DON PEDRO HYDROELECTRIC PROJECT
FERC NO. 2299

FINAL LICENSE APPLICATION

EXHIBIT E – ENVIRONMENTAL REPORT

APPENDIX E-3
DRAFT RECREATION RESOURCE MANAGEMENT PLAN



WATER & POWER
Serving Central California since 1887

MID
Modesto Irrigation District

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List of Acronyms

ac .....acres
ACEC.....Area of Critical Environmental Concern
ACHP.....Advisory Council for Historic Preservation
ACOE.....U.S. Army Corps of Engineers
ADA.....Americans with Disabilities Act (ADA/ABAAG)
AF .....acre-feet
AGS.....Annual Grasslands
ALJ.....Administrative Law Judge
APE.....Area of Potential Effect
APEA .....Applicant-Prepared Environmental Assessment
ARMR.....Archaeological Resource Management Report
AWQC .....Ambient Water Quality Criteria
BA .....Biological Assessment
BDCP .....Bay-Delta Conservation Plan
BLM.....U.S. Department of the Interior, Bureau of Land Management
BLM-S .....Bureau of Land Management – Sensitive Species
BMI.....Benthic macroinvertebrates
BMP .....Best Management Practices
BO.....Biological Opinion
BOW .....Blue Oak Woodland
^{o}C.....celsius
CalCOFI.....California Cooperative Oceanic Fisheries Investigations
CalEPPC .....California Exotic Pest Plant Council
CalSPA.....California Sportfishing Protection Alliance
CAS.....California Academy of Sciences
CBDA .....California Bay-Delta Authority
CCC.....Criterion Continuous Concentrations
CCIC .....Central California Information Center
CCSF.....City and County of San Francisco
CD.....Compact Disc
CDBW.....California Department of Boating and Waterways

CDEC.....California Data Exchange Center
CESA .....California Endangered Species Act
CDFA.....California Department of Food and Agriculture
CDFG.....California Department of Fish and Game (as of January 2013, CDFW)
CDFW .....California Department of Fish and Wildlife
CDMG.....California Division of Mines and Geology
CDOF.....California Department of Finance
CDPH.....California Department of Public Health
CDPR .....California Department of Parks and Recreation
CDSOD.....California Division of Safety of Dams
CDWR.....California Department of Water Resources
CE .....California Endangered Species
CEC.....California Energy Commission
CEII.....Critical Energy Infrastructure Information
CEQA.....California Environmental Quality Act
CESA .....California Endangered Species Act
CFR.....Code of Federal Regulations
cfs.....cubic feet per second
CGS.....California Geological Survey
cm.....centimeters
CMAP .....California Monitoring and Assessment Program
CMC.....Criterion Maximum Concentrations
CNDDB.....California Natural Diversity Database
CNPS.....California Native Plant Society
CORP .....California Outdoor Recreation Plan
CPUC .....California Public Utilities Commission
CPUE .....Catch Per Unit Effort
CRAM.....California Rapid Assessment Method
CRC.....Chamise-Redshank Chaparral
CRLF.....California Red-Legged Frog
CRRF .....California Rivers Restoration Fund
CSAS.....Central Sierra Audubon Society
CSBP.....California Stream Bioassessment Procedure

CSU.....California State University
CT .....California Threatened Species
CTR.....California Toxics Rule
CTS .....California Tiger Salamander
CVP.....Central Valley Project
CVRWQCB .....Central Valley Regional Water Quality Control Board
CWA .....Clean Water Act
CWD .....Chowchilla Water District
CWHR.....California Wildlife Habitat Relationship
CZMA .....Coastal Zone Management Act
DDT .....dichlorodiphenyltrichloroethane
Districts.....Turlock Irrigation District and Modesto Irrigation District
DLA .....Draft License Application
DO.....Dissolved Oxygen
DOI .....Department of Interior
DPRA.....Don Pedro Recreation Agency
DPS .....Distinct Population Segment
DSE.....Chief Dam Safety Engineer
EA .....Environmental Assessment
EBMUD .....East Bay Municipal Utilities District
EC .....Electrical Conductivity
EFH.....Essential Fish Habitat
EIR .....Environmental Impact Report
EIS.....Environmental Impact Statement
Elev or el .....Elevation
ENSO .....El Niño Southern Oscillation
EPA.....U.S. Environmental Protection Agency
ESA.....Federal Endangered Species Act
ESRCD.....East Stanislaus Resource Conservation District
ESU.....Evolutionary Significant Unit
EVC.....Existing Visual Condition
EWUA.....Effective Weighted Useable Area
°F.....fahrenheit

FERC.....Federal Energy Regulatory Commission
FFS.....Foothills Fault System
FL.....Fork length
FLA.....Final License Application
FMP.....Fishery Management Plan
FMU.....Fire Management Unit
FOT.....Friends of the Tuolumne
FPA.....Federal Power Act
FPC.....Federal Power Commission
FPPA.....Federal Plant Protection Act
ft.....feet
ft/mi.....feet per mile
FWCA.....Fish and Wildlife Coordination Act
FWUA.....Friant Water Users Authority
FYLF.....Foothill Yellow-Legged Frog
g.....grams
GIS.....Geographic Information System
GLO.....General Land Office
GORP.....Great Outdoor Recreation Pages
GPS.....Global Positioning System
HCP.....Habitat Conservation Plan
HSC.....Habitat Suitability Criteria
HHWP.....Hetch Hetchy Water and Power
HORB.....Head of Old River Barrier
hp.....horsepower
HPMP.....Historic Properties Management Plan
IFIM.....Instream Flow Incremental Methodology
ILP.....Integrated Licensing Process
in.....inches
ISR.....Initial Study Report
ITA.....Indian Trust Assets
IUCN.....International Union for the Conservation of Nature
KOPs.....Key Observation Points

kV.....kilovolt
kVA.....kilovolt-amperes
kW.....kilowatt
LWD .....large woody debris
m .....meters
mm .....millimeter
M&I.....Municipal and Industrial
MCL.....Maximum Contaminant Level
mg/kg .....milligrams/kilogram
mg/L.....milligrams per liter
mgd .....million gallons per day
MGR .....Migration of Aquatic Organisms
MHW .....Montane Hardwood
mi .....miles
mi^2.....square miles
MID.....Modesto Irrigation District
MOA .....Memorandum of Agreement
MOU .....Memorandum of Understanding
MPN.....Most Probable Number
MPR.....market price referents
MSCS.....Multi-Species Conservation Strategy
msl.....mean sea level
MUN .....municipal and domestic supply
MVA .....Megavolt-ampere
MW .....megawatt
MWh .....megawatt hour
mya.....million years ago
NAE .....National Academy of Engineering
NAHC .....Native American Heritage Commission
NAS.....National Academy of Sciences
NAVD 88.....North American Vertical Datum of 1988
NAWQA .....National Water Quality Assessment
NCCP .....Natural Community Conservation Plan

NGVD29 .....National Geodetic Vertical Datum of 1929
NEPA .....National Environmental Policy Act
NERC.....North American Electric Reliability Corporation
NGOs .....Non-Governmental Organizations
NHI .....Natural Heritage Institute
NHPA.....National Historic Preservation Act
NISC .....National Invasive Species Council
NMFS.....National Marine Fisheries Service
NOAA .....National Oceanic and Atmospheric Administration
NOI .....Notice of Intent
NPS .....U.S. Department of the Interior, National Park Service
NRCS .....National Resource Conservation Service
NRHP.....National Register of Historic Places
NRI.....Nationwide Rivers Inventory
NTU .....Nephelometric Turbidity Unit
NWI.....National Wetland Inventory
NWIS .....National Water Information System
NWR .....National Wildlife Refuge
O&M .....operation and maintenance
OEHHA.....Office of Environmental Health Hazard Assessment
OID .....Oakdale Irrigation District
ORV .....Outstanding Remarkable Value
OSHA.....Occupational Safety and Health Administration
PA .....Programmatic Agreement
PAD.....Pre-Application Document
PDAW.....Project Demand of Applied Water
PDO.....Pacific Decadal Oscillation
PEIR.....Program Environmental Impact Report
PGA.....Peak Ground Acceleration
PG&E.....Pacific Gas and Electric
PHABSIM.....Physical Habitat Simulation System
PHG.....Public Health Goal
PM&E .....Protection, Mitigation and Enhancement

PMF.....Probable Maximum Flood
POAOR.....Public Opinions and Attitudes in Outdoor Recreation
ppb.....parts per billion
ppm .....parts per million
PSP.....Proposed Study Plan
PWA.....Public Works Administration
QA.....Quality Assurance
QC.....Quality Control
RA.....Recreation Area
RBP.....Rapid Bioassessment Protocol
REC-1 .....water contact recreation
REC-2 .....water non-contact recreation
Reclamation .....U.S. Department of the Interior, Bureau of Reclamation
RM .....River Mile
RRMP .....Recreation Resource Management Plan
RMP .....Resource Management Plan
RP.....Relicensing Participant
rpm .....Rotations per minute
RPS .....Renewable Portfolio Standard
RSP .....Revised Study Plan
RST .....Rotary Screw Trap
RWG .....Resource Work Group
RWQCB.....Regional Water Quality Control Board
SC.....State candidate for listing under CESA
SCADA.....Supervisory Control and Data Acquisition
SCD.....State candidate for delisting under CESA
SCE .....State candidate for listing as endangered under CESA
SCT .....State candidate for listing as threatened under CESA
SD1 .....Scoping Document 1
SD2 .....Scoping Document 2
SE.....State Endangered Species under the CESA
SEED.....U.S. Bureau of Reclamation's Safety Evaluation of Existing Dams
SFP.....State Fully Protected Species under CESA

SFPUC .....San Francisco Public Utilities Commission

SHPO .....State Historic Preservation Officer

SJRA .....San Joaquin River Agreement

SJRGA .....San Joaquin River Group Authority

SJTA .....San Joaquin River Tributaries Authority

SM.....Standard Method

SMUD.....Sacramento Municipal Utility District

SPAWN.....spawning, reproduction and/or early development

SPD .....Study Plan Determination

SRA.....State Recreation Area

SRMA .....Special Recreation Management Area or Sierra Resource Management Area (as per use)

SRMP.....Sierra Resource Management Plan

SRP .....Special Run Pools

SSC .....State species of special concern

ST.....California Threatened Species under the CESA

STORET .....Storage and Retrieval

SWAMP.....Surface Water Ambient Monitoring Program

SWE .....Snow-Water Equivalent

SWP .....State Water Project

SWRCB.....State Water Resources Control Board

TAC.....Technical Advisory Committee

TAF.....thousand acre-feet

TCP .....Traditional Cultural Properties

TCWC.....Tuolumne County Water Company

TDS.....Total Dissolved Solids

TID.....Turlock Irrigation District

TMDL .....Total Maximum Daily Load

TOC.....Total Organic Carbon

TRT.....Tuolumne River Trust

TRTAC .....Tuolumne River Technical Advisory Committee

UC.....University of California

USBR.....U.S. Bureau of Reclamation

USDA.....U.S. Department of Agriculture
USDOC.....U.S. Department of Commerce
USDOI .....U.S. Department of the Interior
USFS .....U.S. Department of Agriculture, Forest Service
USFWS .....U.S. Department of the Interior, Fish and Wildlife Service
USGS .....U.S. Department of the Interior, Geological Survey
USR.....Updated Study Report
UTM.....Universal Transverse Mercator
VAMP .....Vernalis Adaptive Management Plan
VELB .....Valley Elderberry Longhorn Beetle
VES .....visual encounter surveys
VRM .....Visual Resource Management
VRO .....Visual Resource Objective
WBWG .....Western Bat Working Group
WECC.....Western Electricity Coordinating Council
WPA.....Works Progress Administration
WPT .....Western Pond Turtle
WQCP.....Water Quality Control Plan
WSA.....Wilderness Study Area
WSIP .....Water System Improvement Program
WSNMB .....Western Sierra Nevada Metamorphic Belt
WUA.....weighted usable area
WWTP .....Wastewater Treatment Plant
WY.....water year
yd^3 .....cubic yard
yr .....year
µS/cm .....microSeimens per centimeter
µg/L.....micrograms per liter
µmhos.....micromhos

PREFACE

The Don Pedro Project provides water storage for irrigation and municipal and industrial (M&I) use, flood control, hydroelectric generation, recreation, and natural resource protection (hereinafter, the "Don Pedro Project"). The study area for the recreation resource studies conducted in support of relicensing considered all components, facilities, operations, and maintenance that make up the Don Pedro Project. The Don Pedro Project was originally conceived as a water supply project. The Don Pedro Project was constructed for the following primary purposes: (1) to provide water supply for the co-licensees, Turlock Irrigation District (TID) and Modesto Irrigation District (MID) (collectively, the Districts), for irrigation of over 200,000 acres (ac) of Central Valley farmland and for M&I use, (2) to provide flood control benefits along the Tuolumne and San Joaquin rivers, and (3) to provide a water banking arrangement for the benefit of the City and County of San Francisco (CCSF) and its 2.6 million Bay Area water customers. The original license was issued in 1966. In 1995, the Districts entered into an agreement with a number of parties which resulted in greater flows to the lower Tuolumne River for the protection of aquatic resources.

Hydroelectric generation is a secondary purpose of the Don Pedro Project. Hereinafter, the hydroelectric generation facilities and operations will be referred to as the "Don Pedro Hydroelectric Project", or the "Project". With this license application to FERC, the Districts are seeking a new license to continue generating hydroelectric power. Based on the information contained in this application, and other sources of information on the record, FERC will consider whether, and under what conditions, to issue a new license for the continued generation of hydropower at the Districts' Don Pedro Project. The Districts are providing a complete description of the facilities and operation of the Don Pedro Project so the effects of the operation and maintenance of the Don Pedro hydroelectric facilities can be distinguished from the effects of the operation and maintenance activities of the overall Don Pedro Project's flood control and water supply/consumptive use purposes.

Being able to differentiate the effects of the hydropower operations from the effects of the flood control and consumptive use purposes and needs of the Don Pedro Project will aid in defining the scope and substance of reasonable protection, mitigation, and enhancement (PM&E) alternatives to be considered in relicensing. As FERC states in Scoping Document 2 in a discussion related to alternative project operation scenarios: "…alternatives that address the consumptive use of water in the Tuolumne River through construction of new structures or methods designed to alter or reduce consumptive use of water are…alternative mitigation strategies that could not replace the Don Pedro *hydroelectric* project [emphasis added]. As such, these recommended alternatives do not satisfy the NEPA purpose and need for the proposed action and are not reasonable alternatives for the NEPA analysis."

1.0 INTRODUCTION

The Districts developed the Recreation Resource Management Plan (RRMP or Plan) to guide the management and maintenance of public recreation within the Project Boundary. The Plan describes the existing measures and facilities to be continued and maintained and new measures or facilities proposed by the Districts for the purposes of creating, preserving, and enhancing

recreational opportunities, and for safeguarding the public during use of the Don Pedro Reservoir.

Throughout the recreation season of 2012, the Districts performed a Facility Condition, Public Accessibility, and Recreation Use Assessment (Study RR-01) to collect information related to the use, maintenance and improvement of existing recreation facilities to support current and future demand for public recreation. In 2012 and 2013, the Districts performed a Whitewater Boating Take-Out Feasibility Study (RR-02) to assess the engineering feasibility of improving the current river-egress used by whitewater boaters at the upstream end of the Don Pedro Reservoir at the Ward's Ferry Bridge.

1.1 General Description of Facilities

The Districts are the co-licensees of the 168-megawatt (MW) Don Pedro Hydroelectric Project located on the Tuolumne River in western Tuolumne County in the Central Valley region of California. The Don Pedro Dam is located at river mile (RM) 54.8 and the Don Pedro Reservoir formed by the dam extends 24 miles upstream at the normal maximum water surface elevation of 830 feet (ft) above mean sea level (msl; NGVD 29). At elevation 830 ft, the reservoir stores over 2,000,000 acre-feet (AF) of water and has a surface area slightly less than 13,000 acres (ac). The watershed above Don Pedro Dam is approximately 1,533 square miles (mi^2).

Both TID and MID are local public agencies authorized under the laws of the State of California to provide water supply for M&I uses and to provide retail electric service. The Don Pedro Project is a multi-purpose water resource development providing water storage for the beneficial use of irrigation of over 200,000 acres of prime Central Valley farmland and for use by the City of Modesto's municipal and industrial water customers. Consistent with agreements between the Districts and CCSF, the Don Pedro Reservoir also includes a 570,000 AF "water bank" CCSF uses to improve the reliability of water supply from its Hetch Hetchy water system while meeting the senior water rights of the Districts. The water bank within Don Pedro Reservoir provides significant water supply benefits for the 2.6 million customers in the San Francisco Bay Area served by CCSF. The Don Pedro Project also provides storage for flood control purposes in accordance with U.S. Army Corps of Engineers (ACOE) Flood Control Manual.

Recreation facilities at Don Pedro Reservoir are operated by the Don Pedro Recreation Agency (DPRA). DPRA, which is operationally a department within TID, is sponsored and governed by an agreement between the Districts and CCSF. DPRA manages the use of all lands within the Project Boundary. DPRA also manages the campsite reservation system, entry-gate administration, and maintenance of all associated facilities, such as the drinking water plant, filtration plant, and wastewater treatment plants. DPRA maintains a visitor's center and headquarters building overlooking Don Pedro Reservoir.

DPRA has 16 full-time employees and up to 35 seasonal employees from May to September. As part of its management of the recreation use at Don Pedro, DPRA rangers hold First Responder medical, wildland firefighting, and limited law enforcement certifications as appropriate for a lake that receives the amount and types of use experienced at Don Pedro Reservoir. DPRA maintains a website at www.donpedrolake.com that provides information on available recreation

opportunities, schedules of operations, and an interactive system for camping reservations. DPRA also is responsible for oversight of concessionaires licensed to provide certain services on the reservoir. Concessionaire-run facilities are currently operated by Forever Resorts, LLC. DPRA activities also include certain non-recreational management duties such as debris management at the upstream end of the reservoir by collecting, corralling, and wintertime disposal of sticks, wood, and debris in the area where the Tuolumne River flows into the reservoir.

As a storage reservoir, Don Pedro Reservoir water levels are cyclic and can be subject to large annual fluctuations as water is captured during the runoff season for later use for irrigation and M&I water and for carry-over storage. Flood management at the Don Pedro Project, which assists in controlling flood flows in the Tuolumne and San Joaquin rivers, also contributes to reservoir level fluctuations.

The Project Boundary extends from approximately one mile downstream of Don Pedro Dam to approximately RM 80.8 upstream of the dam, corresponding to a water surface elevation of 845 ft (Figure 1.1-1). The top of Don Pedro Dam is at elevation 855 ft. The Project Boundary encompasses approximately 18,370 ac of land with 74 percent of the lands owned jointly by the Districts, and the remaining 26 percent (approximately 4,800 ac) owned by the United States and managed as a part of the Bureau of Land Management (BLM) Sierra Resource Management Area.

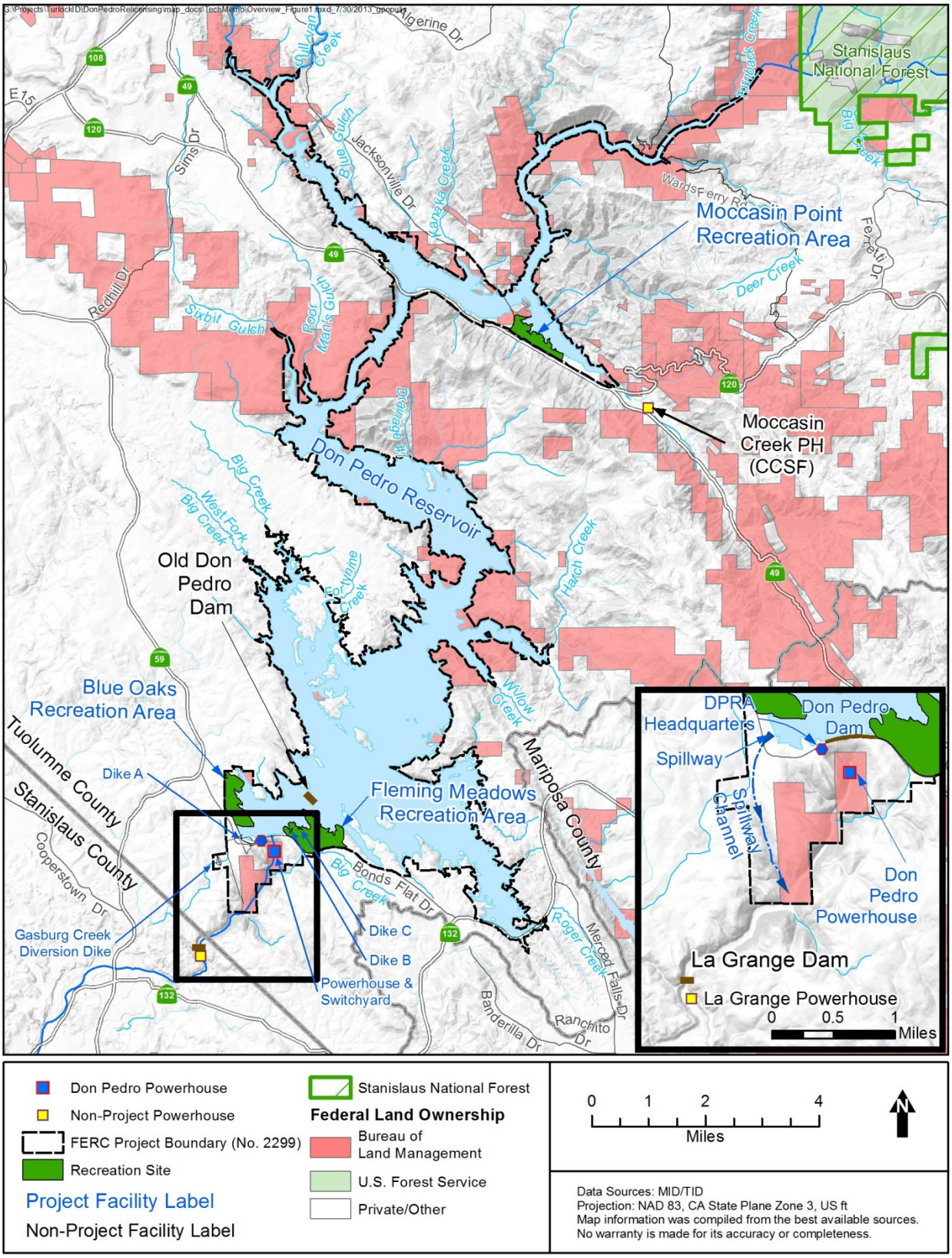


Figure 1.1-1. Don Pedro Project site location map.

1.2 Relicensing Process

The current FERC license for the Project expires on April 30, 2016, and the Districts will apply for a new license no later than April 30, 2014. The Districts began the relicensing process by filing a Notice of Intent and Pre-Application Document (PAD) with FERC on February 10, 2011, following the regulations governing the Integrated Licensing Process (ILP). The Districts' PAD included descriptions of all Don Pedro Project facilities, operations, license requirements, and lands as well as a summary of the extensive existing information available on area resources. The Districts convened a series of Resource Work Group meetings, engaging agencies and other relicensing participants in a collaborative study plan development process culminating in the Districts' Proposed Study Plan (PSP) and Revised Study Plan (RSP) filings to FERC on July 25, 2011 and November 22, 2011, respectively. On December 22, 2011, FERC issued its Study Plan Determination (SPD) for the Project, approving, or approving with modifications, 34 studies proposed in the RSP that addressed Cultural and Historical Resources, Recreational Resources, Terrestrial Resources, and Water and Aquatic Resources.

Reports for each study are included with this license application; each describes the objectives, methods, and results as implemented by the Districts in accordance with FERC's SPD and subsequent study modifications and clarifications. Study reports relevant to the RRMP are the Recreation Facility Condition, Public Accessibility, and Recreation Use Assessment (RR-01) and Whitewater Boating Take-Out Feasibility Study (RR-02).

1.3 Study Results

The Districts conducted recreation studies in 2012 and 2013 with the goal to gather information regarding the use of developed and dispersed recreation opportunities at the Don Pedro Project. The scope of study included investigations of facility carrying capacity; preferences, attitudes, and characteristics of recreation users; current recreation activities and future demand for activities; and the engineering feasibility of improving the existing take-out used by whitewater boaters at Ward's Ferry Bridge (RM 78.4) and potential alternative river-egress locations in the vicinity of the Ward's Ferry Bridge.

1.3.1 Recreation Facility Condition, Public Accessibility, and Recreation Use Assessment

The objectives of the Recreation Facility Condition, Public Accessibility, and Recreation Use Assessment were to evaluate the condition of existing developed recreation facilities and dispersed use areas on Don Pedro Reservoir; estimate the present capacity of recreation facilities to support present and future demand for public recreation (i.e., facility carrying capacity); describe the preferences, attitudes, and characteristics of recreation users; collect information about current recreation activities and future demand for activities; and undertake a creel survey in coordination with Study Plan W&AR-17: Reservoir Fish Population Study. As described in the RR-01 study report (TID/MID 2013a), the study area consisted of developed recreation sites and facilities at the three developed recreation areas: Fleming Meadows, Blue Oaks, and Moccasin Point recreation areas on Don Pedro Reservoir, as well as 12 remote facilities where toilets are maintained (Table 1.3-1 and Figure 1.3-1). Undeveloped shoreline areas within the

Project Boundary where informal use is known to occur were also examined to assess potential impacts of recreation use on shoreline resources.

Table 1.3-1. Summary of recreation facilities and other on-site amenities at developed recreation areas.

Amenities	Moccasin Point RA	Blue Oaks RA	Fleming Meadows RA
Project Recreation Facilities			
Camping Units - Total	96	195	267
With water and electric hookups[1]	18	34	90
Picnic Areas -Total	2	1	2
Group Picnic Sites	1	1	1
Boat Launch Ramp	1	1	1
Fish Cleaning Stations	1	1	1
Comfort Stations - Total	8	11	14
With hot showers	3	5	5
Concession Store	Yes	No	Yes
Swimming Lagoon	No	No	Yes
Marina	Yes	No	Yes
Amphitheatre	No	No	Yes
Houseboat Mooring	Yes	No	Yes
Boat Rentals	Yes	No	Yes
Houseboat Rentals	Yes	No	Yes
Boat Repair Yard	No	Yes	No
Gas and Oil	Yes	No	Yes
Sewage Dump Station	Yes	Yes	Yes

[1] Water service at Moccasin Point and Fleming Meadows recreation areas includes sewer hook-ups.

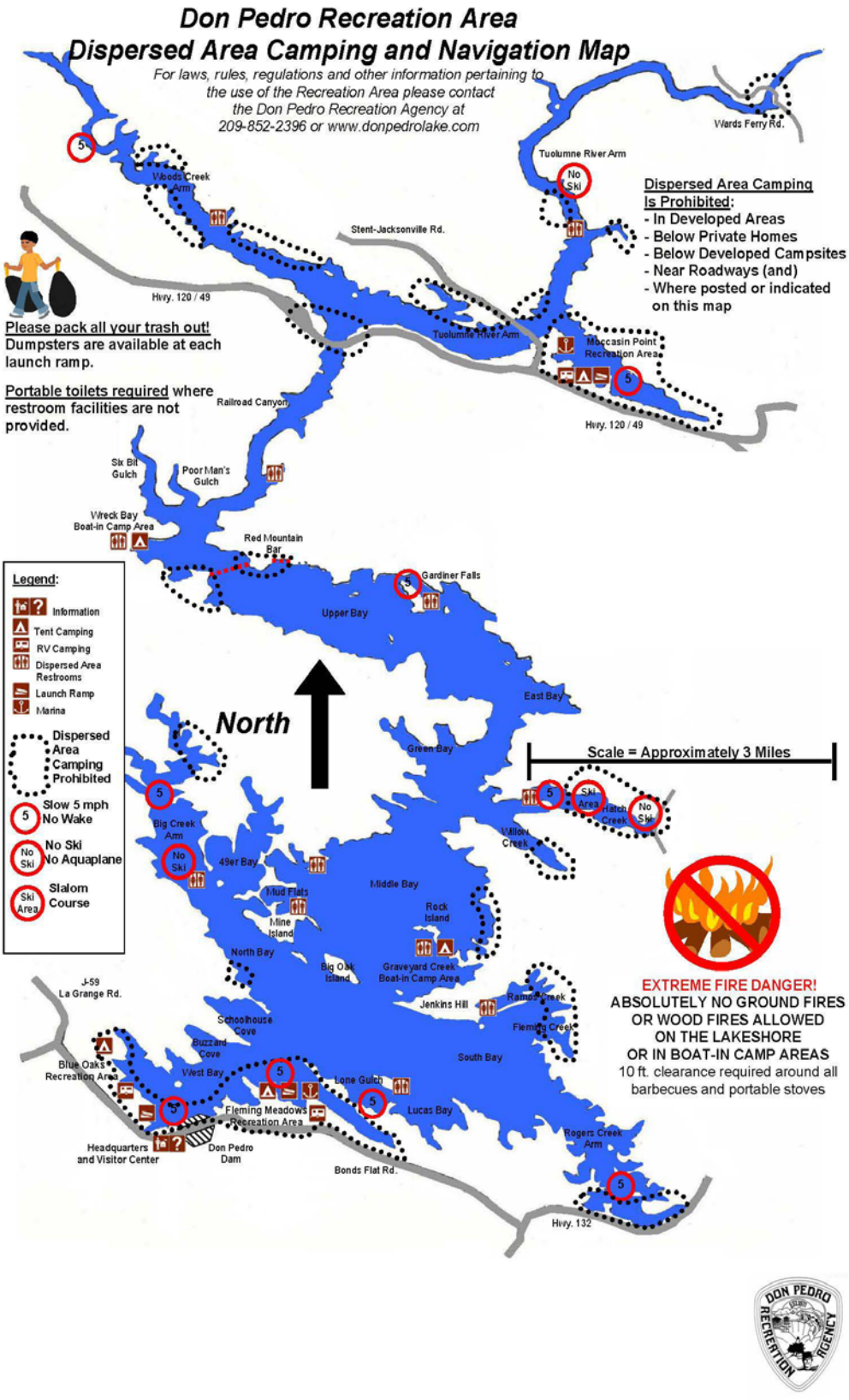


Figure 1.3-1. Developed facilities inventoried and evaluated as part of the recreation facility condition and public accessibility assessment, and recreation use assessment.

1.3.1.1 Fleming Meadows Recreation Area

Fleming Meadows Recreation Area consists of 267 campsites, one group picnic area, one swim lagoon, one boat launch ramp, one fish cleaning station, and 14 toilet buildings (five with showers). Figure 1.3-2 identifies the existing recreation facilities of the Fleming Meadows Recreation Area. All of these facilities, as well as the condition of roads and parking facilities were evaluated.

Overall, roads and parking areas are in good to excellent condition, with only the marina parking area in fair condition. Campground features are also in good to excellent condition with a few exceptions including campsite shelters of wood construction in Campground Area A, and water faucets, which were identified as being in fair condition. With respect to day-use areas, overall, facilities are good to excellent conditions, with the exception of tables and faucets, which were found to be in fair condition.

The site buildings (toilet facilities, the entrance and fish cleaning stations) exteriors and roofs are in good to excellent condition, with interiors rated as fair to good overall. Just over half of the signs are new and constructed of synthetic materials in excellent condition. The remaining signs are constructed of wood and in good condition.

An accessibility evaluation of compliance with the ADA and Architectural Barriers Act Accessibility Guidelines (ABAAG) was completed in accordance with guidelines developed by the U.S. Access Board (USAB 2004). The accessibility at each facility in the campground and day-use areas at Fleming Meadows was categorized as inaccessible, partially accessible, or accessible (TID/MID 2013a). Fleming Meadows facilities are partially accessible with at least some accessible features, such as trash bins, toilets, and parking spaces while other buildings and facilities, including campsites and water spigots, are not accessible.

With the exception of the houseboat marina parking facility, use levels through 2050 at Fleming Meadows Recreation Area are not projected to exceed the capacity of the campgrounds, picnic areas, and parking areas (including boat launch, marina, and overflow lots). The houseboat marina parking facility experienced over 80 percent occupancy on weekends in 2012. Based on population and general recreation use projections, weekend use is projected to exceed capacity by 2020 and overall use is projected to exceed capacity by 2040 as marina users continue to seek to park as close to the marina as possible. It is notable that this parking facility is used primarily by visitors to the marina slips; therefore, future parking demand will be driven by the number of marina slips. No marina expansion is proposed at this time. Use of the Overflow Parking Lot is projected to remain below capacity through 2050.

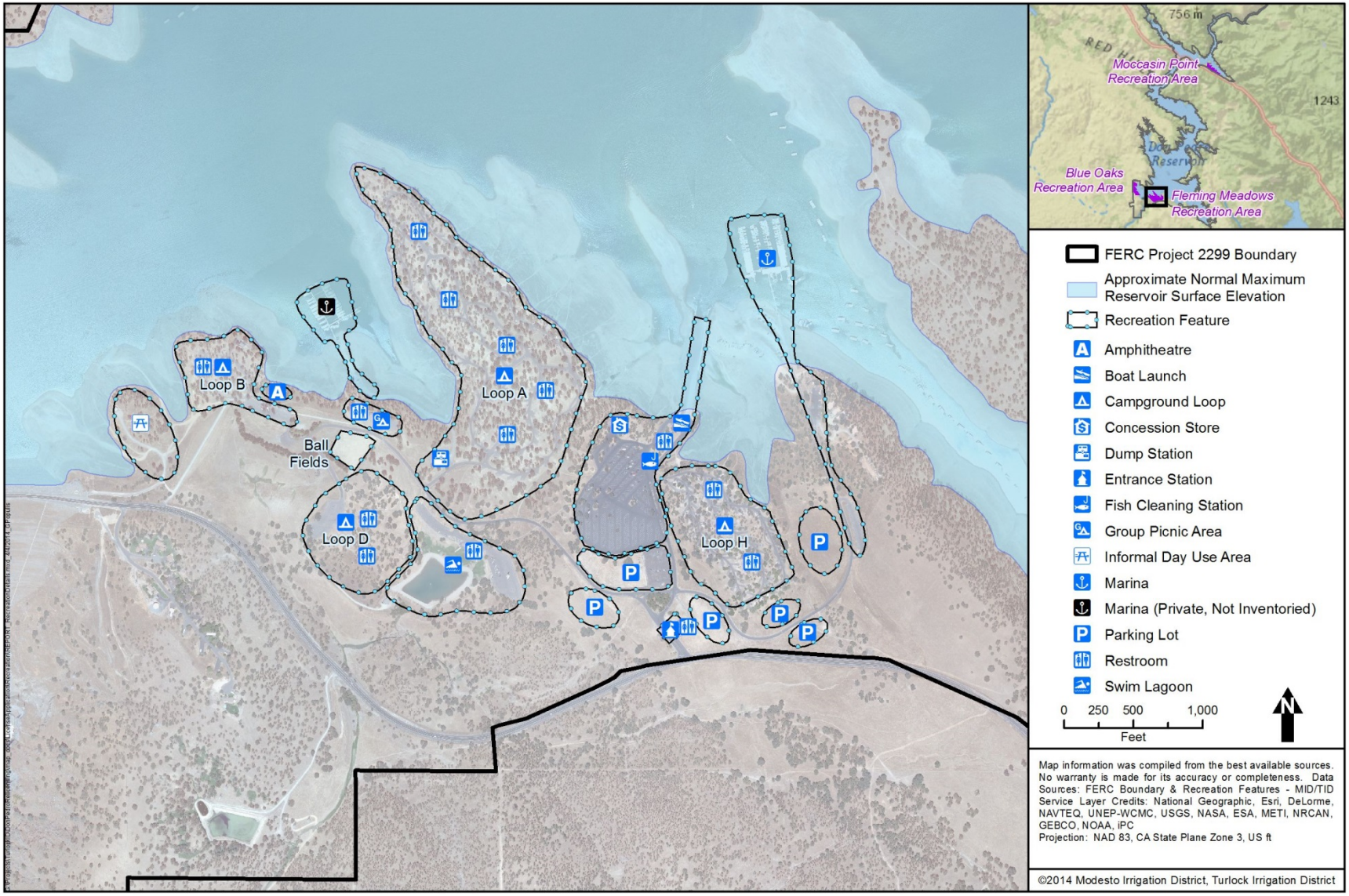


Figure 1.3-2. Recreation facilities at the Fleming Meadows Recreation Area.

1.3.1.2 Blue Oaks Recreation Area

Blue Oaks Recreation Area consists of 195 campsites, one group picnic area, one boat launch ramp, one fish cleaning station, 11 toilet buildings (five with showers), and one sewage dump station facility. Figure 1.3-3 identifies the existing recreation facilities of the Blue Oaks Recreation Area. The evaluation included all of these facilities and site elements, as well as the condition of roads and parking facilities.

Overall, roads and parking areas are in good to excellent condition. Campground features are in good condition overall. The asphalt at the boat ramp main lot was the only parking area found to be in fair condition. With respect to day-use areas, the parking and roads are in excellent condition.

All of the campground facility features are in good or excellent condition, with the exception of a few wood campsite shelters, water faucets, and some trash receptacles in fair condition. Similar to Fleming Meadows, day-use facilities are in good or excellent condition, with the exception of tables and water faucets at the group picnic area and the boat launch, which are in fair condition.

With respect to the site buildings (toilet buildings and the entrance station), the condition assessments were similar to Fleming Meadows. With respect to toilet facilities, the exteriors are in good to excellent condition, while the interiors are in fair to good condition.

Signs within the Blue Oaks Recreation Area are generally in good to excellent condition. The signs constructed of synthetic materials are newer and in excellent condition; the signs constructed of wood material are in good condition overall.

Blue Oaks facilities are partially accessible with at least some accessible features, such as trash bins, toilets, and parking spaces while other buildings and facilities, including water spigots and most campsites, are not accessible.

Use levels through 2050 at Blue Oaks Recreation Area are not projected to exceed the capacity of the campgrounds, picnic areas, and parking areas (including boat launch and group picnic area parking).

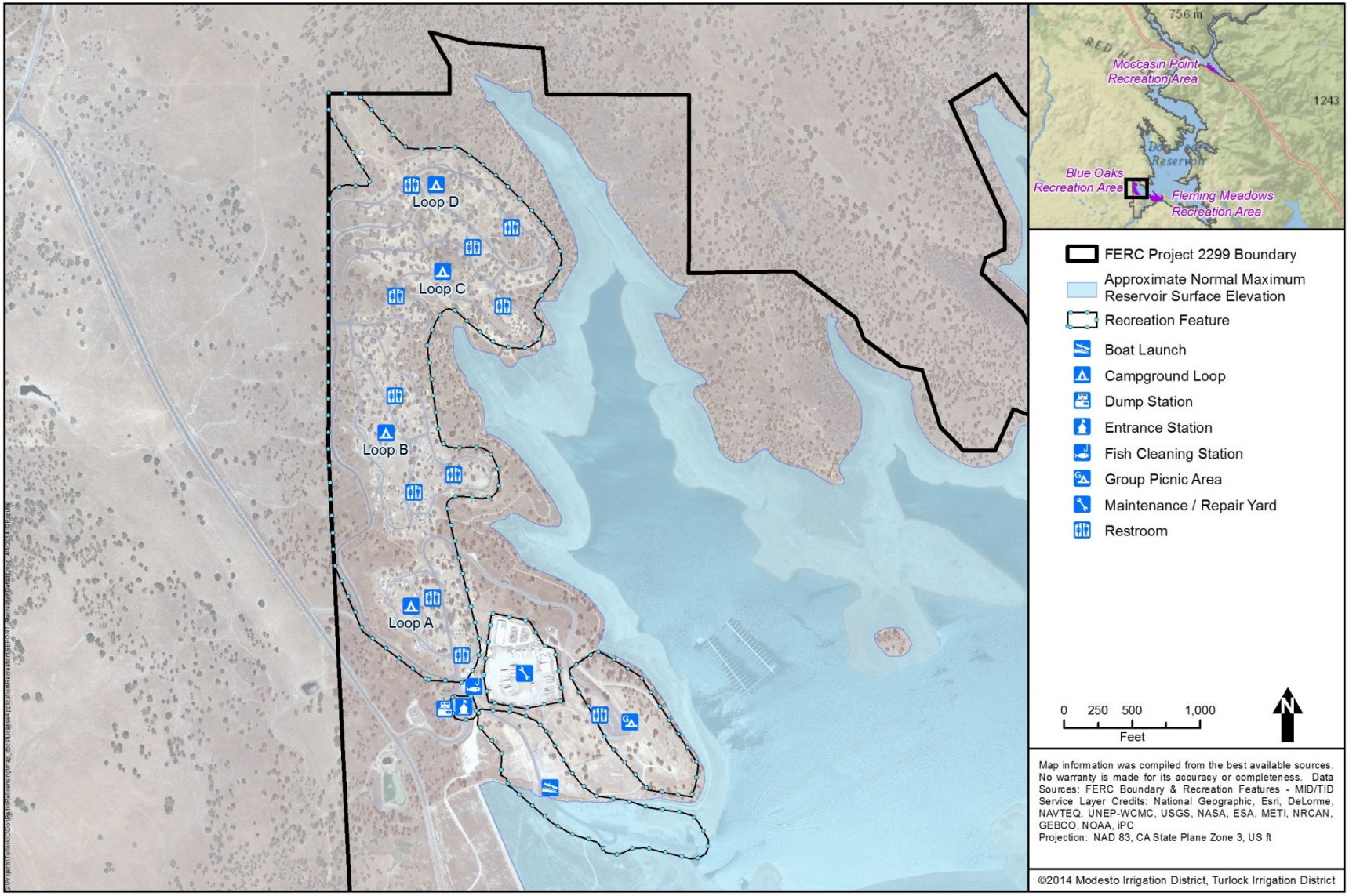


Figure 1.3-3. Recreation facilities at the Blue Oaks Recreation Area.

1.3.1.3 Moccasin Point Recreation Area

Moccasin Point Recreation Area consists of 96 campsites, two group picnic areas, one boat launch ramp, one fish cleaning station, and eight toilet buildings (two with showers). Figure 1.3-4 identifies the existing recreation facilities of the Moccasin Point Recreation Area. The evaluation included all of these facilities and site elements, as well as the condition of roads and parking facilities.

Overall, roads and parking areas are in good to fair condition. The parking areas are generally in good condition, with the gravel parking area (marina lower lot) in fair condition. The Boat Launch Overflow Parking Lot is recently constructed and in excellent condition. Campground features are also in good to excellent condition with one exception, food lockers in Campground areas B and C, some water faucet features in area B, and trash receptacles in area A, which were identified as being in fair condition. Similar to both Fleming Meadows and Blue Oaks, day-use area facilities overall are in good to excellent condition, with the exception of the trash facilities at the boat launch and group picnic area, which were found to be in fair condition.

The site buildings (toilet facilities, the entrance and fish cleaning stations, the marina store/office) exteriors and roofs are in good to excellent condition, with interiors also rated as good to excellent, with the exception of fair at Campground A. Signs within the recreation area were also inventoried and assessed. Unlike the other recreation areas, signs at Moccasin Point have not been replaced in some time. Most of the signs are constructed of wood and were found to be in fair condition overall. The signs constructed of metal were in good condition overall.

Moccasin Point facilities are partially accessible with at least some accessible features, such as trash bins, toilets, and parking spaces while other buildings and facilities, including campsites, water spigots, and toilets in the campground, are not accessible.

Use levels projected through 2050 at Moccasin Point Recreation Area will not exceed the capacity of the campgrounds, picnic areas, and parking areas (including boat launch, marina, and overflow lots), except for the marina and group picnic parking facilities. The marina parking facility experienced over 100 percent occupancy on holidays and weekends in 2012, and overall use is projected to exceed capacity by 2020 as marina users seek to park as close to the marina as possible. Use of the entrance overflow and main lot overflow parking lot are projected to remain below capacity through 2050.

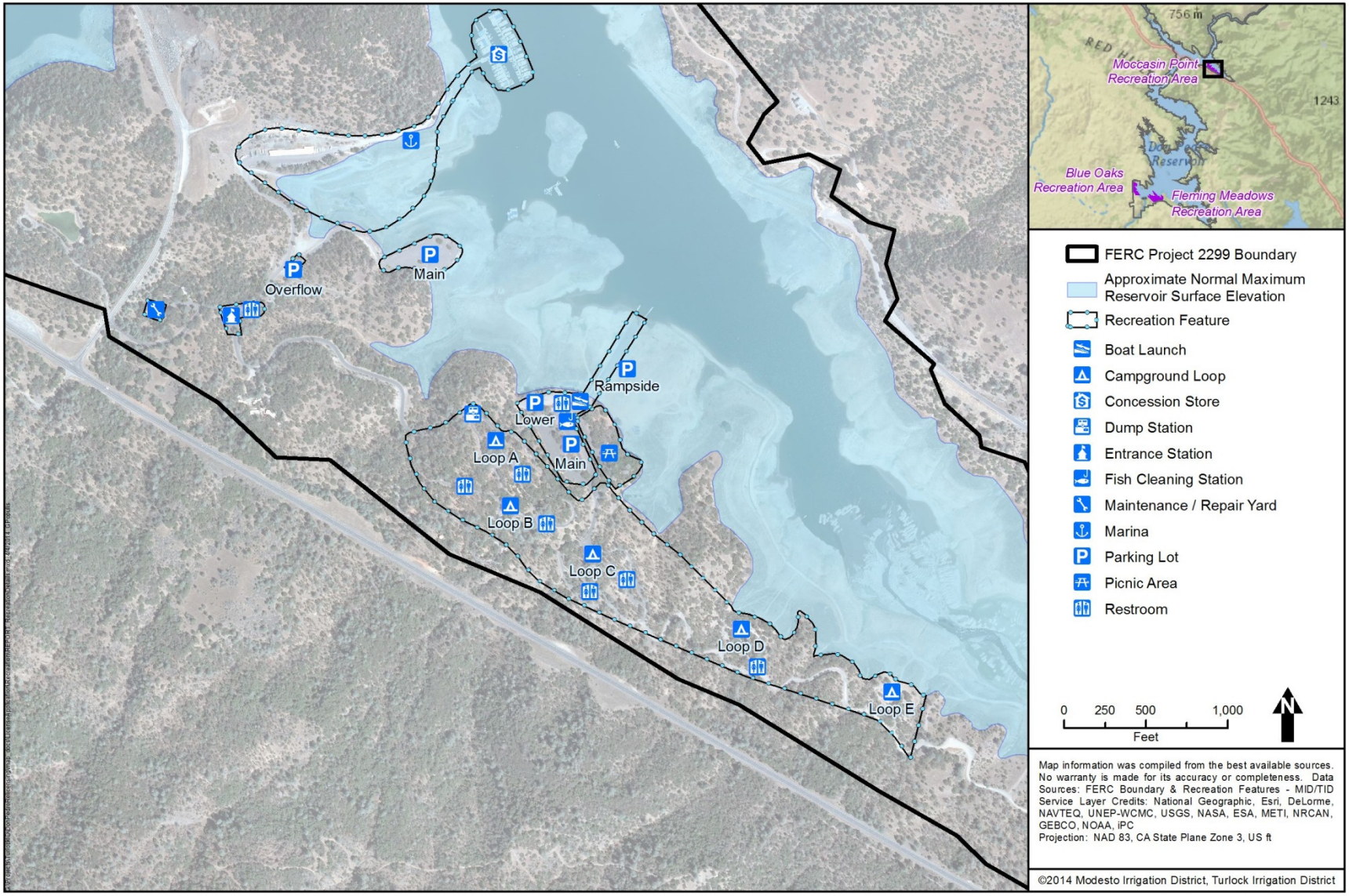


Figure 1.3-4. Recreation facilities of the Moccasin Point Recreation Area.

1.3.1.4 Ward's Ferry Bridge Whitewater Boating Take-Out Area

The whitewater boating take-out site at Ward's Ferry Bridge consists of a vault toilet, unimproved trails to the river, and undeveloped parking areas. The vault toilet was found in good condition and the parking areas along the road were found to be in fair condition. The site received a high use impact rating due to the observed presence of graffiti, general litter, and toilet paper litter.

1.3.1.5 Dispersed Shoreline Recreation Areas

The study team inventoried and evaluated the recurrent-use dispersed recreation locations along the Don Pedro reservoir shoreline. These areas are outside the developed recreation facilities, but within the FERC Project Boundary. Twenty-three recreational use sites were identified, and impact assessments were conducted at these sites. The majority of these sites (70%) exhibited low impacts; with 22 percent exhibiting moderate impact; and, two sites experiencing high impact. The two high impact sites had signs of high use and widespread impacts such as frequent signs of toilet paper, user created trails, compacted ground, trampled vegetation, and fire rings without adequate clearances. All 23 sites were mapped for continued reference and monitoring by DPRA as part of its routine maintenance and recreation management patrols.

1.3.1.6 Regional Uniqueness and Demand for Various Activities

Respondents generally felt that the developed recreation facilities at Don Pedro Reservoir were relatively unique, offered easy access, natural conditions, had a great staff and facilities, good fishing, and were less congested than comparable recreation facilities in central California.

In summary, the majority of respondents to the 2012 survey did not identify unmet demand for any recreational activities due to lack of availability. Camping, houseboating, reservoir boating, fishing, and hiking/walking were the primary activities identified.

1.3.2 Whitewater Boating Take-Out Improvement Feasibility Study

The primary goal of the Whitewater Boating Take-Out Improvement Feasibility Study was to assess the engineering feasibility of improving the efficiency and public safety of river-egress at the existing location used by commercial whitewater rafters and individual boaters for river-egress at the Ward's Ferry Bridge (TID/MID 2013c) The Ward's Ferry Bridge is the first public road access encountered by boaters using the whitewater reach of the Tuolumne River upstream of the Project Boundary. The engineering feasibility of implementing physical improvements at the Ward's Ferry Bridge location to increase the efficiency and safety of river-egress was evaluated, as was the availability of potential alternative take-out locations at Moccasin Point, Buchanan Road, Deer Creek, and Deer Flats. The feasibility study area encompassed the upstream reaches of the Don Pedro Reservoir in the Tuolumne River and Moccasin Creek arms, and the Tuolumne River mainstem up to approximately RM 82, near the North Fork confluence (Figure 1.3-5).

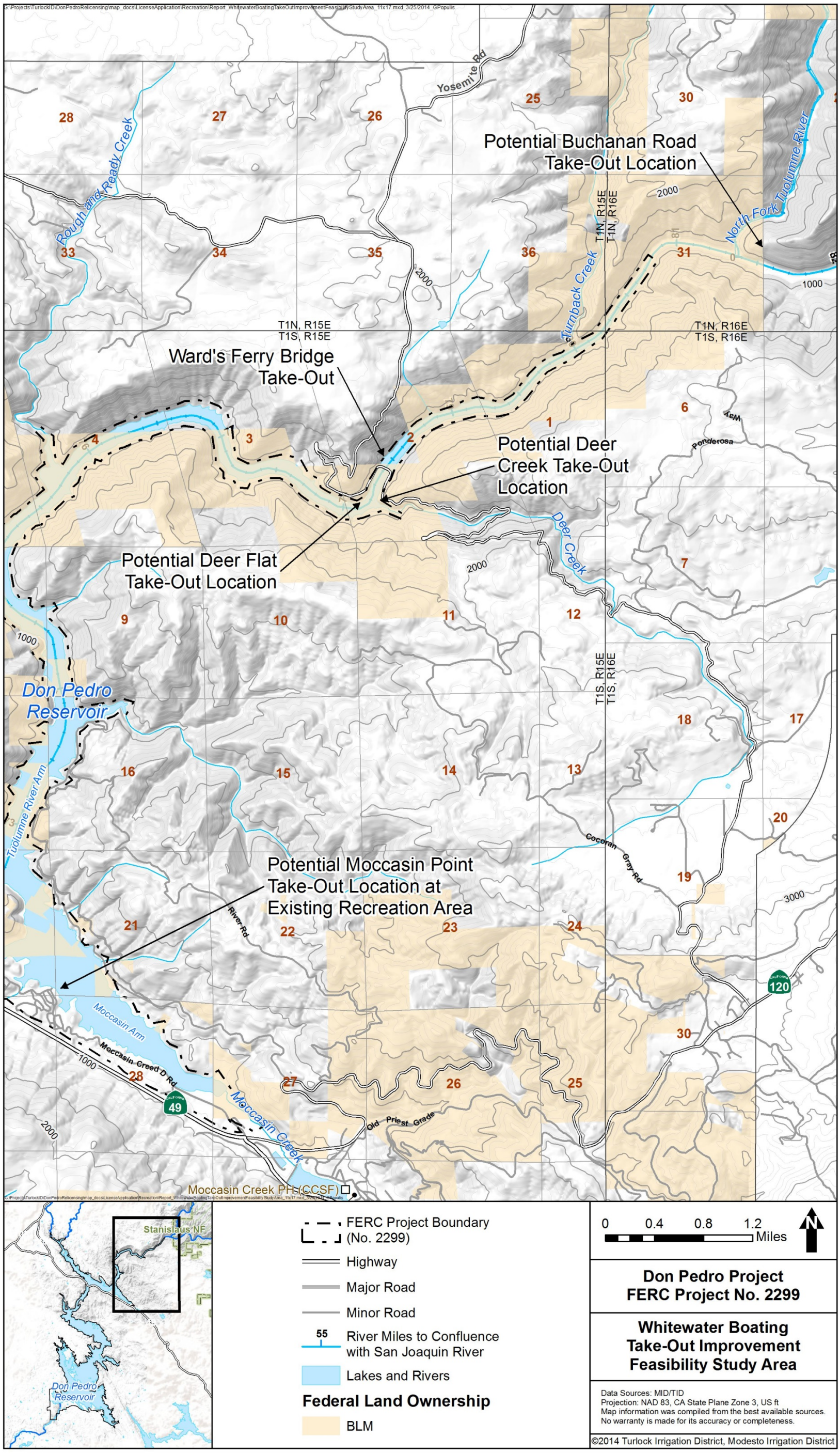


Figure 1.3-5. Whitewater boating take-out improvement feasibility study area.

Based on the study results, improving the efficiency and safety of river-egress for whitewater boaters at the existing Ward's Ferry location on river right appears to be technically feasible and preferable over other options that were studied. Advantages of the river right option include:

- It is located near the terminus of the whitewater run, i.e., far enough downstream to include all of the whitewater upstream of the Project Boundary and far enough upstream to minimize flatwater paddling on the reservoir.
- It is accessible via existing public roads.
- It is usable over the normal range of reservoir levels.
- The area has been previously disturbed and contains no sensitive resources.
- Vehicles with trailers will be able to turn around in the area of the old abutment, minimizing the need for backing up.
- Pedestrian and vehicle access to the shoreline on river right can be accommodated with a 15-ft wide access way and separated at the old bridge abutment to reduce conflicts among users. Pedestrians could also continue to use the existing trails on river left to avoid conflicts with whitewater boaters.
- The existing toilet facility would remain in place, avoiding cost of relocation.

2.0 RRMP OBJECTIVES

The purpose of the RRMP is to:

- address existing recreation resource needs within the Project Boundary,
- address future recreation resource needs within the Project Boundary,
- provide adequate and safe public access for recreation purposes,
- preserve and enhance recreation resources, and
- promote timely recreation planning over the term of the new license.

Taken as a whole, this RRMP represents a comprehensive list of recreation resource provisions and enhancements for the Project and describes the Districts' roles and responsibilities associated with providing recreation opportunity for the term of the new FERC license. The RRMP is consistent with the requirements described in the Code of Federal Regulations at 18 CFR § 2.7, Recreational Development at (FERC) Licensed Projects, which outlines licensees' responsibility for providing recreation at licensed projects. In addition to defining the Districts' roles and responsibilities for public recreation resources, the RRMP describes in Table 2.0-1 below the Districts' approach to meeting the requirements of 18 CFR § 2.7.

Table 2.0-1. Overview of 18 CFR § 2.7 requirements and Districts' measures within the Don Pedro Project Boundary.

18 CFR 2.7 Requirement	Measure
Acquire in fee and include within the Project boundary enough land to assure optimum development of the recreational resources afforded by the Project. To the extent consistent with the other objectives of the license, such lands to be acquired in fee for recreational purposes shall include the lands adjacent to the exterior margin of any project reservoir plus all other Project lands specified in any approved recreational use plan for the Project.	Because of the extensive federal and District ownership, no new land purchases will be necessary. This RRMP identifies BLM-managed and District-owned locations for existing and new recreation facilities. All non-federal lands are owned in-fee title by the Districts.
Develop suitable public recreational facilities upon Project lands and waters and make provisions for adequate public access to such Project facilities and waters and include therein consideration of the needs of physically handicapped individuals in the design and construction of such project facilities and access.	Recreation amenities are accessible in accordance with the Americans With Disabilities Act (ADA) guidelines. Maintenance and renovation of facilities will be undertaken with consideration of ADA guidelines.
Encourage and cooperate with appropriate local, state, and federal agencies and other interested entities in the determination of public recreation needs and cooperate in the preparation of plans to meet these needs, including those for sport fishing and hunting.	Relicensing studies identified public recreation opportunities and needs in the Project area. The Districts will continue to direct the DPRA and coordinate with BLM to maintain public access. The Districts will seek cooperating partners and grant awards when feasible for facility development.

18 CFR 2.7 Requirement	Measure
Encourage governmental agencies and private interests, such as operators of user-fee facilities, to assist in carrying out plans for recreation, including operation and adequate maintenance of recreational areas and facilities.	This RRMP includes taking certain recreation-related actions through partnerships and/or cost sharing with private recreation providers, government agencies, or other land managers for the development of new facilities to benefit the general public and improve the overall recreation experience.
Cooperate with local, state, and federal Government agencies in planning, providing, operating, and maintaining facilities for recreational use of public lands administered by those agencies adjacent to the Project area.	The Districts will continue to cooperate with BLM for facility development and operations and maintenance on federal lands within the Project Boundary.
Comply with federal, state and local regulations for health, sanitation, and public safety, and cooperate with law enforcement authorities in the development of additional necessary regulations for such purposes.	This RRMP identifies a detailed program to monitor recreational impacts, including sanitation, safety, and enforcement issues. The Districts' recreation facilities are designed and maintained with safety as a primary consideration. The Districts will continue to cooperate with local law enforcement officials.
Provide either by itself or through arrangement with others for facilities to process adequately sewage, litter, and other wastes from recreation facilities including wastes from watercraft, at recreation facilities maintained and operated by the Licensee or its concessionaires.	All DPRA-managed recreation facilities are designed, constructed, and maintained to meet relevant health and sanitation requirements, including permitted sewage facilities at highly developed recreation areas, vault and floating toilets in less developed locations, and solid waste management.
Ensure public access and recreational use of Project lands and waters without regard to race, color, sex, religious creed or national origin.	This RRMP defines recreation measures and programs designed to provide public access to, and use of, water bodies and shorelines without regard to race, color, sex, religious creed or national origin.
Inform the public of the opportunities for recreation at licensed projects, as well as of rules governing the accessibility and use of recreational facilities.	This RRMP describes the website and signage that are maintained to inform visitors and potential visitors of recreation facilities and opportunities, and educate visitors about sensitive resources and appropriate behavior through regulatory and informational signage and other written material.

3.0 RECREATION FACILITY DEVELOPMENT

DPRA's Recreation Facility Development Program is intended to help address existing and future recreation facility needs identified by upgrading existing facilities and constructing new facilities, where appropriate, based on regular monitoring of recreation use and trends. The program also defines the current capital construction-related plans of the Districts, identifies proposed recreation development projects and their estimated costs, and provides conceptual diagrams of the locations of anticipated improvements.

The Recreation Facility Development Program addresses needs identified by relicensing recreation studies, including the current desire for improved river-egress for whitewater boaters at the Ward's Ferry Bridge location.

3.1 Ward's Ferry Improvement Project

As stated in Section 1.2.2, the Districts identified technically feasible improvements to accommodate river-egress for whitewater boaters at Ward's Ferry Bridge (Figure 1.3-5) to improve safe, efficient use of the site by commercial and individual boaters exiting the river. Under this RRMP, the improvements to the whitewater boating take-out at the Ward's Ferry Bridge presented and described below will be implemented within five years of the effective date of the new FERC license. The estimated cost of design and construction is $1.1 million. Attachment A contains a preliminary capital cost estimate for the Ward's Ferry Bridge whitewater boating take-out improvements. To recover their costs, the Districts will charge a user fee of $10/boater, payable by the commercial rafting companies. At this rate, cost recovery by the Districts will likely exceed 35 years.

A new access road/water access ramp will be constructed starting at the river-right abutment of the Ward's Ferry Bridge and extending upstream to the water's edge (Figures 3.1-1; 3.1-2; 3.1-3; and 3.1-4). Mechanically Stabilized Earth wall construction is the preferred alternative to eliminate the need for blasting or cutting into the existing steep hillside. The upper section of the access road will be paved 15-ft wide from the bridge to the old bridge abutment at approximately elevation 830 ft to accommodate both pedestrian and vehicle traffic with visual delineation (e.g., painted line) designating the pedestrian portion. The upper road section will include a Mechanically Stabilized Earth retaining wall for its lower half and guard rail along its upper half. A new 10-foot wide access road/ramp will be constructed to descend from the abandoned bridge abutment to low-water's edge at about elevation 770 ft in an upstream direction (Figure 3.1-4). This lower new road section will provide vehicle access to the shoreline at low reservoir elevation conditions and would include construction of a Mechanically Stabilized Earth wall for most its length. The new road will be designed and constructed to withstand inundation of reservoir levels up to elevation 830 ft.

At the abandoned bridge abutment, a vehicle turn around area will be constructed (Figure 3.1-3). Vehicles without trailers will be able to turn around at this location and back down to the water's edge to retrieve equipment. Operators of vehicles with trailers will be able to use this area to disconnect the trailers and turn their vehicles around before re-hitching the trailer, then backing down to the water's edge. Alternatively, rafts and other equipment could be carried up the short

distance to the abandoned bridge abutment as the vehicle is being turned around. While this configuration accommodates only one vehicle at a time, it is a feasible, reasonable solution given the topographic and geotechnical engineering challenges of the site.

The existing user-defined pedestrian trail that descends in a downstream direction from the old bridge abutment will be upgraded to provide improved pedestrian access to the shoreline at low reservoir elevation conditions. The trail will be expanded to a width of four feet by grading, placement, and spreading of granular fill, combined with the use of cross-drainage and erosion control. As with the road described above, the trail will be constructed to withstand inundation that occurs at this location.

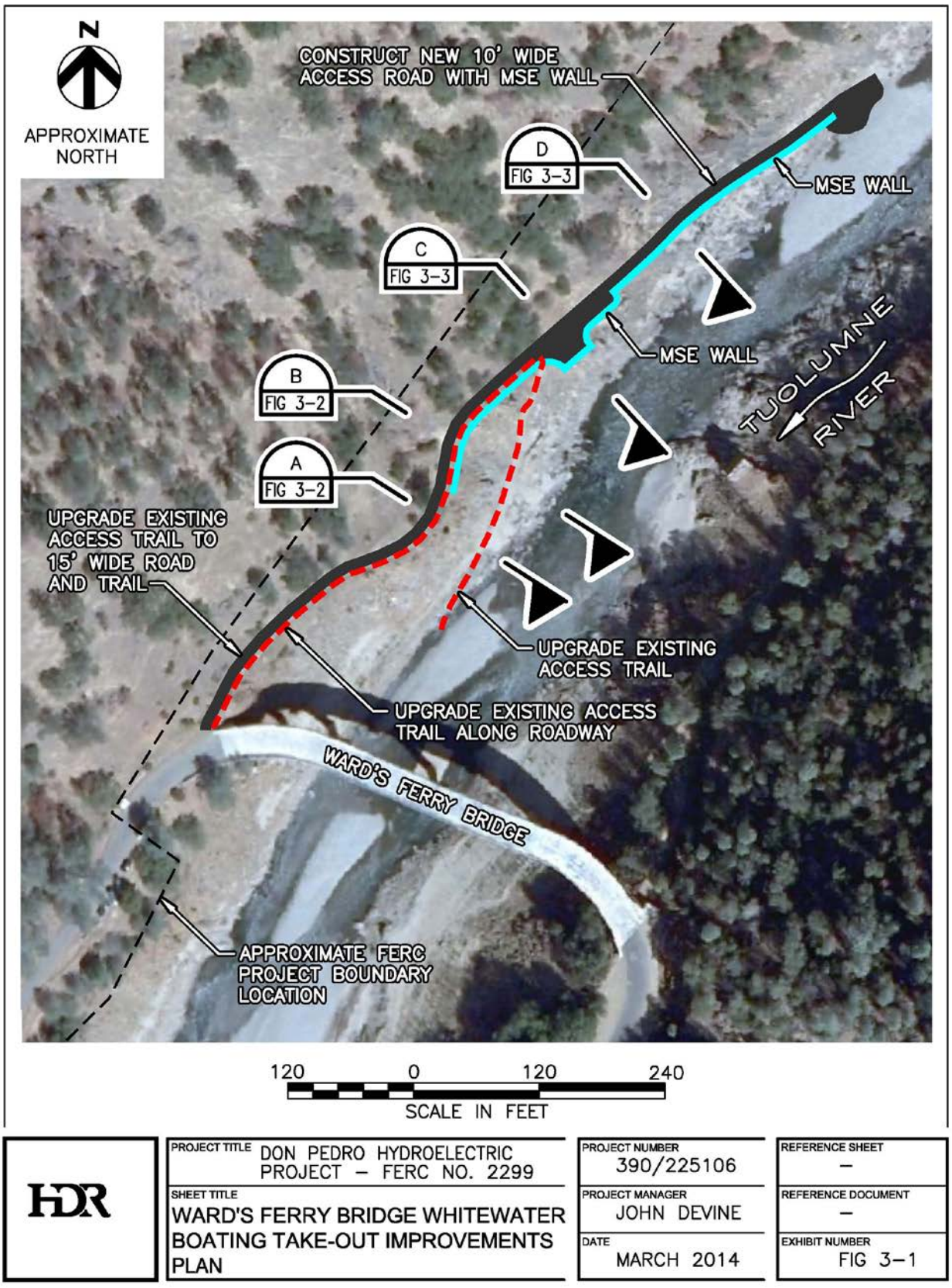


Figure 3.1-1. Ward's Ferry Bridge whitewater boating take-out improvements – plan view.

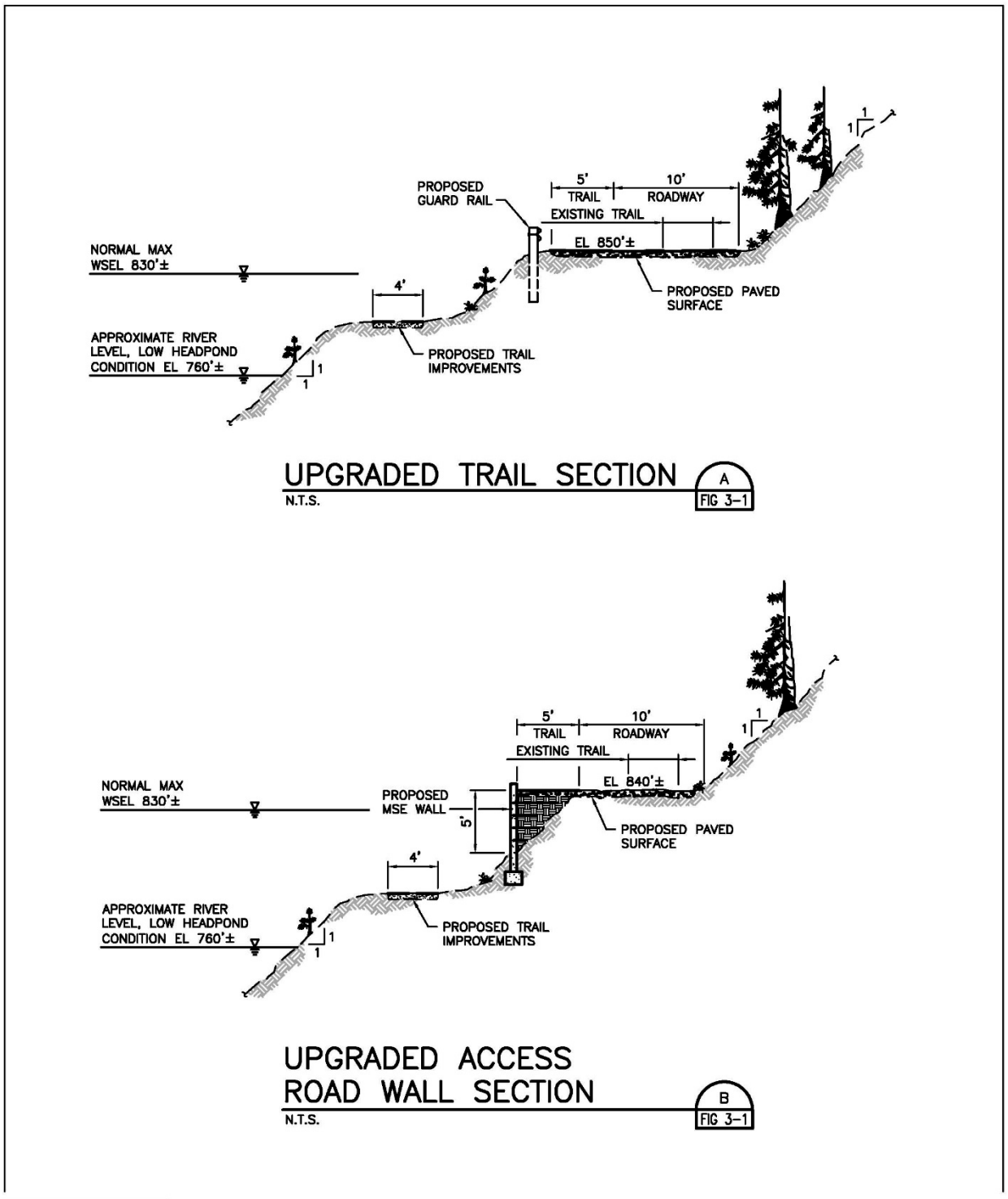
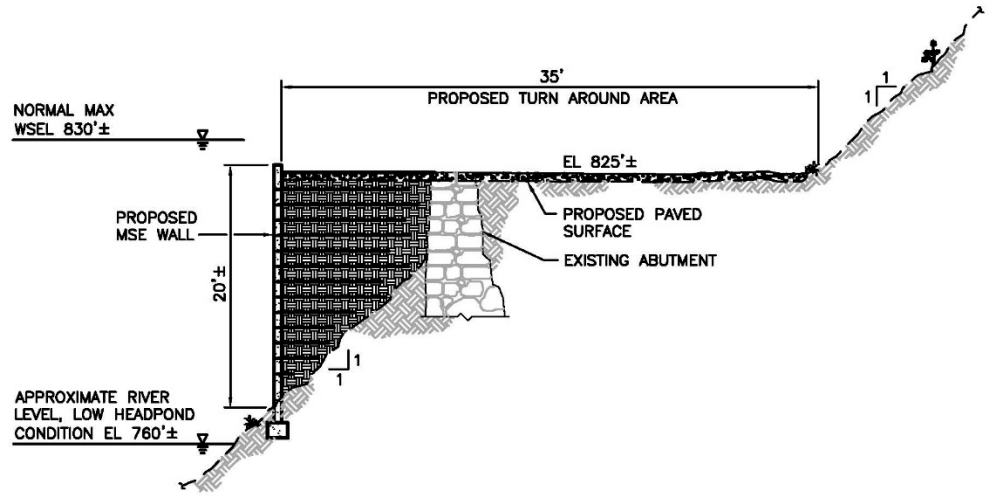
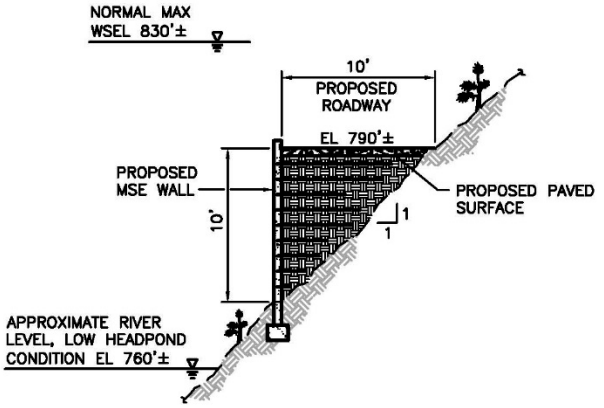


Figure 3.1-2. Ward's Ferry Bridge whitewater boating take-out improvements -- sections.



UPGRADED ABUTMENT SECTION C
N.T.S. FIG 3-1



CONSTRUCTED ACCESS
ROAD WALL SECTION D
N.T.S. FIG 3-1

HDR	PROJECT TITLE: DON PEDRO HYDROELECTRIC PROJECT – FERC NO. 2299 SHEET TITLE: WARD'S FERRY BRIDGE WHITEWATER BOATING TAKE-OUT IMPROVEMENTS SECTIONS	PROJECT NUMBER: 390/225106 PROJECT MANAGER: JOHN DEVINE DATE: MARCH 2014	REFERENCE SHEET: – REFERENCE DOCUMENT: – EXHIBIT NUMBER: FIG 3–3

Figure 3.1-3. Ward's Ferry Bridge whitewater boating take-out improvements -- sections.

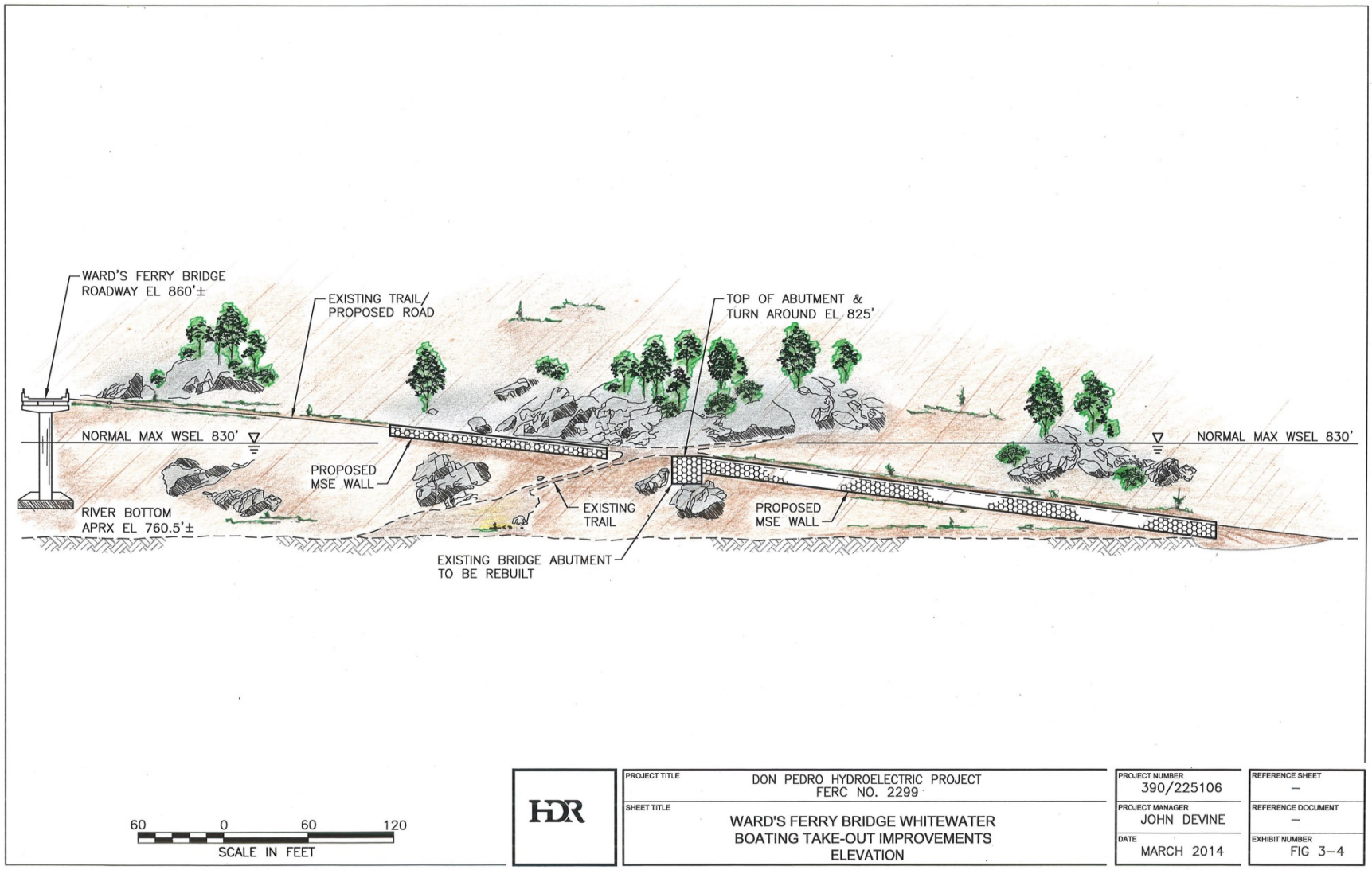


Figure 3.1-4. Ward's Ferry Bridge whitewater boating take-out improvements -- elevation view.

3.2 Potential Future Recreation Facility Development

The Recreation Facility Development Program will be reviewed periodically and revised as appropriate to continue to address new recreation needs within the Project Boundary as they evolve throughout the term of the license. The monitoring of recreation use and the determination of the type and timing of new facilities is discussed below in Section 6.0.

4.0 RECREATION FACILITIES OPERATIONS AND MAINTENANCE

Effective operation and maintenance (O&M) of existing and future recreation facilities are key elements of a successful recreation resource management program. The Districts will continue to provide through DPRA the measures described below. The Districts and DPRA maintain a five-year budget plan that is updated annually (see Attachment B). The current five-year DPRA recreation maintenance and operation budget projection for 2014-2018 averages $269,000 per year.

4.1 Operation and Maintenance of Developed Multi-Use Recreation Facilities

DPRA is responsible for operation and maintenance of the three developed multi-use recreation facilities: Fleming Meadows Recreation Area, Blue Oaks Recreation Area, and Moccasin Point Recreation Area (Figures 1.3-2 through 1.3-4). The Districts and DPRA may contract with concessionaires for the administration, operation, and maintenance of these recreation areas.

Operational maintenance activities keep recreation facilities in functioning, efficient operating condition. Examples of regular or routine operational maintenance activities include, but are not limited to, cleaning, mowing and other vegetation maintenance, repair, replacement, servicing, inspecting, and painting. Maintenance activities may include work needed to meet applicable laws, regulations, and codes (such as compliance with the Americans with Disabilities Act, or ADA). Operational maintenance does not require prior FERC approval or agency consultation.

DPRA and concessionaires will routinely monitor the three developed multi-purpose recreation facilities to identify maintenance needs as they arise. Needs identified through monitoring may be addressed immediately (e.g., collecting litter, replacing light bulbs, cleaning bathroom areas), or flagged for inclusion in upcoming scheduled routine maintenance activities (e.g., emptying large trash containers, repairing plumbing).

The Special-Status Wildlife – Bat Study conducted in relicensing (TID/MID 2013b) identified evidence of bat night roosting at certain campground facilities that persisted throughout the study, suggesting that disturbance to night roosts in general is not adversely affecting bat use of the area. The disturbance associated with recreation use of is unlikely to result in abandonment of roosts by bats. However, the small cinderblock structure[1] near the A2 restroom in the Blue Oak campground, used by pallid bats as a night roost, was found to have burn marks on the interior walls of the structure and broken glass on the floor. It is notable that DPRA patrol records and staff anecdotal recollections support that this building has never been the source of any incidences or patrol contacts, day or night. Nonetheless, the direct nature of the disturbance to this structure suggests that future disturbances occurring at night could lead to a reduction of use or abandonment by special-status bats. Therefore, to prevent visitor activities from disrupting pallid bat use of this building, routine maintenance patrols at Blue Oaks campground will include

[1] The building appears to be a small shed for storing explosives that was part of Guy F. Atkinson Company's construction camp during the construction of the new Don Pedro Dam in the late 1960s and early 1970s.

direct observation of the cinderblock structure to ensure that visitors are not entering the building or otherwise disturbing pallid bat night roosting. These patrols will be conducted periodically during the day to determine any evidence of human use and at night to directly observe and prevent any use that may be occurring during the time that pallid bats use the building. If DPRA determines that human use is occurring at night in spite of patrols, physical measures will be taken to exclude humans from the building while still accommodating pallid bat use (e.g., partially boarding the doorway).

4.2 Operation and Maintenance of Recreation Areas with Limited-Facility Infrastructure

DPRA is responsible for operation and maintenance of the limited-facility infrastructure at one primitive boat-in camping area (Wreck Bay) and 12 developed toilet only facilities (eight floating toilets and four dispersed shoreline toilets) (Figure 4.2-1). One of the toilet facilities is located at Ward's Ferry, where additional improvements are proposed to be constructed during the term of the new license (Section 3.2). Routine maintenance activities keep the limited-facility infrastructure in functioning, efficient operating condition. Examples of regular or routine maintenance activities include, but are not limited to, cleaning, vegetation maintenance, repair, replacement, servicing, and inspecting. Additionally, DPRA may relocate, remove, or add floating toilets at the identified locations and other locations as deemed necessary to maintain sanitary conditions and provide toilet services where they are needed by recreationists. Figure 4.2-1 of this RRMP will be revised and maintained over time to reflect current locations of floating toilets. Maintenance activities may include work needed to meet applicable laws, regulations, and codes. Maintenance, including the relocation, addition, or removal of floating toilets, does not require prior FERC approval or agency consultation.

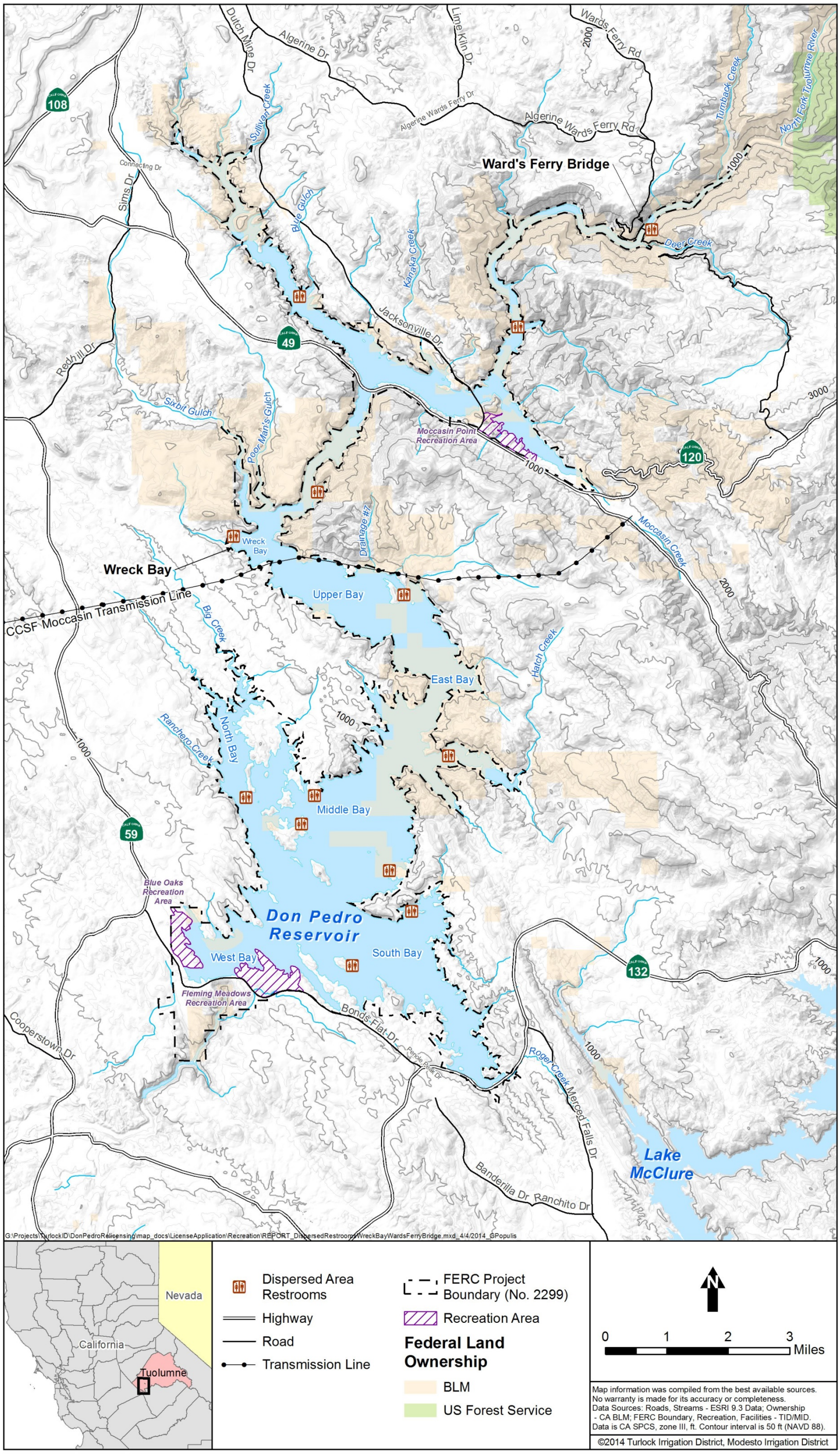


Figure 4.2-1. Remote and limited-facility infrastructure locations.

4.3 Maintenance of User-Defined Dispersed Recreation Areas with No Facility Infrastructure

DPRA will periodically monitor and cleanup public shoreline dispersed areas identified in Figure 4.3-1. If monitoring reveals resource damage at any of these locations due to significant visitor use impacts, appropriate actions will be proposed in cooperation with adjoining landowners or resource agencies. Options to consider may include site closure, new use restrictions, or new "hardened" recreation facilities. Hardened facilities may include tent pads, picnic tables, moorage, designated hunting blinds, and/or toilets for increased resource protection (on a case-by-case basis). If additional public shoreline dispersed areas are identified within the Project Boundary over time, they will be included in this program. Figures 4.2-1 and 4.3-1 of this RRMP will be revised and maintained over time to reflect current locations of limited infrastructure and the dispersed recreation areas monitored under the RRMP.

DPRA provides surveillance of areas where vehicular traffic has potential direct access to the Project Boundary and the reservoir shoreline. DPRA will continue its practice of monitoring and installing barriers and signs (as needed) where vehicles attempt to access shoreline areas. DPRA's actions in this regard protect against shoreline damage and disturbance.

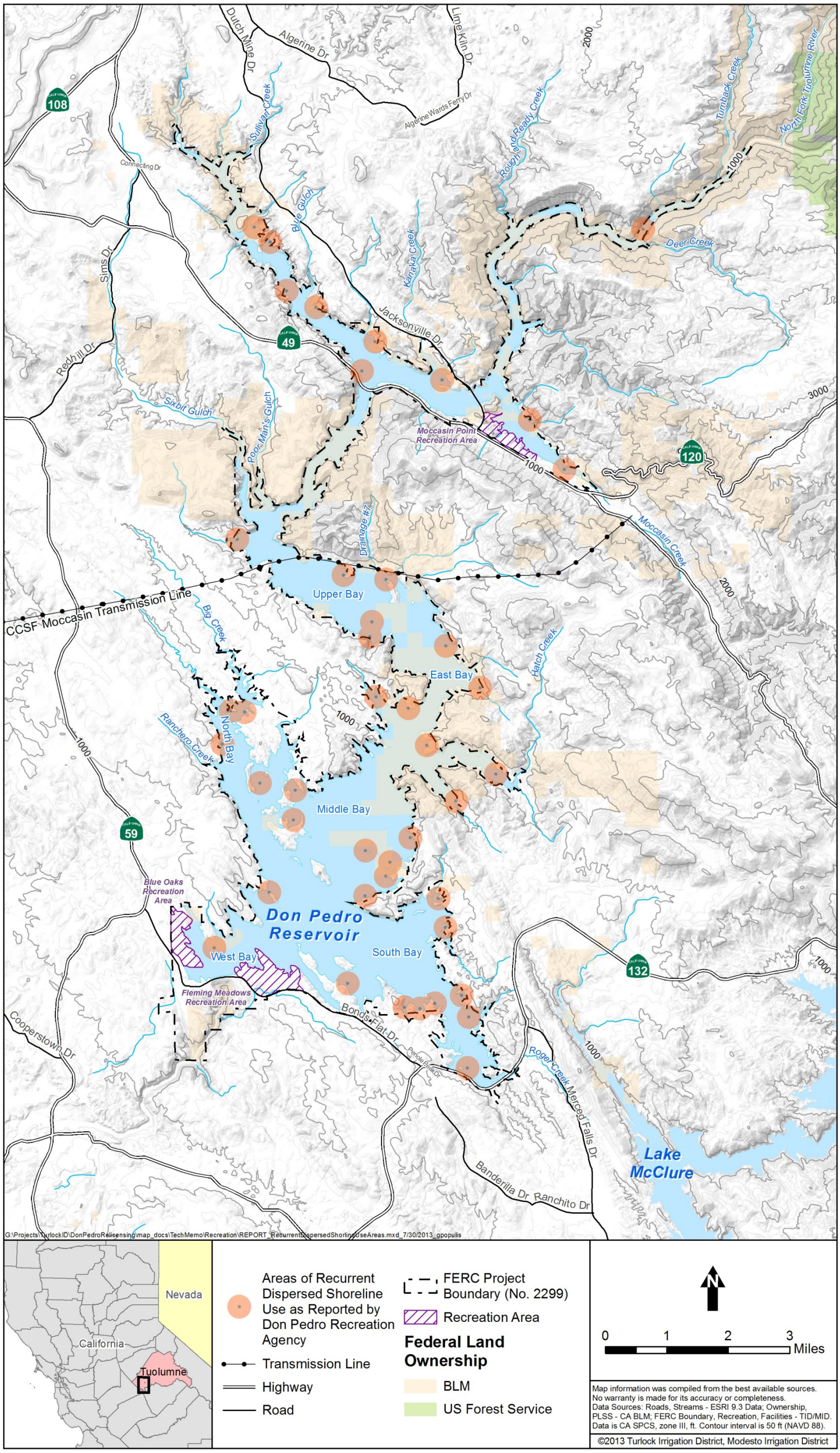


Figure 4.3-1. Dispersed recreation areas.

5.0 RECREATION USE MONITORING PROGRAM

The Recreation Use Monitoring Program is designed to measure recreation use levels, recreation use impacts, visitor tolerances for impacts (crowding, conflict, use impacts, facility conditions, etc.) and management actions that may be used to address identified "impact problems." Combined, this information will allow DPRA and the Districts to determine if the RRMP's objectives are being achieved.

The Recreation Use Monitoring Program defines the Districts' intended recreation-related monitoring activities over the term of the new license. The program defines the Districts' role in collecting and analyzing recreation data, and proposes how the data might be used to guide planning related to recreation management and capital facility improvements.

As described below, the Districts will collect basic recreation use data every year beginning in the year following FERC approval of this RRMP. A report summarizing the annual data and discussing any notable trends will be submitted to FERC with the Form 80 filings every six years beginning with the year 2020 Form 80. Should FERC's requirement for filing Form 80s be eliminated or revised, the Districts will revise the RRMP to reflect FERC's new reporting schedule or requirements.

Every 12 years beginning in 2026, the Districts will undertake a comprehensive assessment of recreation use as discussed in Section 5.2.

5.1 Annual Use Estimates and Form 80 Reporting

Each year, the Districts will collect and compile entrance fee information at developed multi-use recreation facilities, observational data during routine maintenance at dispersed sites, and relevant information available from secondary sources (e.g., upper Tuolumne River whitewater boating use estimates). Counts will be compared over the years to identify any change in the amount and/or location of use. Estimates of the recreational activity at dispersed sites will be based on instantaneous counts and/or vehicle counts during routine maintenance[2]. This information will form the basis of use estimates, allow for tracking of trends over time, and support the examination of correlations among those trends.

A report summarizing the annual data collected over the previous six years and discussing any notable trends will be submitted to FERC with the Form 80 filings beginning with the year 2020 as described in Section 5.1. Should FERC's requirement for filing Form 80s be eliminated or revised, this RMP will be deemed changed to reflect FERC's new reporting schedule or requirements.

5.2 Twelve-Year Monitoring

Every twelve years beginning in 2026, the Districts will develop and file with FERC a Recreation Monitoring Report. Methods for gathering data to develop this report will include

[2] The Districts may substitute over-the-road vehicle traffic counters in lieu of instantaneous counts.

administration of a visitor survey to determine if existing recreation facilities and opportunities are adequate to meet user preferences for recreation facilities and opportunities.

6.0 CONSULTATION, REPORTING, AND PLAN REVIEW AND REVISION

Over the term of the new license, additional consultation may occur as necessary to ensure that the objectives of the RRMP are being met and the proposed measures are implemented. Consultation activities conducted during the new license terms will include periodic reporting of recreation use and facility condition as described below.

6.1 Recreation Use and Condition Survey Report

The Districts will prepare a Recreation Report every six years to be submitted to FERC with the Form 80. The report will include the following information:

- Summary of previous six years of Project recreation fee/occupancy indicator information,
- Form 80,
- Trend analysis from comparing existing monitoring report results to previous monitoring report results,
- Summary of recreation related impacts presented in other Project resource monitoring plans from the previous six years, and
- Current 5-year budget and planning forecast.

The report will be submitted with the Form 80 filings every six years beginning with the year 2020 Form 80.

6.2 Visitor Survey Report

Every 12 years, the Districts will complete a recreation questionnaire survey report aimed to determine if existing recreation facilities and opportunities are adequate to meet user preferences for recreation facilities and opportunities. Based on the survey, the Districts will prepare a report including objectives, methods, results, recommended reasonable resource management measures (which will include any need for recreation facility modification, closure, or new facilities) where appropriate, and a schedule of implementation for recommended resource management measures. The Districts will implement those measures approved by FERC. The Districts will consult with Bureau of Land Management, National Park Service, California Department of Parks and Recreation, California Department of Boating and Waterways, and California Department of Fish and Wildlife as part of the preparation of the reports prior to filing them with FERC. The first report will be filed with FERC on December 1, 2027 (allowing time for report development and consultation after the Districts' submission of the 2026 Form 80 and recreation report described in Section 6.1). The 12-year report will include:

- Annual recreation use estimates,
- A discussion of the adequacy of existing recreation facilities at the project to meet recreation demand,

- A description of the methodology used to collect all study data,
- If there is a need for additional facilities, a revised plan and schedule to accommodate recreation needs at the Project,
- The entity or entities responsible for constructing, operating, and maintaining the facilities,
- Documentation of agency consultation and agency comments on the revised report after it has been prepared and provided to the agencies, and
- Specific descriptions of how the agencies' comments are accommodated by the revised report.

6.3 Revisions to the Plan

In conjunction with the development of the 12-year visitor survey report, the Districts will review the RRMP. The Plan will be updated and/or revised if the Districts determine the data collected in the preceding 12 years indicates significant changes in recreation use/conditions or substantial differences in recreation use versus facility capacity of the existing recreation areas. During the 12 year reviews, changes or revisions to the RRMP will be considered if recreation use patterns or resource conditions have changed. Any revisions to the RRMP will be developed with consideration for economic feasibility and public interest with the purpose of continuing to provide reasonable public access to and use of Don Pedro Project lands and waters.

Any updates to the Plan would be prepared in coordination and consultation with stakeholders, as appropriate. If the Districts do not adopt a particular recommendation, the filing would include the reasons for not doing so, based on recommendation-specific information.

7.0 LITERATURE CITED

Turlock Irrigation District and Modesto Irrigation District (TID/MID). 2013a. Recreation Facility and Public Accessibility Assessment, and Recreation use Assessment Study Report (RR-01), Attachment to Don Pedro Hydroelectric Project Updated Study Report. December 2013.

____. 2013b. Special-Status Bats Study Report (TR-09). Attachment to Don Pedro Hydroelectric Project Draft License Application. December 2013.

____. 2013c. Whitewater Boating Take Out Improvement Feasibility Study Report (RR-02). Attachment to Don Pedro Hydroelectric Project Updated Study Report. December 2013.

U.S. Access Board (USAB). 2004. Americans with Disabilities Act and Architectural Barriers Act Accessibility Guidelines (ABAAG). Washington, D.C. 304 pp. http://www.accessboard. gov/ada-aba/final.cfm.

DRAFT RECREATION RESOURCE MANAGEMENT PLAN

ATTACHMENT A

CONSTRUCTION COST ESTIMATE FOR THE WARD'S FERRY BRIDGE WHITEWATER BOATING TAKE-OUT IMPROVEMENTS

PROJECT: 390-177264-014
CLIENT: MID - TID

Don Pedro Hydroelectric Project (FERC No. 2299) - Ward's Ferry Bridge Whitewater Boating Take-Out
Conceptual Design Preliminary Cost Estimate - River Right Upgrade Option

EST. AS OF: 03/19/14
PREPARED BY: CR MacDonald
REVIEWED BY: J Gagnon / G Hickman

CODE	DESCRIPTION	MATERIAL QUANTITY	MATERIAL UNIT	MATERIAL PRICE	LABOR QUANTITY	LABOR UNIT	LABOR RATE	EQUIPMENT QUANTITY	EQUIPMENT UNIT	EQUIPMENT RATE	Total Rate Plus O&P	DIRECT TOTAL $	TOTAL $	COMMENTS
100	**GENERAL**												**$57,500**	
110	Mobilzation										$35,000	$35,000		Assumed for adverse site location, narrow roads, remote location
120	Temporary Services										$5,000	$5,000		Assumed for power, data, and water
130	Site Management										$15,000	$15,000		Assumed, includes stockpile and surplus management, traffic control, trailer / office faclitities and general oversight
140	Site Access										$2,500	$2,500		Assumed travel costs for inspection and supervision
1000	**UPGRADE EXISTING ACCESS ROAD ON RIVER RIGHT**												**$170,604**	**Note: Costs provided are in Q2 2012 Dollars based in Modesto Ca. Values for labor and equipment have been increased by an addtional factor of 2.75 over means values and notes below due to the remote nature of the site.**
1100	**Road Restoration (Widen to 15' total to Old Abutment)**													
1110	Wall Construction	750	sqft	$21.27	750	sqft	$21.49	750	sqft	$2.39	$45.15	$33,865		Means ID: 322223137150 Segmental retaining walls, unit masonry interlocking wall system, straight split, 8" high x 18" wide x 20" deep, includes pins, and void fill, excludes base. Multiplied by a factor of 1.5, as MEANS does not provide an appropriate line item for this wall system. Assume 5 feet tall by length.
1120	Wall Footing	150	cuft	$32.57	150	cuft	$91.08	150	cuft	$3.58	$127.23	$19,084		Assuming a 1' wide x 1' tall footing along the length of wall: Means ID: 031113450020 C.I.P. concrete forms, footing, continuous wall, plywood, 1 use, includes erecting, bracing, stripping and cleaning & Means ID: 033105250150 Concrete, hand mix, for small quantities or remote areas, 5000 psi, using gas powered cement mixer, includes local bulk aggregate & sand, bagged Portland cement, excludes, forms, reinforcing, placing & finishing
1130	Common Borrow / Road Build Up	69	cuyd	$19.41	69	cuyd	$22.72	69	cuyd	$31.10	$73.23	$5,085		Means ID: 312323154000 Borrow, common earth, 1 C.Y. bucket, loading and/or spreading, shovel & Means ID: 312323151840 Borrow, delivery charge, minimum 20 tons, 2 hour round trip
1140	Select Road Materials	589	cuyd	$21.22	589	cuyd	$22.39	589	cuyd	$30.72	$74.32	$43,768		Means ID: 312323155000 Borrow, select granular fill, 1 C.Y. bucket, loading and/or spreading, shovel & Means ID: 312323151840 Borrow, delivery charge, minimum 20 tons, 2 hour round trip
1150	Pavement	7,950	sqft	$2.40	7,950	sqft	$0.94	7,950	sqft	$0.74	$4.08	$32,416		Means ID: 321216140025 Asphaltic concrete, parking lots & driveways, 6" stone base, 2" binder course, 2" topping, no asphalt hauling included
1160	Pavement Hauling	192	ton	$0.00	192	ton	$19.22	192	ton	$26.92	$46.15	$8,866		Means ID: 312323151840 Borrow, delivery charge, minimum 20 tons, 2 hour round trip. Assumed as a more appropriate delivery charge given the presumed travel distance.
1170	Guardrail	530	lf	$40.43	530	$530.00	$7.12	530	lf	$4.37	$51.93	$27,520		RS Means 2012 4th Quarter Update, Modified to Modesto, Ca rates with Contractor OH&P, Sales Tax and Insurance.
2000	**UPGRADE RIVER RIGHT EXISTING TRAIL TO RIVER**												**$14,365**	
2100	**Widen Trail to 4'**													
2110	Grade Existing Trail	1,540	sqft	$0.00	1,540	sqft	$3.41	1,540	sqft	$0.41	$3.82	$5,887		Means ID: 312216101200 Fine grading, fine grade granular base for sidewalks and bikeways
2110	Select Trail Materials	114	cuyd	$21.22	114	cuyd	$22.39	114	cuyd	$30.72	$74.32	$8,478		Means ID: 312323155000 Borrow, select granular fill, 1 C.Y. bucket, loading and/or spreading, shovel & Means ID: 312323151840 Borrow, delivery charge, minimum 20 tons, 2 hour round trip
3000	**CONSTRUCT NEW ROAD TO RIVER ON RIVER RIGHT**												**$501,034**	
3100	**MSE Wall**												$443,800	
3110	Common Borrow / Road Build Up	1,463	cuyd	$19.41	1,463	cuyd	$22.72	1,463	cuyd	$31.10	$73.23	$107,129.12		Means ID: 312323154000 Borrow, common earth, 1 C.Y. bucket, loading and/or spreading, shovel & Means ID: 312323151840 Borrow, delivery charge, minimum 20 tons, 2 hour round trip
3120	Wall	6,160	sqft	$21.27	6,160	sqft	$21.49	6,160	sqft	$2.39	$45.15	$278,147.10		Means ID: 322223137150 Segmental retaining walls, unit masonry interlocking wall system, straight split, 8" high x 18" wide x 20" deep, includes pins, and void fill, excludes base. Multiplied by a factor of 1.5, as Means does not provide an appropriate line item for this wall system. Assume 10 feet tall by length.
3130	Wall Footing	460	cuft	$32.57	460	cuft	$91.08	460	cuft	$3.58	$127.23	$58,523.50		Assuming a 1' wide x 1' tall footing along the length of wall: Means ID: 031113450020 C.I.P. concrete forms, footing, continuous wall, plywood, 1 use, includes erecting, bracing, stripping and cleaning (units x3 to yield sqft per LF) & Means ID: 033105250150 Concrete, hand mix, for small quantities or remote areas, 5000 psi, using gas powered cement mixer, includes local bulk aggregate & sand, bagged Portland cement, excludes, forms, reinforcing, placing & finishing
3200	**General Road Construction**												$57,235	
3210	Select Road Materials	396	cuyd	$21.22	396	cuyd	$22.39	396	cuyd	$30.72	$74.32	$29,453.73		Means ID: 312323155000 Borrow, select granular fill, 1 C.Y. bucket, loading and/or spreading, shovel & Means ID: 312323151840 Borrow, delivery charge, minimum 20 tons, 2 hour round trip
3220	Pavement	5,350	sqft	$2.40	5,350	sqft	$0.94	5,350	sqft	$0.74	$4.08	$21,814.63		Means ID: 321216140025 Asphaltic concrete, parking lots & driveways, 6" stone base, 2" binder course, 2" topping, no asphalt hauling included
3230	Pavement Hauling	129	ton	$0.00	129	ton	$19.22	129	ton	$26.92	$46.15	$5,966.16		Means ID: 312323151840 Borrow, delivery charge, minimum 20 tons, 2 hour round trip. Assumed as a more appropriate delivery charge given the presumed travel distance.

CONSTRUCTION COST MSE WALL	**SUBTOTAL**	**$743,503**
ENGINEERING	15%	$111,525
CONTINGENCY	30%	$223,051
ESCALATE TO Q1 2014 DOLLARS	4.6%	$50,014
CONSTRUCTION COST MSE WALL	**TOTAL**	**$1,128,094**

DRAFT RECREATION RESOURCE MANAGEMENT PLAN

ATTACHMENT B

DON PEDRO RECREATION AGENCY FIVE YEAR BUDGET PLAN

FIVE YEAR BUDGET PLAN - BY PROJECT
2014 - 2018

Don Pedro Recreation Agency				2014			
PROJECT DESCRIPTION	PRIORITY	MULTIYEAR PROJECT TOTAL	PRIOR YEARS TOTAL	PROJECT MATERIALS	OUTSIDE SERVICE	TOTAL	ACCUMULATED TOTAL
ADA Upgrades	A				5,000	5,000	5,000
Campsite Renovation	A			7,000		7,000	12,000
Restroom Roof Renovation	B			15,000		15,000	27,000
Electronics/IS/Communication	B			10,000	2,000	12,000	39,000
Signs	B			7,000		7,000	46,000
Restroom Interior Renovations	B			8,000		8,000	54,000
Water System Upgrades	B			3,000		3,000	57,000
Transformer	C			8,000		8,000	65,000
Lake Regulatory Management	C			10,000		10,000	75,000
Roadwork	C			3,000	147,000	150,000	225,000
Vehicles	C			35,000		35,000	260,000
Work Dock Renovation	C			6,000		6,000	266,000
Vegetation Management	D			6,000		6,000	272,000
Administrative Site Management	D				10,000	10,000	282,000
TOTALS		0	0	118,000	164,000	282,000	

PRIORITY: A = Required by Law B = Necessary for Continued Operation C = End of Life Replacement D = Result in Increased Efficiency
E = General Enhancement

FIVE YEAR BUDGET PLAN - BY PROJECT
2014 - 2018

Don Pedro Recreation Agency				2015			
PROJECT DESCRIPTION	PRIORITY	MULTIYEAR PROJECT TOTAL	PRIOR YEARS TOTAL	PROJECT MATERIALS	OUTSIDE SERVICE	TOTAL	ACCUMULATED TOTAL
ADA Upgrades	A			5,000		5,000	5,000
Campsite Renovation	A			7,000		7,000	12,000
Restroom Roof Renovation	B			15,000		15,000	27,000
Electronics/IS/Communication	B			10,000	2,000	12,000	39,000
Signs	B			7,000		7,000	46,000
Restroom Interior Renovations	B			8,000		8,000	54,000
Lake Regulatory Management	C			10,000		10,000	64,000
Roadwork	C			3,000	147,000	150,000	214,000
Outboard Engine	C			10,000		10,000	224,000
Vehicle	C			35,000		35,000	259,000
Automated Iron Ranger	D	90,000	0		30,000	30,000	289,000
TOTALS		90,000	0	110,000	179,000	289,000	

PRIORITY: A = Required by Law B = Necessary for Continued Operation C = End of Life Replacement D = Result in Increased Efficiency
E = General Enhancement

FIVE YEAR BUDGET PLAN - BY PROJECT
2014 - 2018

Don Pedro Recreation Agency				2016			
PROJECT DESCRIPTION	PRIORITY	MULTIYEAR PROJECT TOTAL	PRIOR YEARS TOTAL	PROJECT MATERIALS	OUTSIDE SERVICE	TOTAL	ACCUMULATED TOTAL
ADA Upgrades	A			5,000		5,000	5,000
Campsite Renovation	A			7,000		7,000	12,000
Electronics/IS/Communication	B			5,000	2,000	7,000	19,000
Signs	B			7,000		7,000	26,000
Restroom Interior Renovations	B			8,000		8,000	34,000
Lake Regulatory Management	C			10,000		10,000	44,000
Fleming B Restroom Modification	C			35,000		35,000	79,000
Vehicles	C			60,000		60,000	139,000
Roadwork	C			5,000	30,000	35,000	174,000
Automated Iron Ranger	D	90,000	30,000		30,000	30,000	204,000
Fleming Entrance Modification	D			85,000		85,000	289,000
TOTALS		90,000	30,000	227,000	62,000	289,000	

PRIORITY: A = Required by Law B = Necessary for Continued Operation C = End of Life Replacement D = Result in Increased Efficiency
E = General Enhancement

FIVE YEAR BUDGET PLAN - BY PROJECT
2014 - 2018

Don Pedro Recreation Agency **2017**

PROJECT DESCRIPTION	PRIORITY	MULTIYEAR PROJECT TOTAL	PRIOR YEARS TOTAL	PROJECT MATERIALS	OUTSIDE SERVICE	TOTAL	ACCUMULATED TOTAL
Campsite Renovation	A			7,000		7,000	7,000
Electronics/IS/Communication	B			5,000	2,000	7,000	14,000
Signs	B			7,000		7,000	21,000
Restroom Interior Renovations	B			8,000		8,000	29,000
Lake Regulatory Management	C			10,000		10,000	31,000
Roadwork	C			5000	30,000	35,000	64,000
Vehicles	C			60,000		60,000	124,000
Automated Iron Ranger	D	90,000	60,000		30,000	30,000	154,000
Fleming Entrance Modification	D			75,000	50,000	125,000	249,000
Vegetation Management	D			5,000		5,000	254,000
TOTALS		90,000	60,000	182,000	112,000	294,000	

PRIORITY: A = Required by Law B = Necessary for Continued Operation C = End of Life Replacement D = Result in Increased Efficiency
E = General Enhancement

FIVE YEAR BUDGET PLAN - BY PROJECT
2014 - 2018

Don Pedro Recreation Agency				2018			
PROJECT DESCRIPTION	PRIORITY	MULTIYEAR PROJECT TOTAL	PRIOR YEARS TOTAL	PROJECT MATERIALS	OUTSIDE SERVICE	TOTAL	ACCUMULATED TOTAL
Campsite Renovation	A			7,000		7,000	7,000
Electronics/IS/Communication	B			5,000	2,000	7,000	14,000
Signs	B			7,000		7,000	21,000
Restroom Interior Renovations	B			30,000		30,000	51,000
Lake Regulatory Management	C			10,000		10,000	61,000
Roadwork	C			5000	35,000	40,000	101,000
Vehicles	C			60,000		60,000	161,000
Concrete Food Lockers	C			30,000		30,000	191,000
TOTALS		0	0	154,000	37,000	191,000	

PRIORITY: A = Required by Law B = Necessary for Continued Operation C = End of Life Replacement D = Result in Increased Efficiency
E = General Enhancement