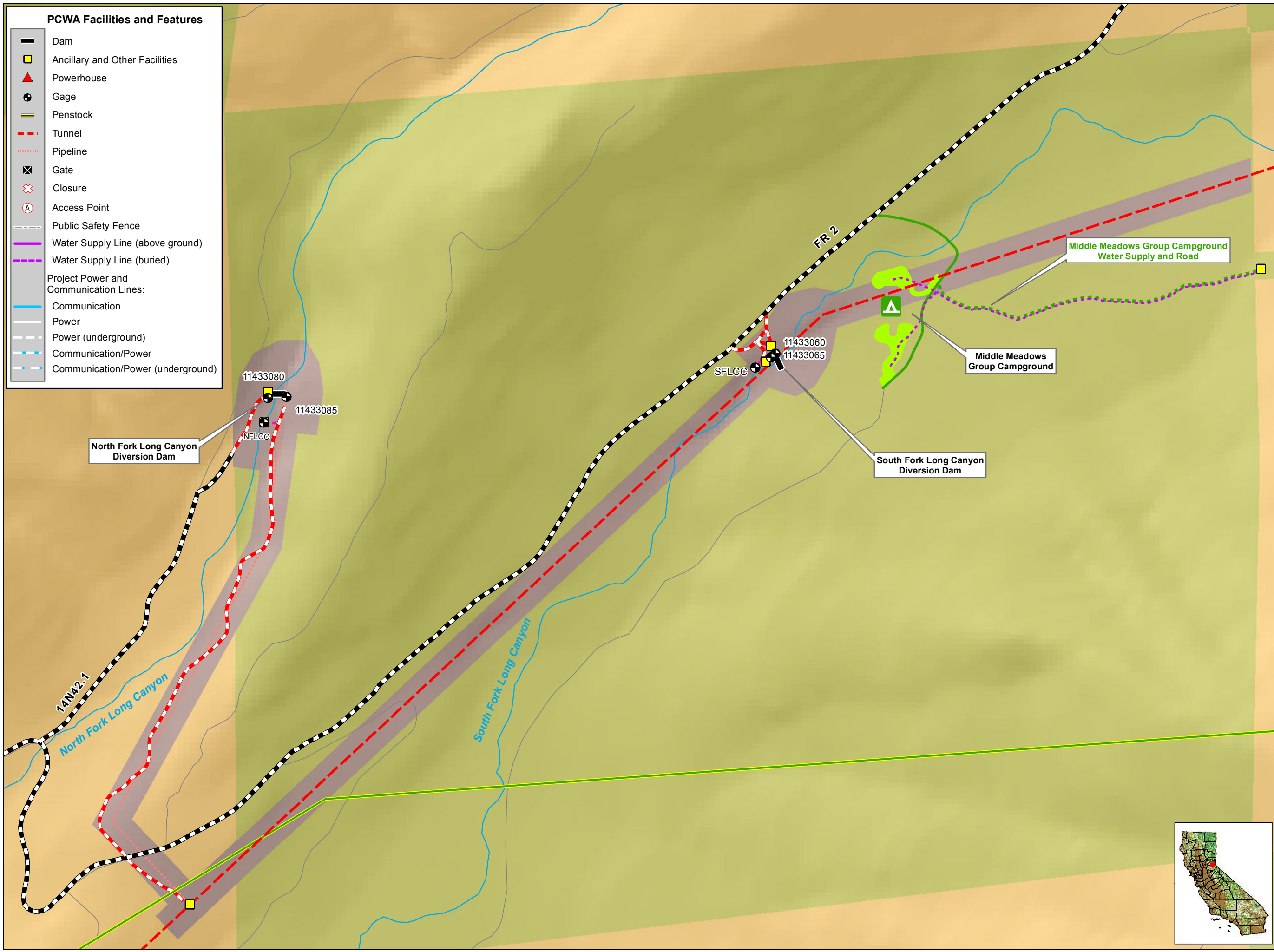
* PARCEL DATA SOURCES:
 Placer County, September 2009.
 El Dorado County, September 2009.
 USFS Region 5, October 2010.
 Some data has been modified to account for known errors and is to be used for general planning purposes only.



Placer County Water Agency
 Middle Fork American River Project

REC Plan Map 2
Recreation Facilities and Land Ownership
in the French Meadows Reservoir and
Duncan Creek Diversion Areas

0 0.25 0.5 Miles
 Projection: Ca. Stateplane, Zone 2
 Datum: NAD 83
 Date: 7/28/11



- PCWA Facilities and Features**
- Dam
 - Ancillary and Other Facilities
 - Powerhouse
 - Gage
 - Penstock
 - Tunnel
 - Pipeline
 - Gate
 - Closure
 - Access Point
 - Public Safety Fence
 - Water Supply Line (above ground)
 - Water Supply Line (buried)
 - Project Power and Communication Lines:**
 - Communication
 - Power
 - Power (underground)
 - Communication/Power
 - Communication/Power (underground)

- Transportation**
- Non-Project General Access Road
 - Project Road
 - Project Trail
 - Recreation Access Road
 - Recreation Water Supply Facility Access Road or Trail
 - Proposed Project Trail
 - Other Road
- Project Recreation Facilities**
- Picnic Area
 - Boat Ramp
 - Scenic Viewpoint
 - Developed Campground
 - Recreation Facility Footprints
- Other Facilities**
- PG & E Transmission Lines:
- 230 kV
 - 60 kV
- Land Jurisdictions / Ownership***
- Eldorado National Forest
 - Tahoe National Forest
 - PCWA
 - Lone Star Timber
 - Sierra Pacific Industries**
 - Other Private (Blank)
- ** Includes former properties of R.H. Emmerson & Son, LLC

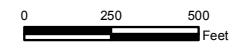
* PARCEL DATA SOURCES:
 Placer County, September 2009,
 El Dorado County, September 2009,
 USFS Region 5, October 2010.
 Some data has been modified to account for known errors
 and is to be used for general planning purposes only.



Placer County Water Agency
 Middle Fork American River Project

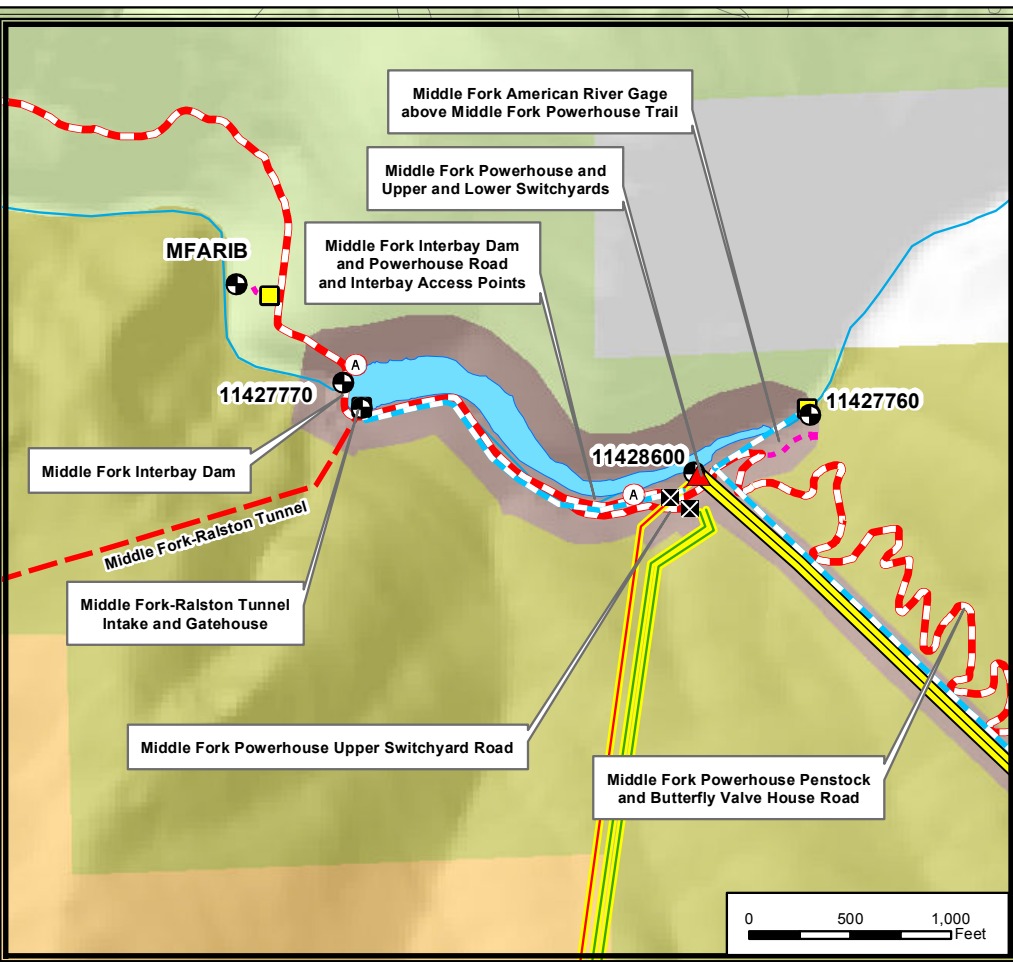
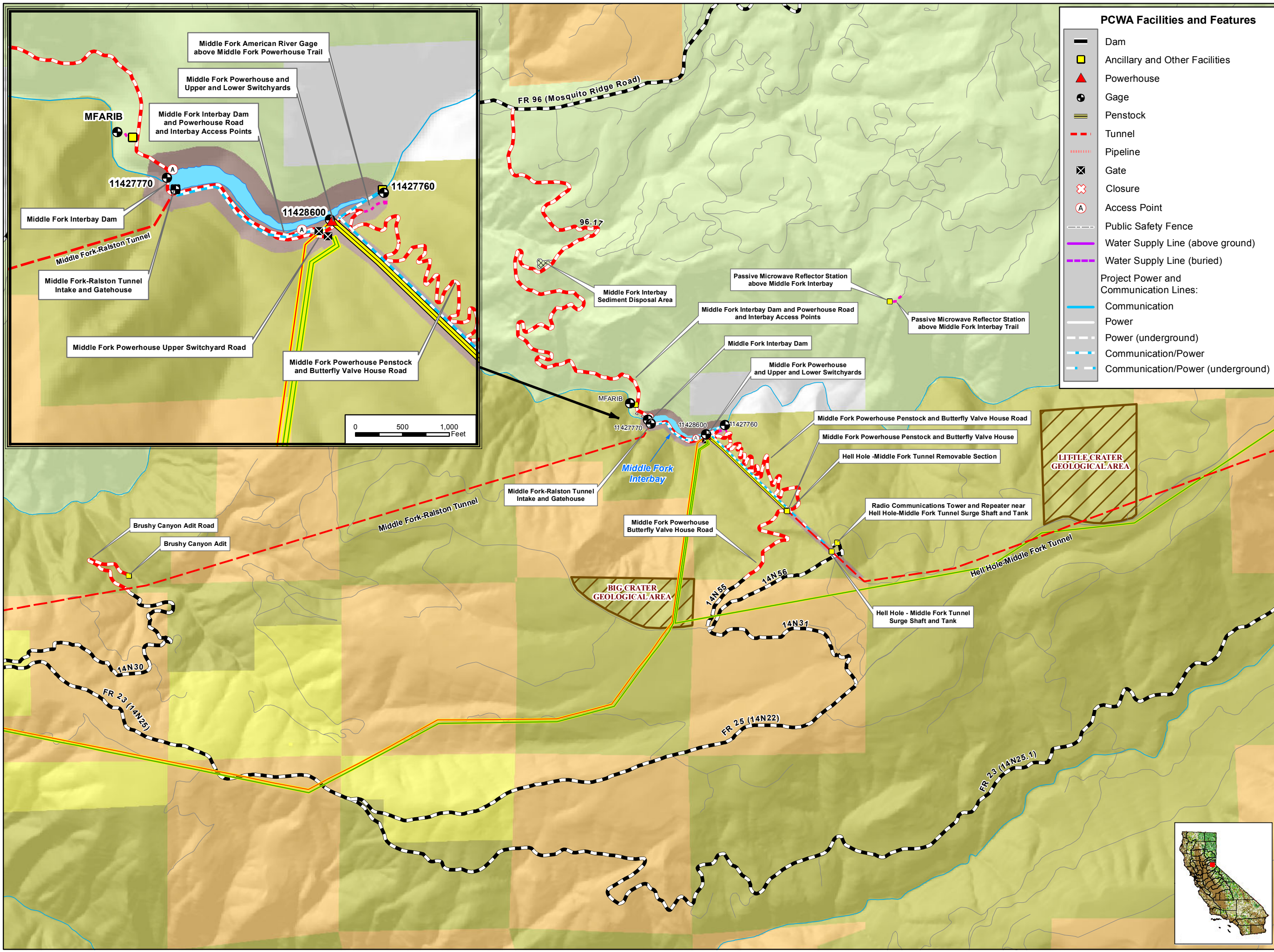
REC Plan Map 3

**Recreation Facilities and Land Ownership
 in the Long Canyon Area**



Projection: Ca. Stateplane, Zone 2
 Datum: NAD 83

Date: 7/27/11



PCWA Facilities and Features

- Dam
- Ancillary and Other Facilities
- Powerhouse
- Gage
- Penstock
- Tunnel
- Pipeline
- Gate
- Closure
- Access Point
- Public Safety Fence
- Water Supply Line (above ground)
- Water Supply Line (buried)
- Project Power and Communication Lines:**
- Communication
- Power
- Power (underground)
- Communication/Power
- Communication/Power (underground)

Transportation

- Non-Project General Access Road
- Project Road
- Project Trail
- Recreation Access Road
- Recreation Water Supply Facility Access Road or Trail
- Proposed Project Trail
- Other Road

Project Recreation Facilities

- Picnic Area
- Boat Ramp
- Scenic Viewpoint
- Developed Campground
- Recreation Facility Footprints

Other Facilities

PG & E Transmission Lines:

- 230 kV
- 60 kV

Land Jurisdictions / Ownership*

- Eldorado National Forest
- Tahoe National Forest
- PCWA
- Lone Star Timber
- Sierra Pacific Industries**
- Other Private (Blank)

** Includes former properties of R.H. Emmerson & Son, LLC

* PARCEL DATA SOURCES:
 Placer County, September 2009,
 El Dorado County, September 2009,
 USFS Region 5, October 2010.
 Some data has been modified to account for known errors
 and is to be used for general planning purposes only.

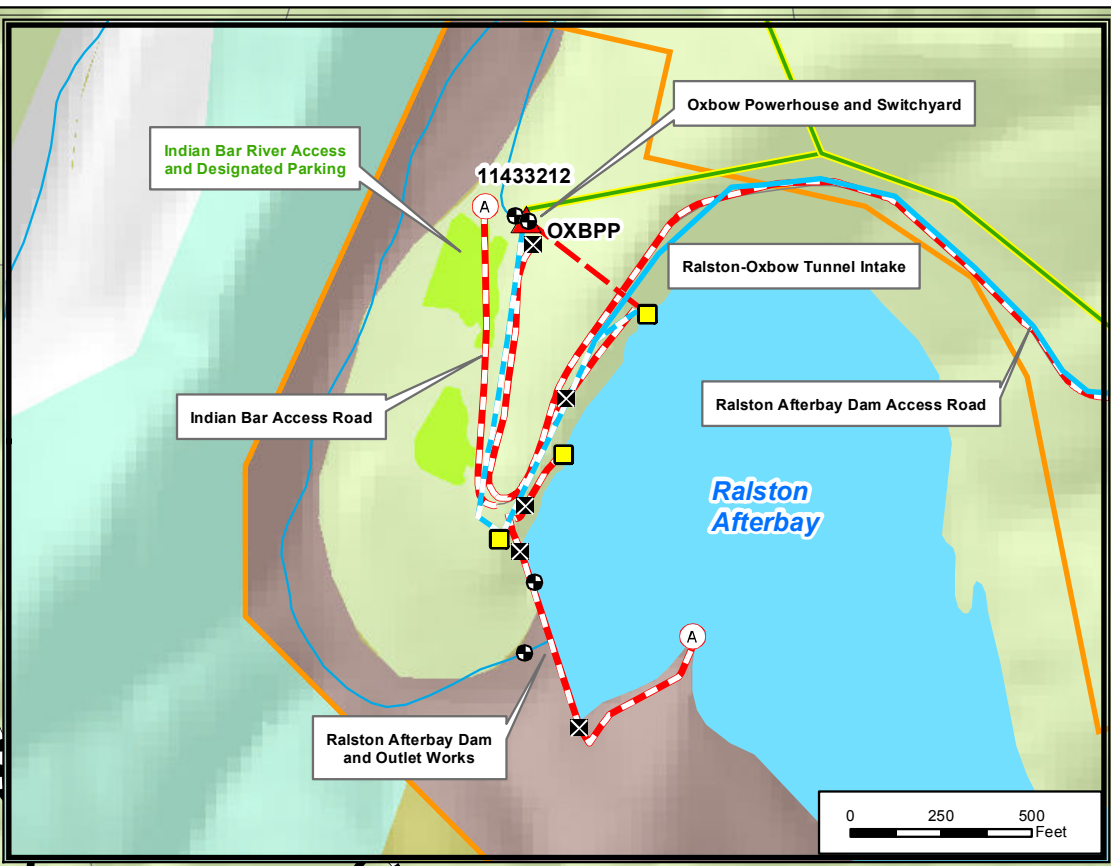
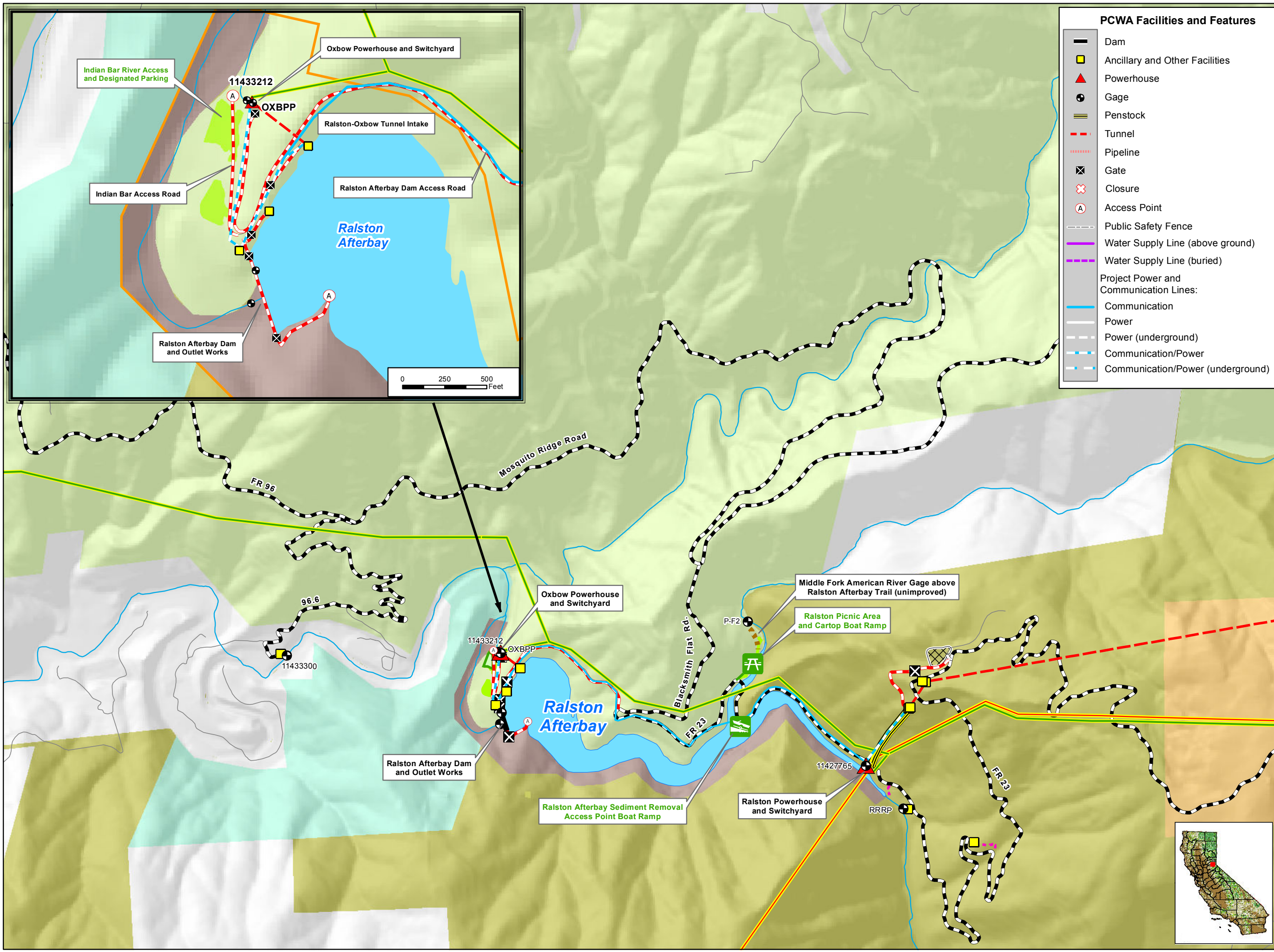
Placer County Water Agency
 Middle Fork American River Project

REC Plan Map 4

**Recreation Facilities and Land Ownership
 in the Middle Fork Interbay Area**

Projection: Ca. Stateplane, Zone 2
 Datum: NAD 83

Date: 7/28/11



PCWA Facilities and Features

- Dam
- Ancillary and Other Facilities
- Powerhouse
- Gage
- Penstock
- Tunnel
- Pipeline
- Gate
- Closure
- Access Point
- Public Safety Fence
- Water Supply Line (above ground)
- Water Supply Line (buried)
- Project Power and Communication Lines:**
- Communication
- Power
- Power (underground)
- Communication/Power
- Communication/Power (underground)

Transportation

- Non-Project General Access Road
- Project Road
- Project Trail
- Recreation Access Road
- Recreation Water Supply Facility Access Road or Trail
- Proposed Project Trail
- Other Road

Project Recreation Facilities

- Picnic Area
- Boat Ramp
- Scenic Viewpoint
- Developed Campground
- Recreation Facility Footprints

Other Facilities

PG & E Transmission Lines:


- 230 kV
- 60 kV

Land Jurisdictions / Ownership*

- Eldorado National Forest
- Tahoe National Forest
- Bureau of Land Management
- PCWA
- Lone Star Timber
- Sierra Pacific Industries**
- Other Private (Blank)

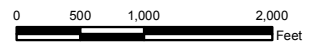
** Includes former properties of R.H. Emmerson & Son, LLC

* PARCEL DATA SOURCES:
 Placer County, September 2009,
 El Dorado County, September 2009,
 USFS Region 5, October 2010.
 Some data has been modified to account for known errors
 and is to be used for general planning purposes only.




Placer County Water Agency
 Middle Fork American River Project

REC Plan Map 5
Recreation Facilities and Land Ownership
in the Ralston Afterbay Area












Projection: Ca. Stateplane, Zone 2
 Datum: NAD 83








Date: 7/28/11

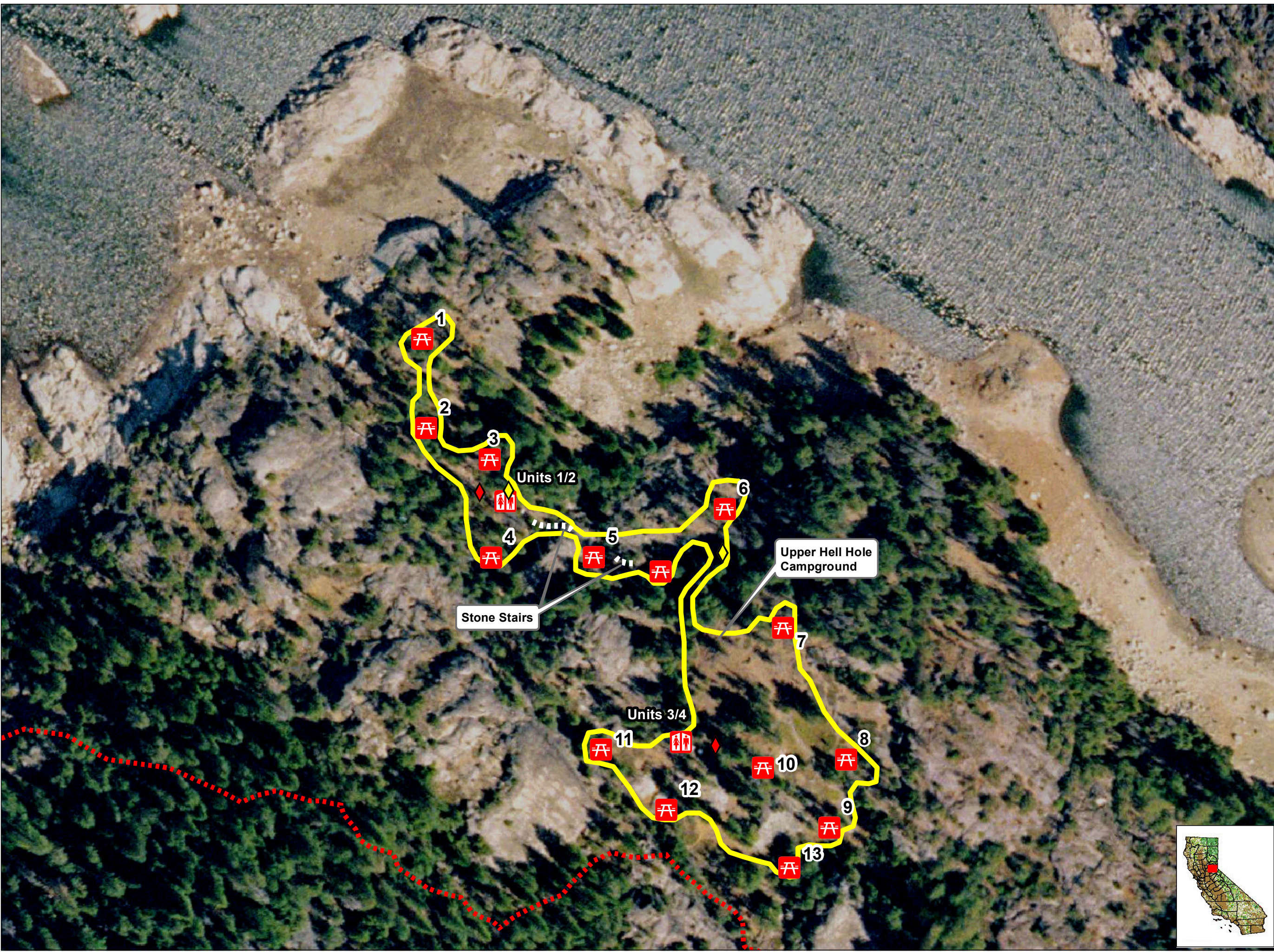


Recreation

-  Bathroom
-  Camp Site with Site Number
-  Sign - Site Identification
-  Sign - Part 8
-  Sign - Accessible Parking
-  Sign - Informational
-  Sign - Safety
-  Sign - Regulatory / Traffic
-  Sign - Fee Area

Transportation

-  Gate
-  Non-Project General Access Road
-  Project Road
-  Trail
-  Recreation Access Road
-  Recreation Water Supply Facility Access Road or Trail
-  Recreation Road Reference Point



Placer County Water Agency
Middle Fork American River Project

REC Plan Map 6











Upper Hell Hole Campground










Projection: CA State Plane, Zone 2
Datum: NAD 83


Date: 7/28/11

Recreation

-  Bathroom - Accessible
-  Camp Site with Site Number
-  Campsite - Accessible
-  Sign - Site Identification
-  Sign - Part 8
-  Sign - Accessible Parking
-  Sign - Informational
-  Sign - Safety
-  Sign - Regulatory / Traffic
-  Sign - Fee Area

Transportation


-  Gate
-  Non-Project General Access Road
-  Project Road
-  Trail
-  Recreation Access Road
-  Recreation Water Supply Facility Access Road or Trail
-  Recreation Road Reference Point



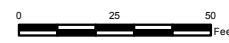
Placer County Water Agency
Middle Fork American River Project

REC Plan Map 7

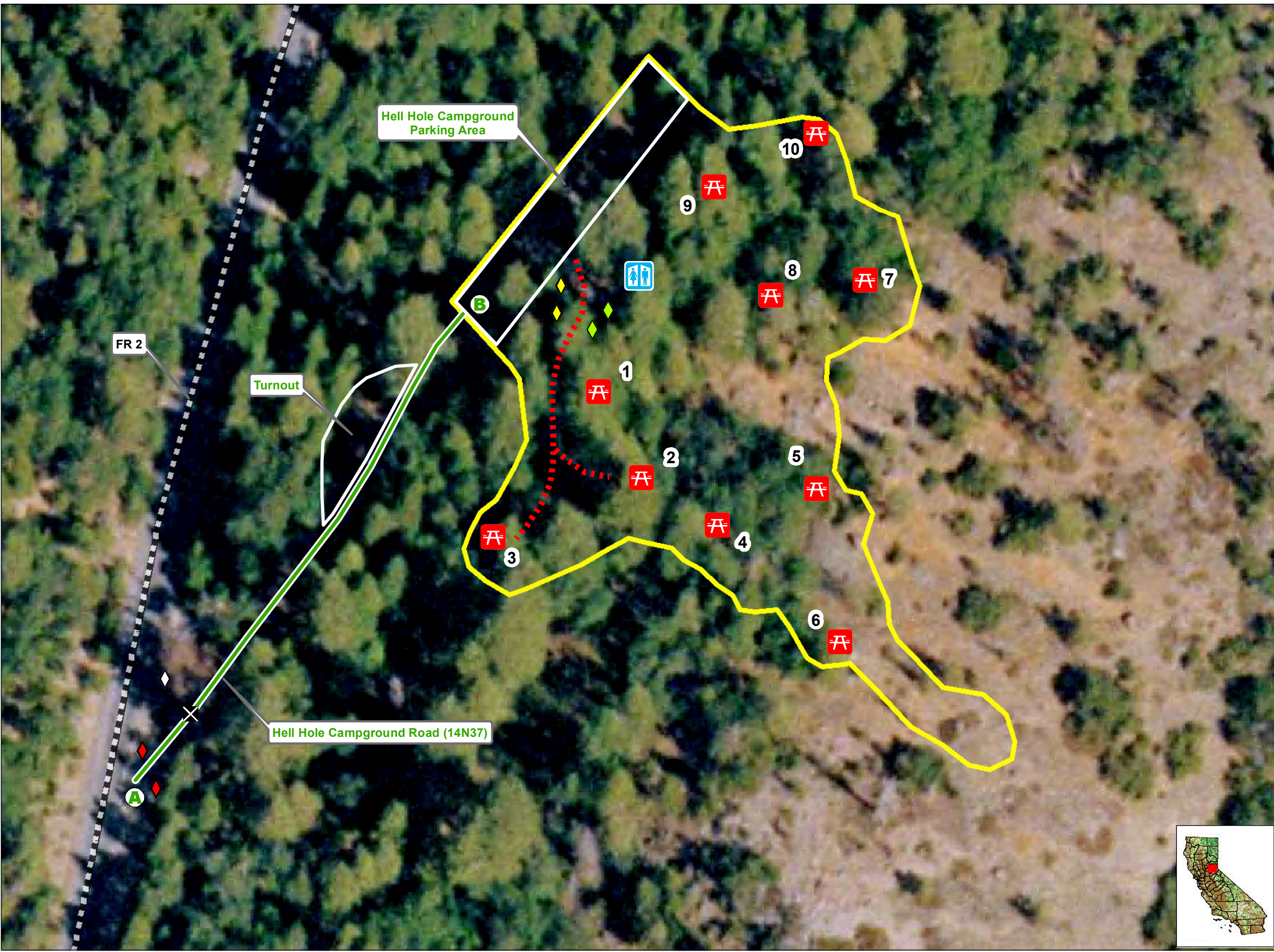
Hell Hole Campground

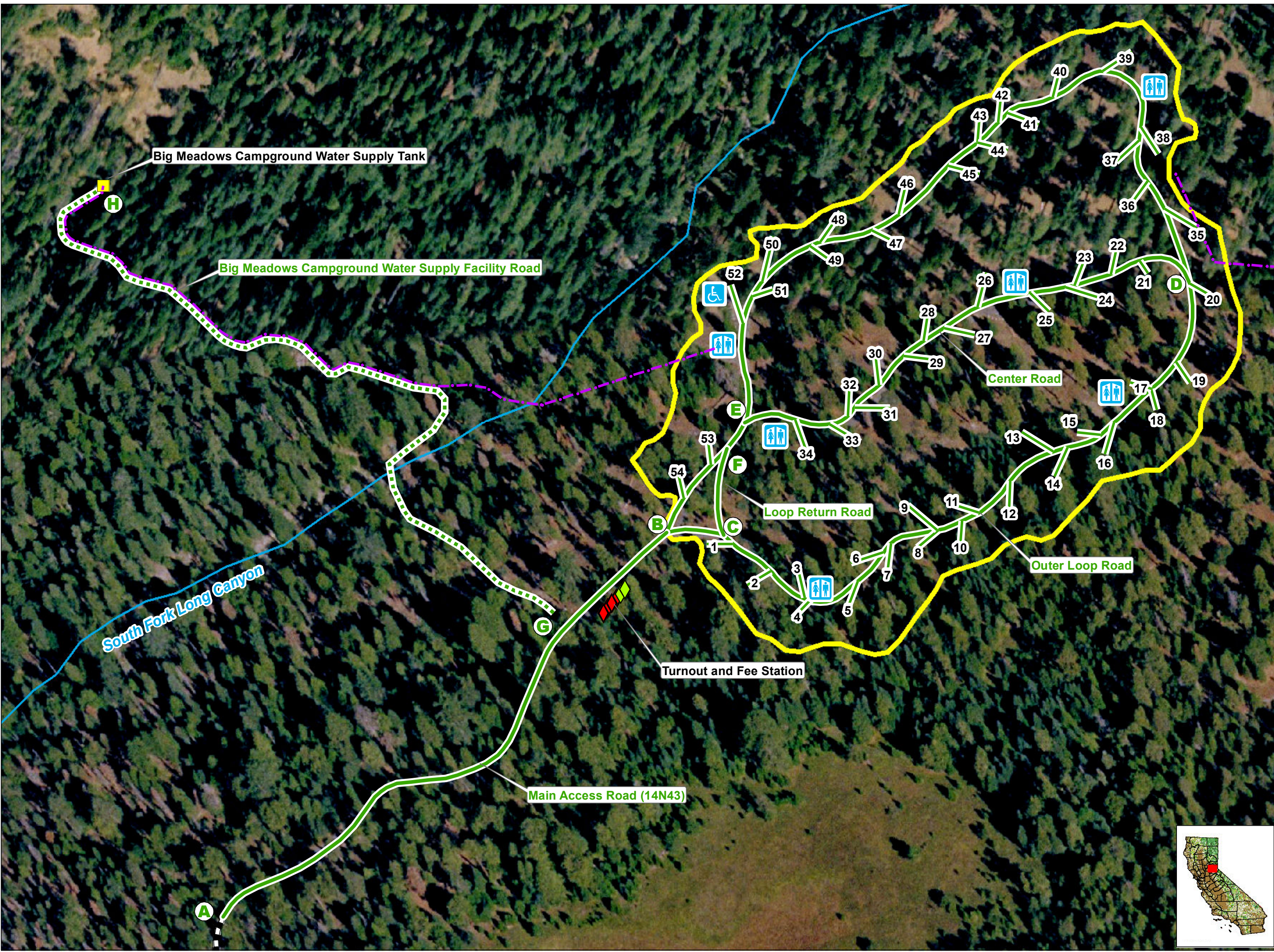


Date: 7/28/11














Projection: CA State Plane, Zone 2
Datum: NAD 83












Recreation

-  Bathroom - Accessible
-  Campsite Spur with Site Number
-  Campsite - Accessible
-  Sign - Site Identification
-  Sign - Part 8
-  Sign - Accessible Parking
-  Sign - Informational
-  Sign - Safety
-  Sign - Regulatory / Traffic
-  Sign - Fee Area
-  Water Supply Line (approximate)

Transportation

-  Gate
-  Non-Project General Access Road
-  Project Road
-  Trail
-  Recreation Access Road
-  Recreation Water Supply Facility Access Road or Trail
-  Recreation Road Reference Point


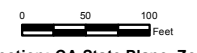


Placer County Water Agency
Middle Fork American River Project

REC Plan Map 8










Big Meadows Campground














Projection: CA State Plane, Zone 2
 Datum: NAD 83
 Date: 7/28/10

Recreation

-  Bathroom
-  Picnic Table
-  Sign - Site Identification
-  Sign - Part 8
-  Sign - Accessible Parking
-  Sign - Informational
-  Sign - Safety
-  Sign - Regulatory / Traffic
-  Sign - Fee Area

Transportation

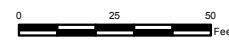
-  Gate
-  Non-Project General Access Road
-  Project Road
-  Trail
-  Recreation Access Road
-  Recreation Water Supply Facility Access Road or Trail
-  Recreation Road Reference Point



Placer County Water Agency
Middle Fork American River Project

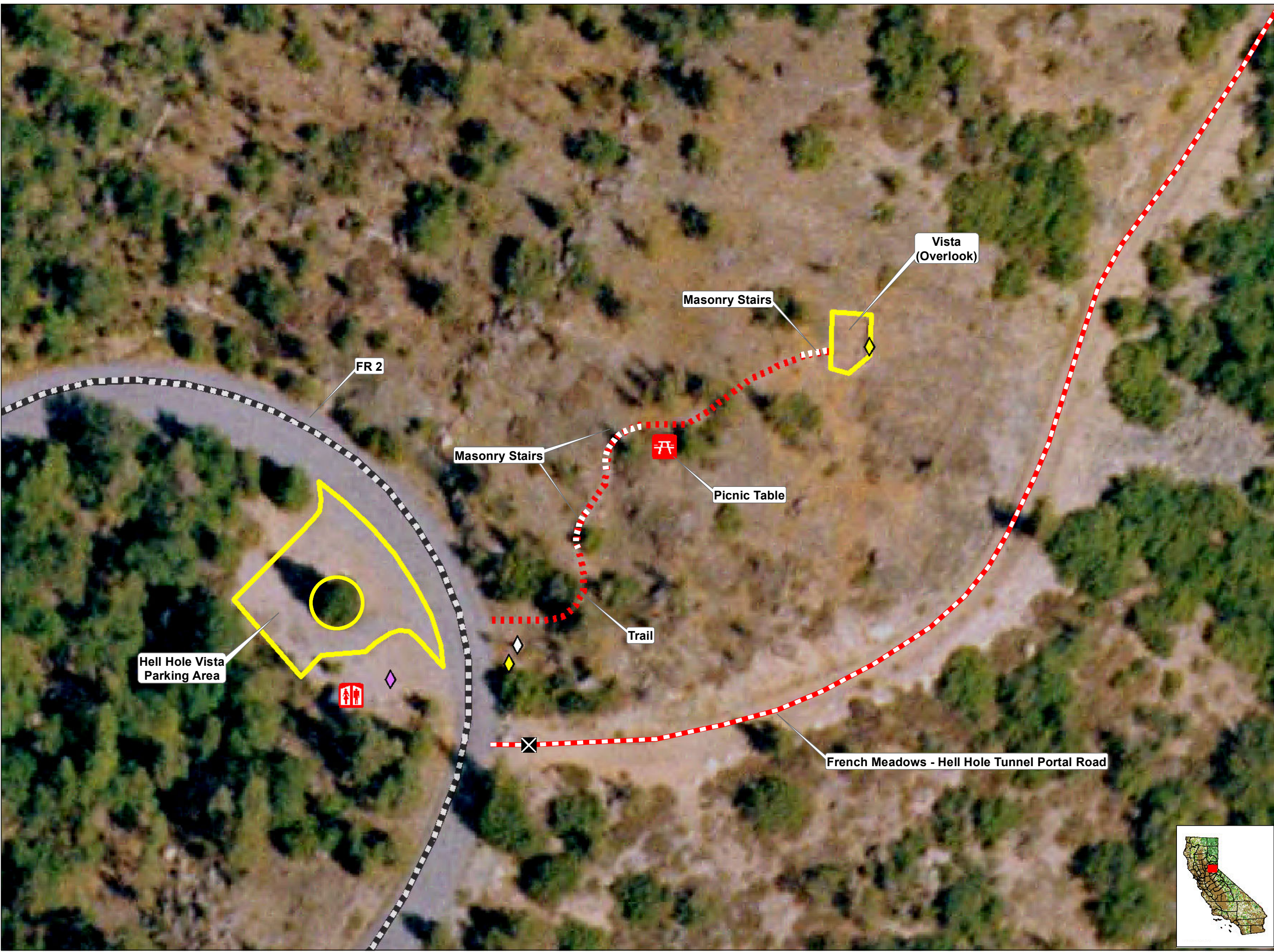
REC Plan Map 9

Hell Hole Vista




Projection: CA State Plane, Zone 2
Datum: NAD 83

Date: 7/28/11










Hydrography

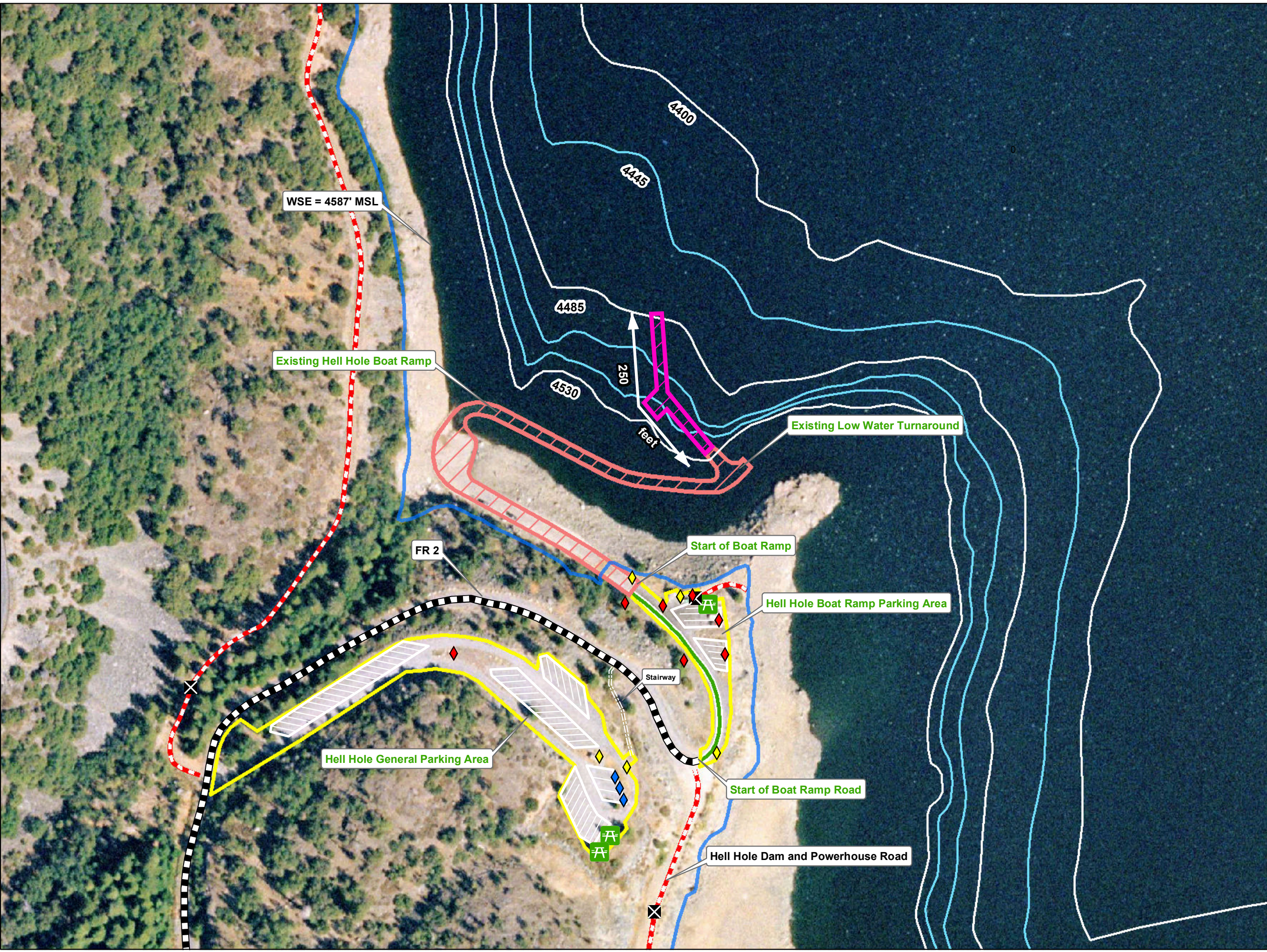
 Inundation Footprint at 4630' MSL
(Current Maximum Operating WSE)


Recreation

-  Bathroom
-  Picnic Table
-  Sign - Accessible Parking
-  Sign - Informational
-  Sign - Regulatory
-  Sign - Safety


Transportation

-  Gate
-  Non-Project General Access Road
-  Project Road
-  Project Trail
-  Recreation Access Road
-  Existing Boat Ramp
-  Boat Ramp Extension












Placer County Water Agency
Middle Fork American River Project








REC Plan Map 10
**Hell Hole Boat Ramp and
Associated Parking Areas**

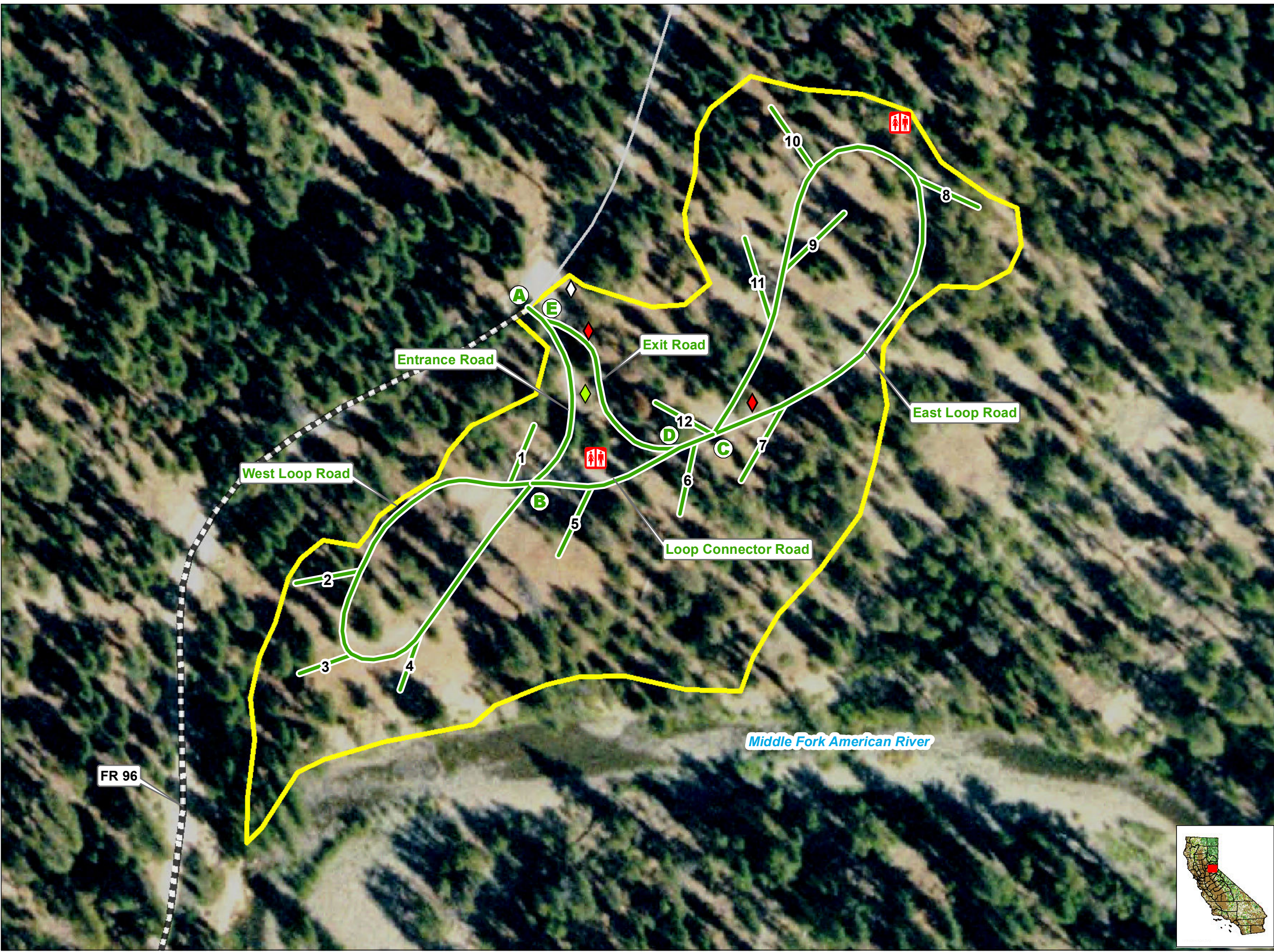
 0 50 100 200 Feet
Projection: Ca. Stateplane, Zone 2
Datum: NAD 83
Date: 7/28/11

Recreation

-  Bathroom
-  Campsite Spur with Site Number
-  Sign - Site Identification
-  Sign - Part 8
-  Sign - Informational
-  Sign - Safety
-  Sign - Regulatory / Traffic
-  Sign - Fee Area

Transportation

-  Gate
-  Non-Project General Access Road
-  Project Road
-  Trail
-  Recreation Access Road
-  Recreation Water Supply Facility Access Road or Trail
-  Recreation Road Reference Point



Placer County Water Agency
Middle Fork American River Project

REC Plan Map 11









Ahart Campground

0 50 100 Feet








Projection: CA State Plane, Zone 2
Datum: NAD 83

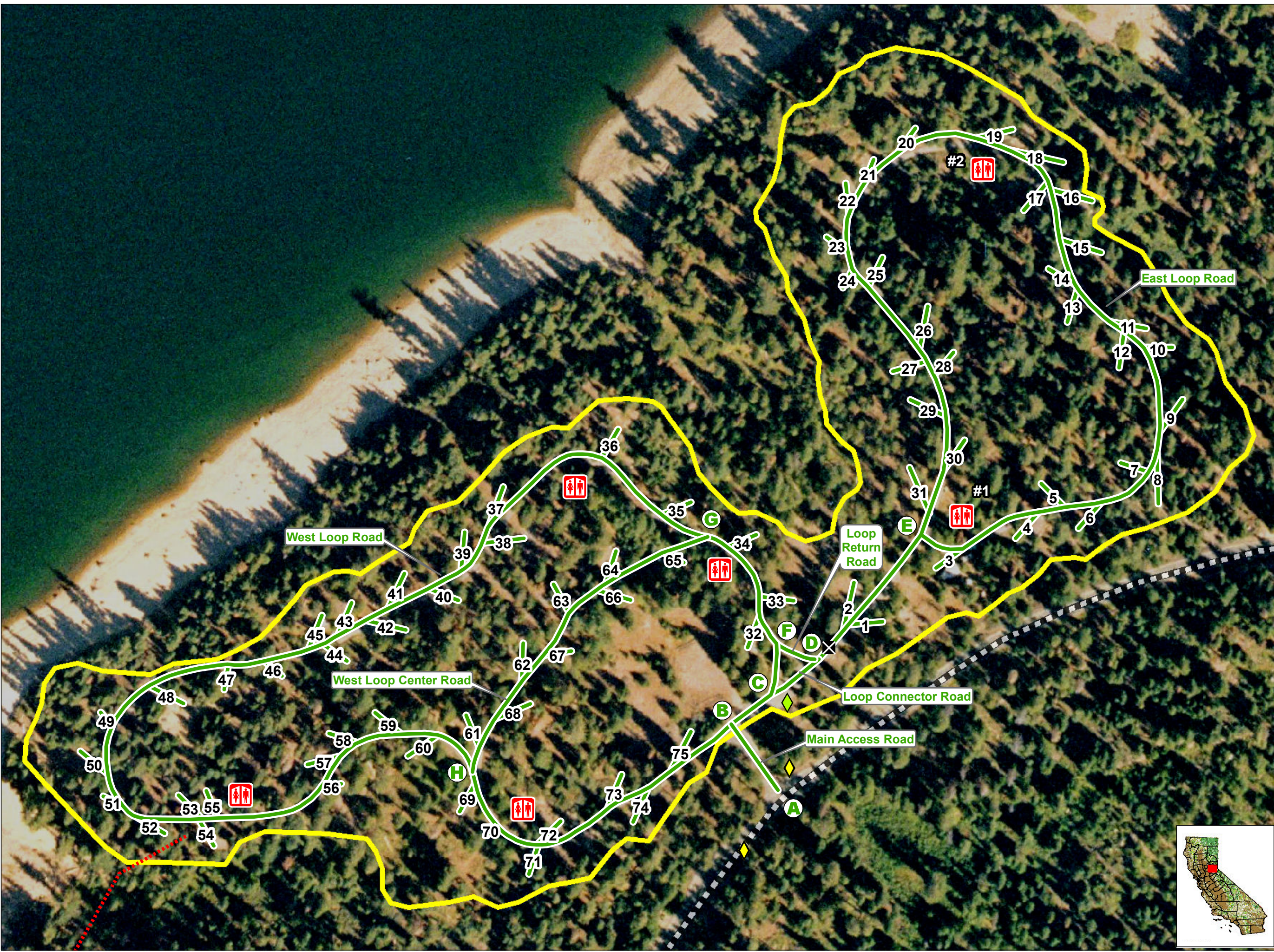
Date: 7/28/11


Recreation

-  Bathroom
-  Campsite Spur with Site Number
-  Sign - Site Identification
-  Sign - Part 8
-  Sign - Informational
-  Sign - Safety
-  Sign - Regulatory / Traffic
-  Sign - Fee Area

Transportation

-  Gate
-  Non-Project General Access Road
-  Project Road
-  Trail
-  Recreation Access Road
-  Recreation Water Supply Facility Access Road or Trail
-  Recreation Road Reference Point




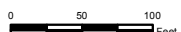


Placer County Water Agency
Middle Fork American River Project

REC Plan Map 12









French Meadows Campground












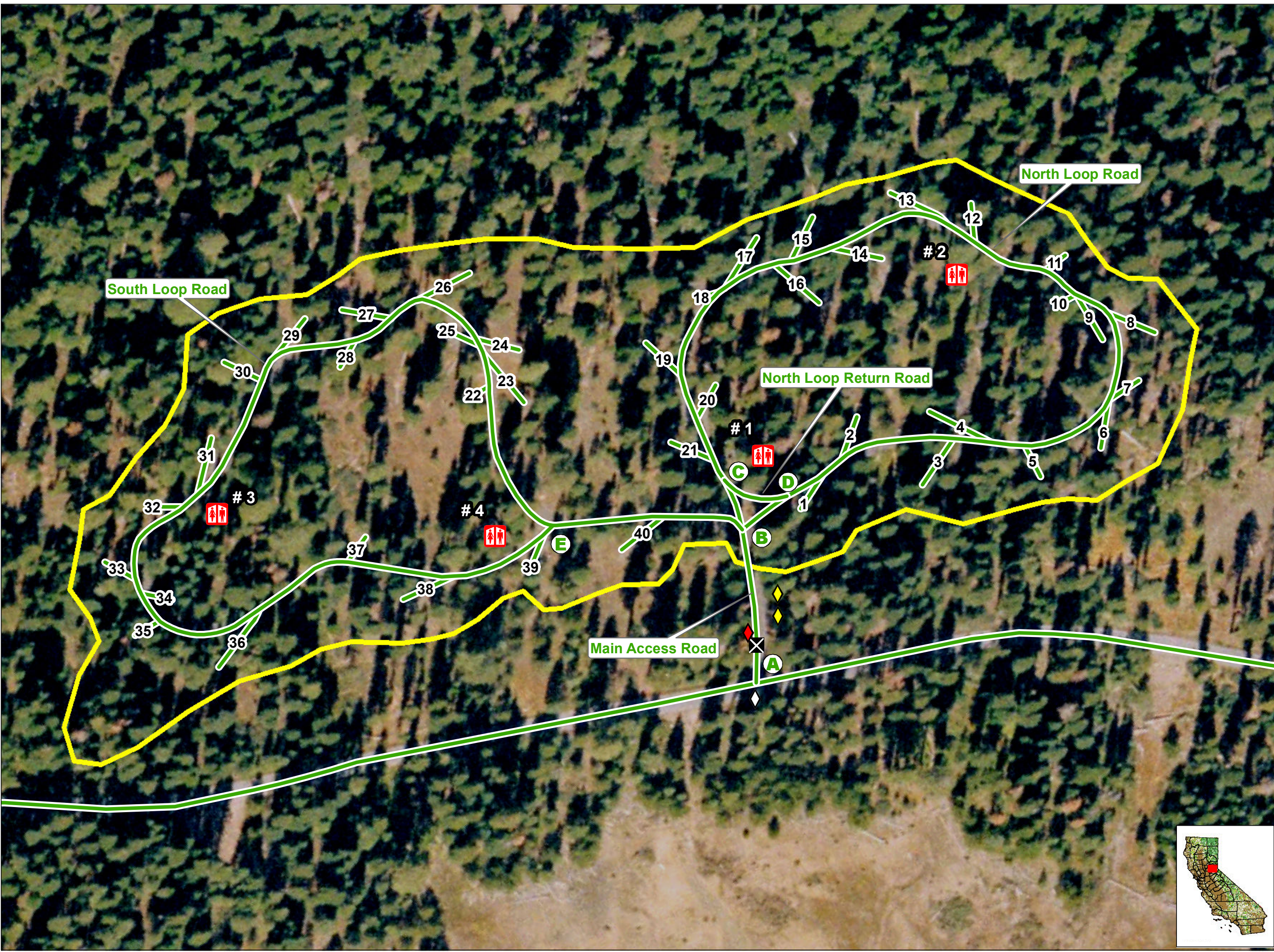
Projection: CA State Plane, Zone 2
 Datum: NAD 83
 Date: 7/28/11

Recreation

-  Bathroom
-  Campsite Spur with Site Number
-  Sign - Site Identification
-  Sign - Part 8
-  Sign - Informational
-  Sign - Safety
-  Sign - Regulatory / Traffic
-  Sign - Fee Area

Transportation

-  Gate
-  Non-Project General Access Road
-  Project Road
-  Trail
-  Recreation Access Road
-  Recreation Water Supply Facility Access Road or Trail
-  Recreation Road Reference Point



Placer County Water Agency
Middle Fork American River Project

REC Plan Map 13









Lewis Campground










Projection: CA State Plane, Zone 2
Datum: NAD 83

Date: 6/17/11

Recreation

-  Bathroom
-  Camp Site with Site Number
-  Sign - Site Identification
-  Sign - Part 8
-  Sign - Informational
-  Sign - Safety
-  Sign - Regulatory / Traffic
-  Sign - Fee Area

Transportation


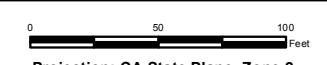
-  Gate
-  Non-Project General Access Road
-  Project Road
-  Trail
-  Recreation Access Road
-  Recreation Water Supply Facility Access Road or Trail
-  Recreation Road Reference Point



Placer County Water Agency
Middle Fork American River Project

REC Plan Map 14










Poppy Campground








Projection: CA State Plane, Zone 2
 Datum: NAD 83


Date: 7/28/11

Recreation

-  Bathroom
-  Campsite Spur with Site Number
-  Group Fire Circle
-  Sign - Site Identification
-  Sign - Part 8
-  Sign - Informational
-  Sign - Safety
-  Sign - Regulatory / Traffic
-  Sign - Fee Area

Transportation


-  Gate
-  Non-Project General Access Road
-  Project Road
-  Trail
-  Recreation Access Road
-  Recreation Water Supply Facility Access Road or Trail
-  Recreation Road Reference Point



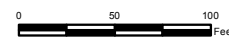
Placer County Water Agency
Middle Fork American River Project

REC Plan Map 15

Coyote Group Campground

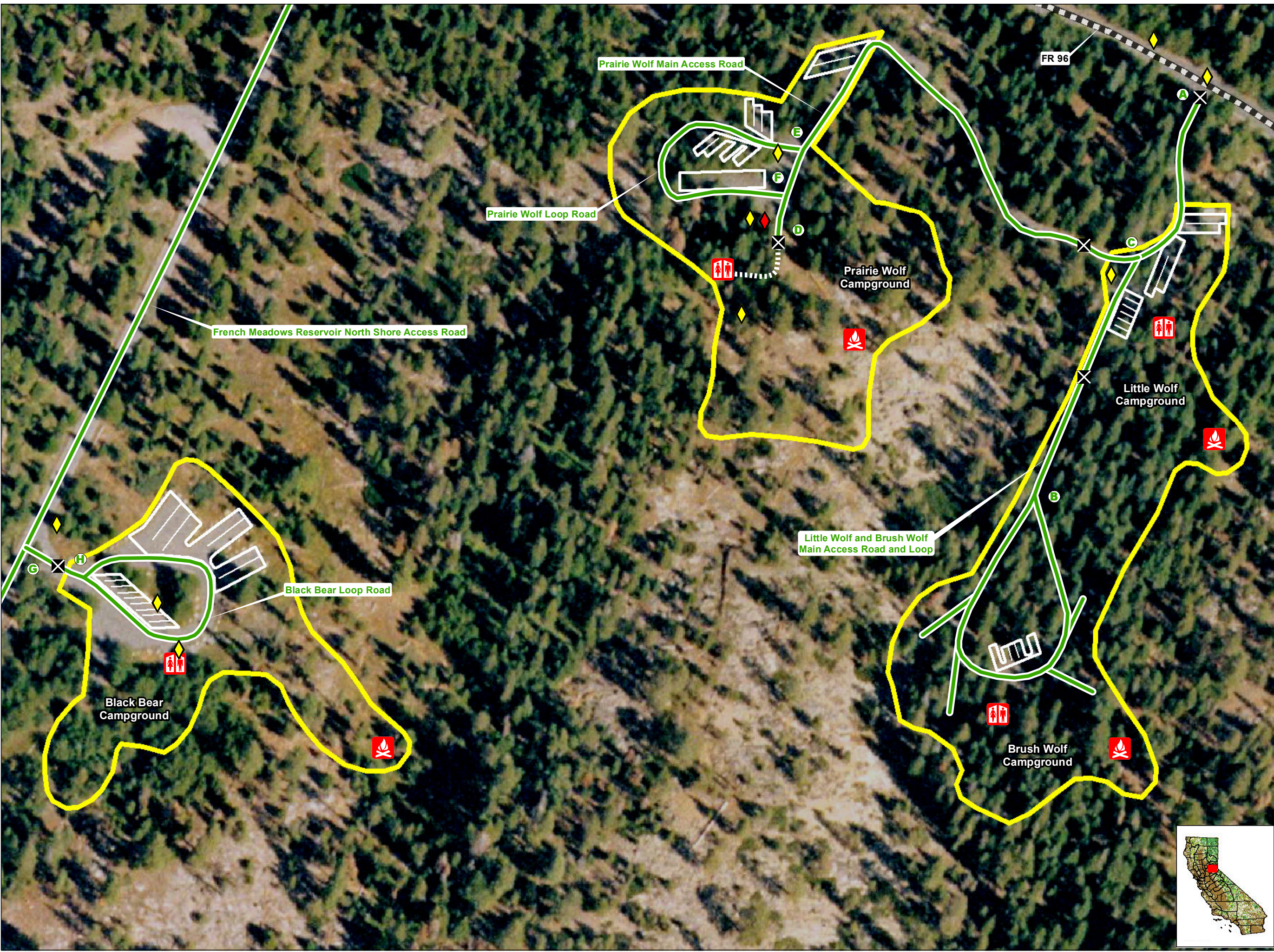


Date: 7/28/11












0 50 100 Feet








Projection: CA State Plane, Zone 2
Datum: NAD 83



Recreation

-  Bathroom
-  Campsite Spur with Site Number
-  Group Fire Circle
-  Sign - Site Identification
-  Sign - Part 8
-  Sign - Informational
-  Sign - Safety
-  Sign - Regulatory / Traffic
-  Sign - Fee Area

Transportation

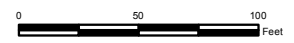
-  Gate
-  Non-Project General Access Road
-  Project Road
-  Trail
-  Recreation Access Road
-  Recreation Water Supply Facility Access Road or Trail
-  Recreation Road Reference Point



Placer County Water Agency
Middle Fork American River Project

REC Plan Map 16


Gates Group Campground








Projection: CA State Plane, Zone 2
Datum: NAD 83

Date: 7/28/11








Hydrography

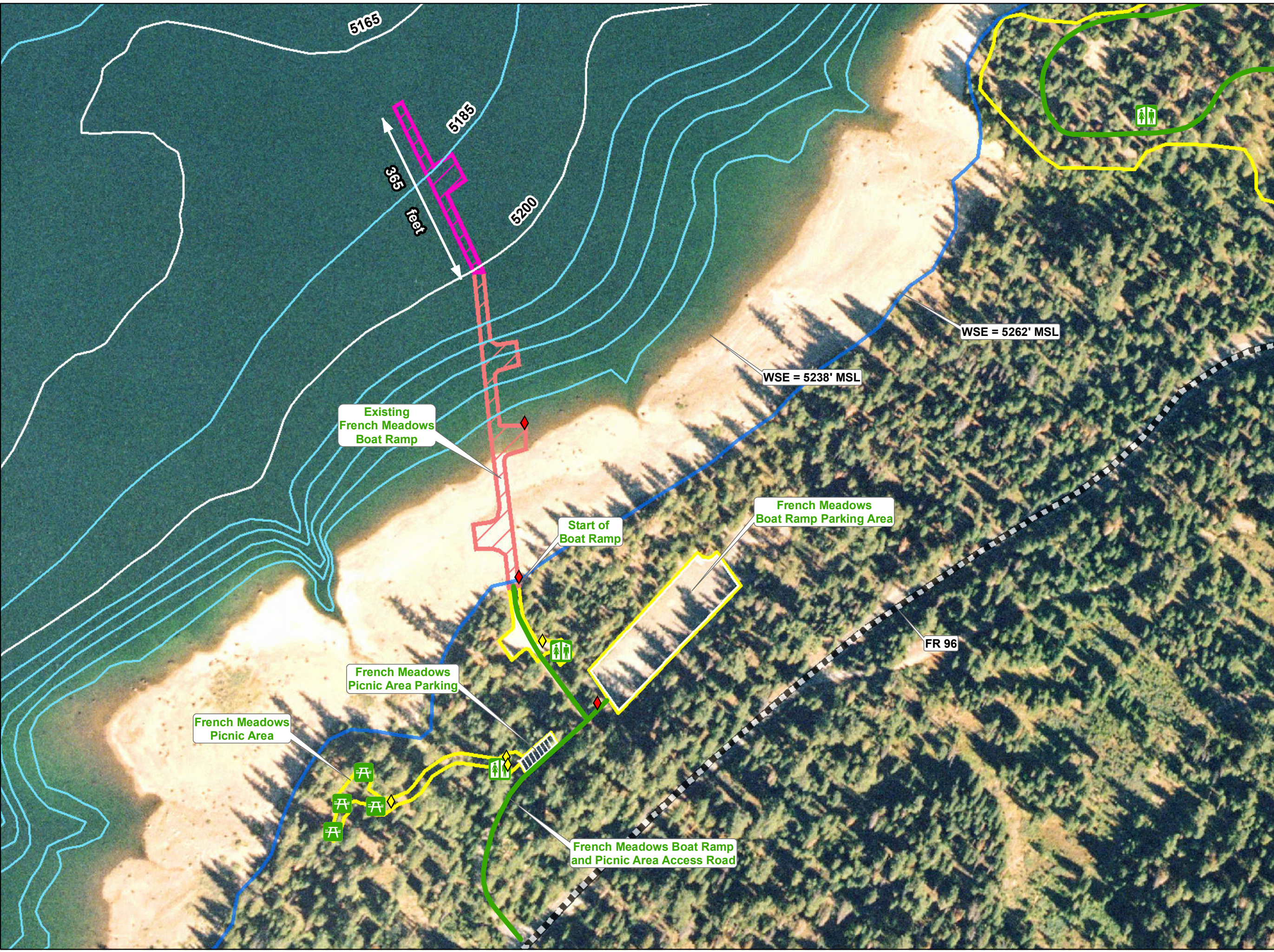
 Inundation Footprint at 5262' MSL
(Current Maximum Operating WSE)

Recreation

-  Bathroom
-  Picnic Table
-  Sign - Informational
-  Sign - Regulatory
-  Sign - Safety

Transportation

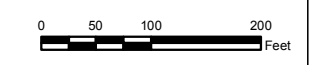
-  Gate
-  Non-Project General Access Road
-  Project Road
-  Project Trail
-  Recreation Access Road
-  Existing Boat Ramp
-  Boat Ramp Extension



Placer County Water Agency
Middle Fork American River Project

REC Plan Map 17




**French Meadows Boat Ramp
and Picnic Area**











Projection: Ca. Stateplane, Zone 2
Datum: NAD 83

Date: 7/28/11









Hydrography

-  Inundation Footprint at 5200' MSL
-  Inundation Footprint at 5220' MSL
-  Inundation Footprint at 5262' MSL (Current Maximum Operating WSE)

Recreation

-  Bathroom
-  Picnic Table
-  Sign - Site Identification
-  Sign - Part 8
-  Sign - Informational
-  Sign - Safety
-  Sign - Regulatory / Traffic
-  Sign - Fee Area

Transportation

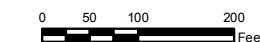
-  Gate
-  Non-Project General Access Road
-  Project Road
-  Trail
-  Recreation Access Road
-  Recreation Water Supply Facility Access Road or Trail
-  Recreation Road Reference Point
-  Existing Boat Ramp



Placer County Water Agency
Middle Fork American River Project

REC Plan Map 18

**McGuire Boat Ramp, Picnic Area and Beach,
and Associated Parking Areas**












Projection: Ca. Stateplane, Zone 2
Datum: NAD 83








Date: 7/28/11




Recreation

-  Bathroom - Accessible
-  Picnic Site with Site Number
-  Sign - Site Identification
-  Sign - Part 8
-  Sign - Accessible Parking
-  Sign - Informational
-  Sign - Safety
-  Sign - Regulatory / Traffic
-  Sign - Fee Area

Transportation


-  Gate
-  Non-Project General Access Road
-  Project Road
-  Trail
-  Recreation Access Road
-  Recreation Water Supply Facility Access Road or Trail
-  Recreation Road Reference Point



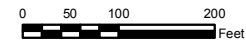
Placer County Water Agency
Middle Fork American River Project

REC Plan Map 19

**Ralston Picnic Area
and Car Top Boat Ramp**

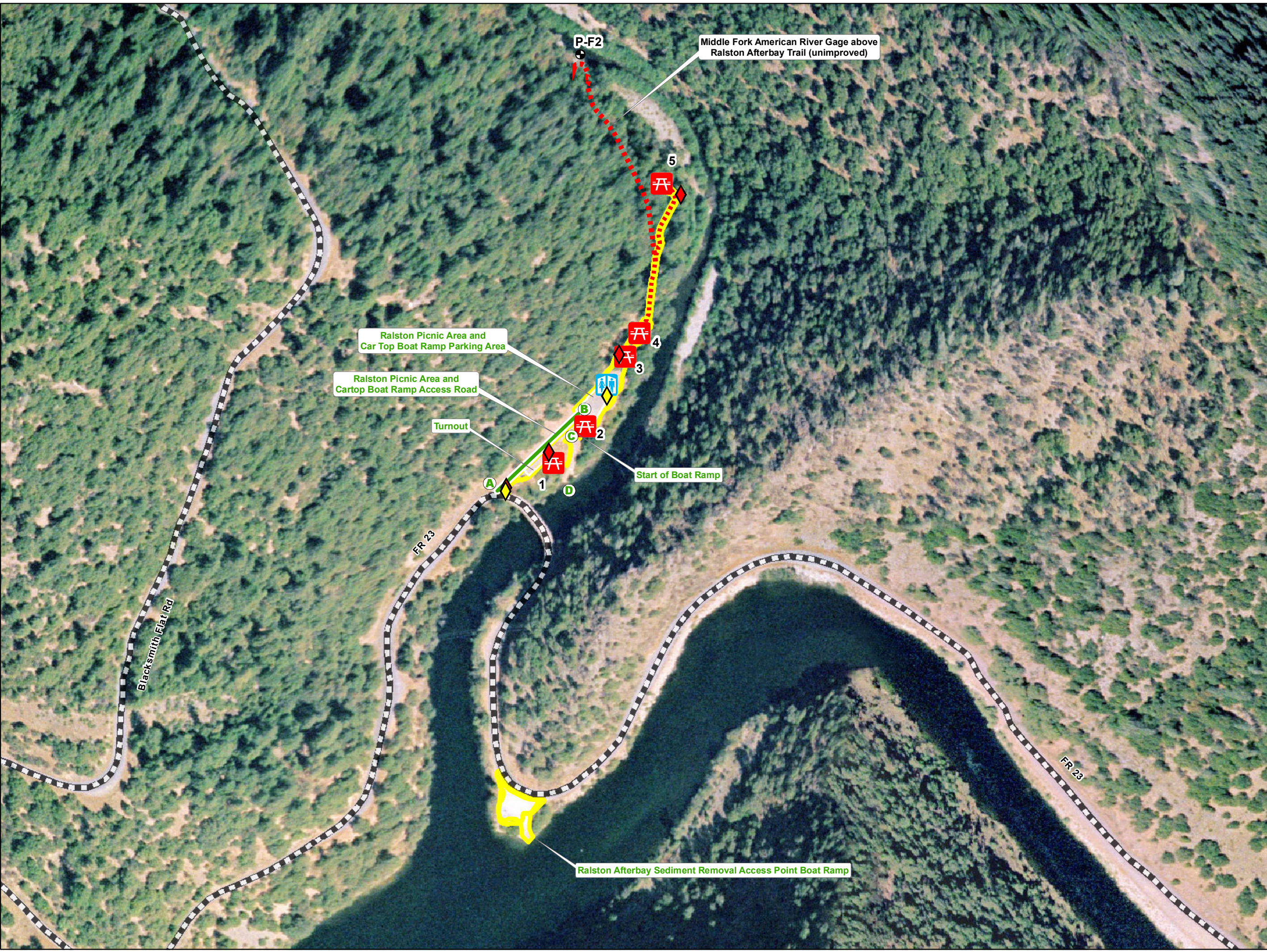


Date: 7/29/11












0 50 100 200 Feet








Projection: Ca. Stateplane, Zone 2
Datum: NAD 83

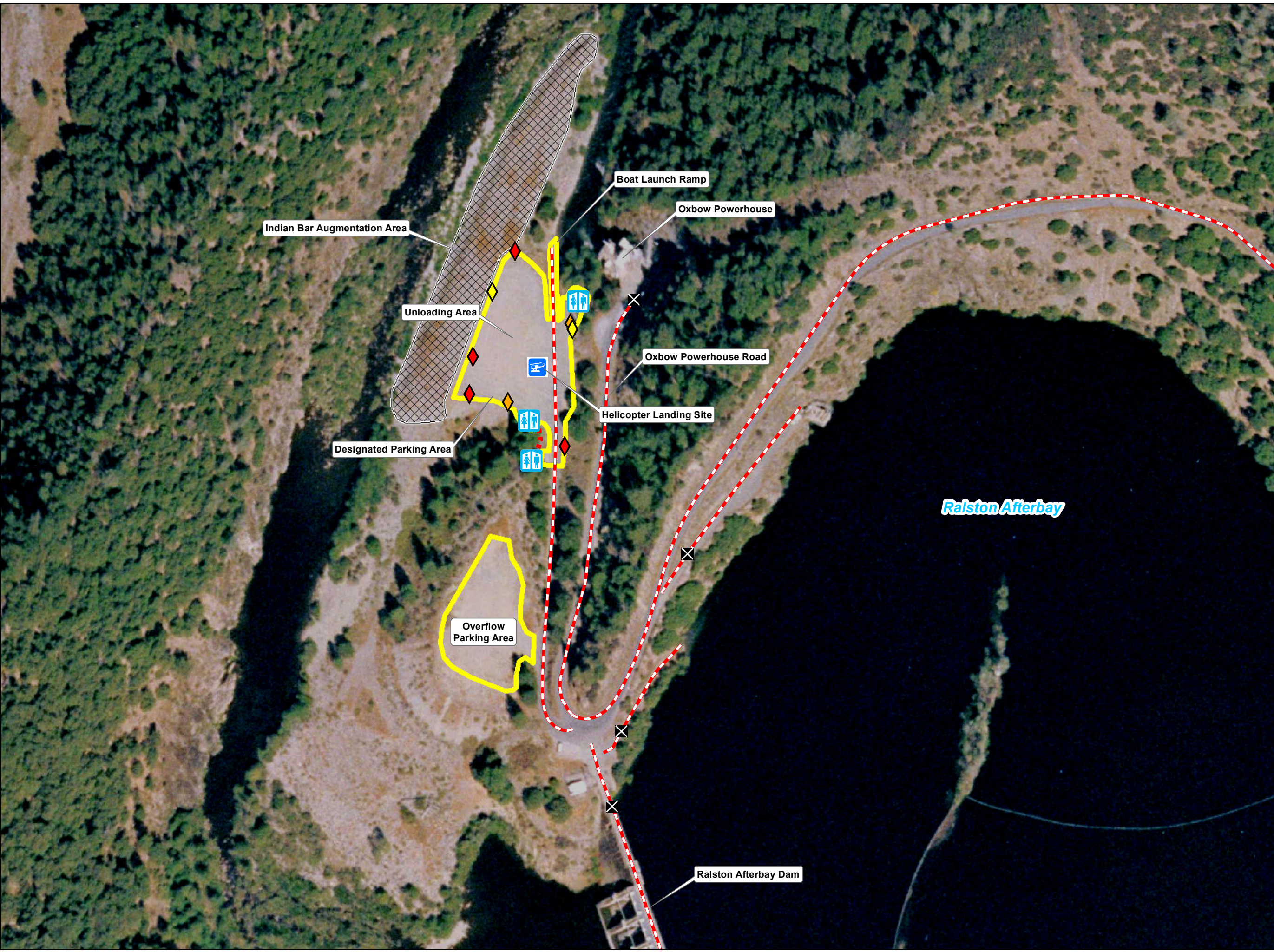



Recreation

-  Bathroom - Accessible
-  Picnic Table
-  Sign - Site Identification
-  Sign - Part 8
-  Sign - Accessible Parking
-  Sign - Informational
-  Sign - Safety
-  Sign - Regulatory / Traffic
-  Sign - Fee Area

Transportation

-  Gate
-  Non-Project General Access Road
-  Project Road
-  Trail
-  Recreation Access Road
-  Recreation Water Supply Facility Access Road or Trail
-  Recreation Road Reference Point




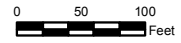


Placer County Water Agency
Middle Fork American River Project

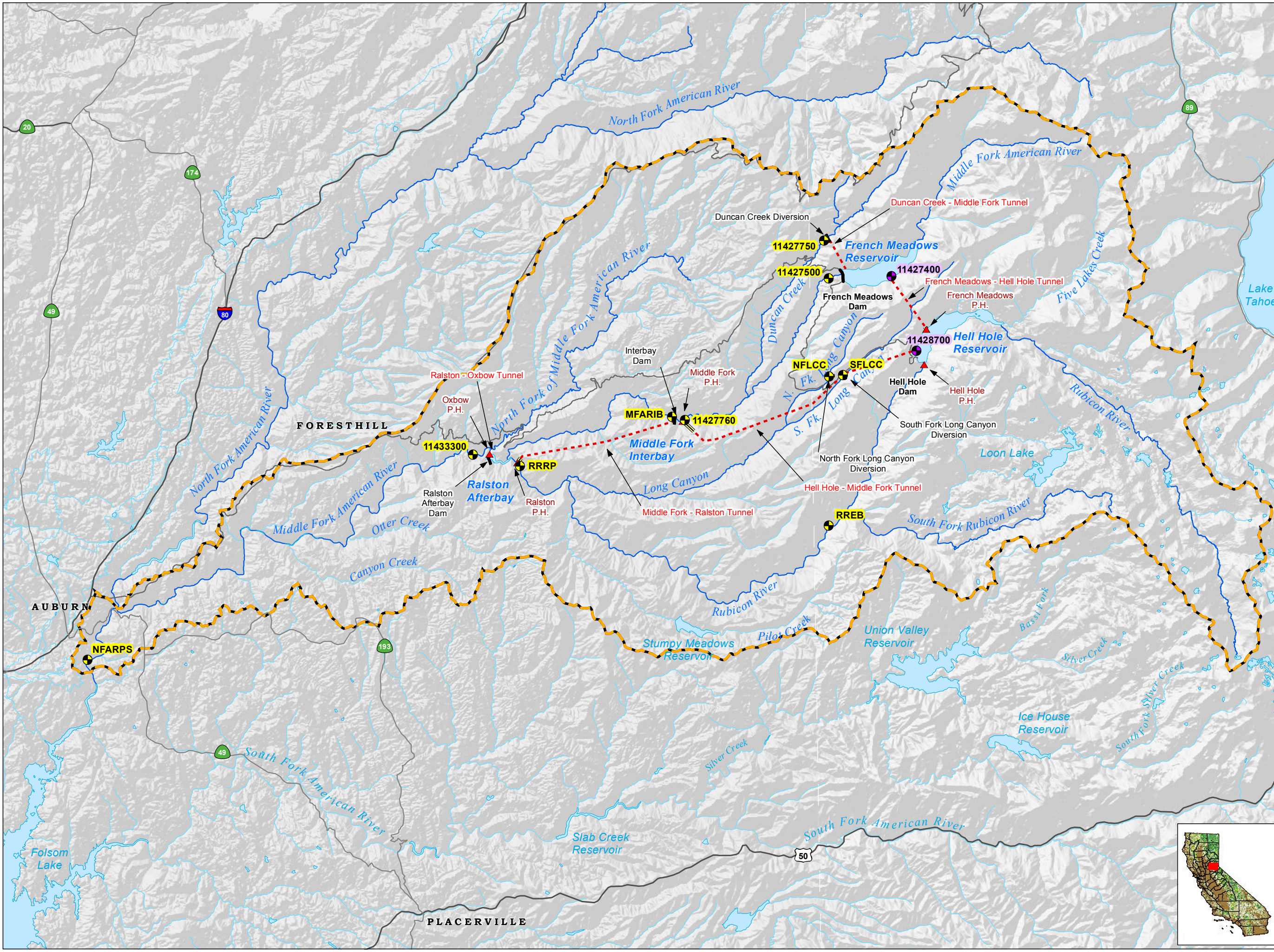
REC Plan Map 20

Indian Bar River Access





Date: 7/28/11
Projection: Ca. Stateplane, Zone 2
Datum: NAD 83



Project Facilities

- Powerhouse
- Dam
- Tunnel
- Penstock

Transportation

- Major Road
- Minor Road

Hydrography

- Watercourse
- Water Body
- Middle Fork American River Watershed*

*Modified from Calwater Ver. 2.2 to represent drainage above high-water mark of Folsom Lake

Proposed Real Time Flow Gaging Station Locations

- Gage Location (15 min.)
- Gage Location (Daily)

PCWA

Placer County Water Agency
Middle Fork American River Project

REC Plan Map 21

Real Time Flow Gaging Station Locations

0 0.5 1 2 3 4 5 Miles

Projection: CA State Plane, Zone 2
Datum: NAD 83

Date: 6/17/11

