DON PEDRO HYDROELECTRIC PROJECT
FERC NO. 2299

AMENDMENT OF APPLICATION

EXHIBIT E – ENVIRONMENTAL REPORT

APPENDIX E-7
RECREATION RESOURCE MANAGEMENT PLAN



WATER & POWER
Serving Central California since 1887

MID
Modesto Irrigation District

Prepared by:
Turlock Irrigation District
P.O. Box 949
Turlock, CA 95381

and

Modesto Irrigation District
P.O. Box 4060
Modesto, CA 95352

September 2017

This Page Intentionally Left Blank.

TABLE OF CONTENTS

List of Tables

List of Figures

List of Acronyms

ABAAG .....Architectural Barriers Act Accessibility Guidelines

ac .....acres

ACOE.....U.S. Army Corps of Engineers

ADA.....Americans with Disabilities Act (ADA/ABAAG)

AF .....acre-feet

AFLA .....Amendment to the Final License Application

BLM.....U.S. Department of the Interior, Bureau of Land Management

CCSF.....City and County of San Francisco

CFR.....Code of Federal Regulations

cfs.....cubic feet per second

Districts.....Turlock Irrigation District and Modesto Irrigation District

DPRA.....Don Pedro Recreation Agency

FERC.....Federal Energy Regulatory Commission

FLA.....Final License Application

ft .....feet

ILP.....Integrated Licensing Process

M&I.....Municipal and Industrial

mi^2 .....square miles

MID.....Modesto Irrigation District

msl.....mean sea level

MW .....megawatt

NGVD29 .....National Geodetic Vertical Datum of 1929

NEPA .....National Environmental Policy Act

O&M .....operation and maintenance

PAD.....Pre-Application Document

PM&E .....Protection, Mitigation and Enhancement

PSP.....Proposed Study Plan

RM .....River Mile

RRMP .....Recreation Resource Management Plan

RMP .....Resource Management Plan

RSP .....Revised Study Plan

SPD .....Study Plan Determination

TID.....Turlock Irrigation District

USAB.....U.S. Access Board

PREFACE

On April 28, 2014, the co-licensees of the Don Pedro Hydroelectric Project, Turlock Irrigation District (TID) and Modesto Irrigation District (MID) (collectively, the Districts), timely filed with the Federal Energy Regulatory Commission (Commission or FERC) the Final License Application (FLA) for the Don Pedro Hydroelectric Project, FERC No. 2299. As noted in the filing and acknowledged by FERC at the time, several studies were ongoing which were likely to inform the development of additional protection, mitigation, and enhancement (PM&E) measures. The Districts have now completed these studies and herein submit this Amendment of Application (Amendment to the Final License Application or AFLA). For ease of review and reference, this AFLA replaces the Districts' April 2014 filing in its entirety.

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 environmental analysis contained in this AFLA considers all the components, facilities, operations, and maintenance that make up the Don Pedro Project and certain facilities proposed to be included under the new license. The Don Pedro Project is operated to fulfill the following primary purposes and needs: (1) to provide water supply for the Districts for irrigation of over 200,000 acres of Central Valley farmland and 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 the 2.6 million people CCSF supplies in the Bay Area. 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, recreational facilities, and related operations will be referred to as the "Don Pedro Hydroelectric Project," or the "Project". With this AFLA to FERC, the Districts are seeking a new license to continue generating hydroelectric power and implement the Districts' proposed PM&E measures. Based on the information contained in this AFLA, 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 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 PM&E alternatives. 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* [emphasis added] project. As such, these recommended alternatives do not satisfy the National Environmental Policy Act (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 (TID/MID 2013b) 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 (TID/MID 2013d) 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. Also in 2012 and 2013, the Districts performed a Lower Tuolumne River Lowest Boatable Flow Study (TID/MID 2013a) to determine if the minimum flows required under the current license provide boatable flows for non-motorized, recreational river boating in portions of the lower Tuolumne River where put-ins and take-outs are available.

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 irrigation and 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 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 current 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 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 current 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 current 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. The proposed Project Boundary includes the proposed fish counting and barrier weir and infiltration galleries located on the lower Tuolumne River at approximately RM 25.5 and RM 25.9, respectively.

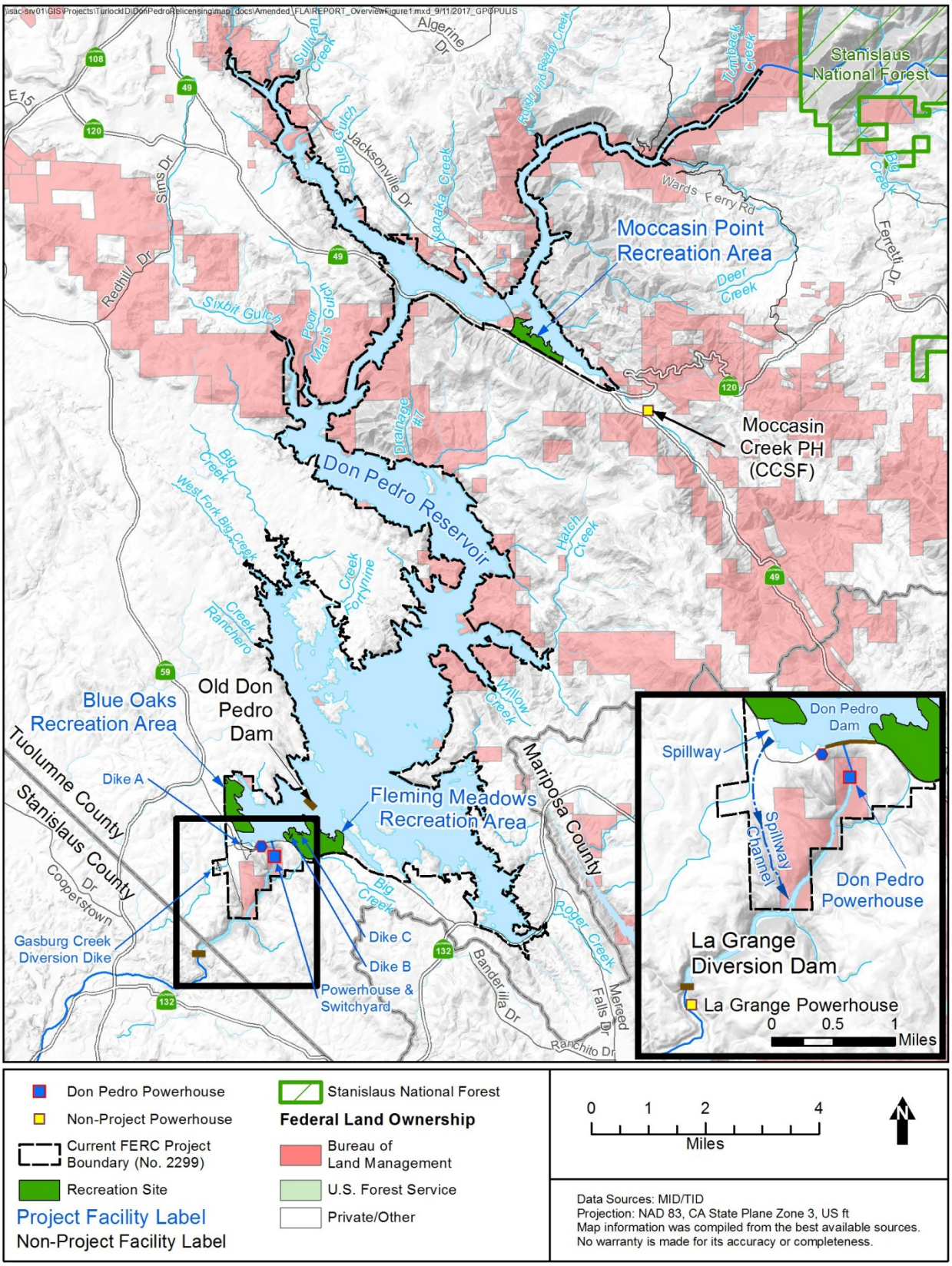

Figure 1.1-1. Don Pedro Project site location map.

1.2 Relicensing Process

The current FERC license for the Project expired on April 30, 2016, and the Districts filed their FLA on April 28, 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 (TID/MID 2013b), Whitewater Boating Take-Out Feasibility Study (TID/MID 2013d), and Lower Tuolumne River Lowest Boatable Flow Study (TID/MID 2013a).

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; 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; and determination of whether the minimum flows required under the current FERC license provide boatable flows for non-motorized, recreational river boating in portions of the lower Tuolumne River where put-ins and take-outs are available.

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 2013b), 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 Recreation Area	Blue Oaks Recreation Area	Fleming Meadows Recreation Area
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.

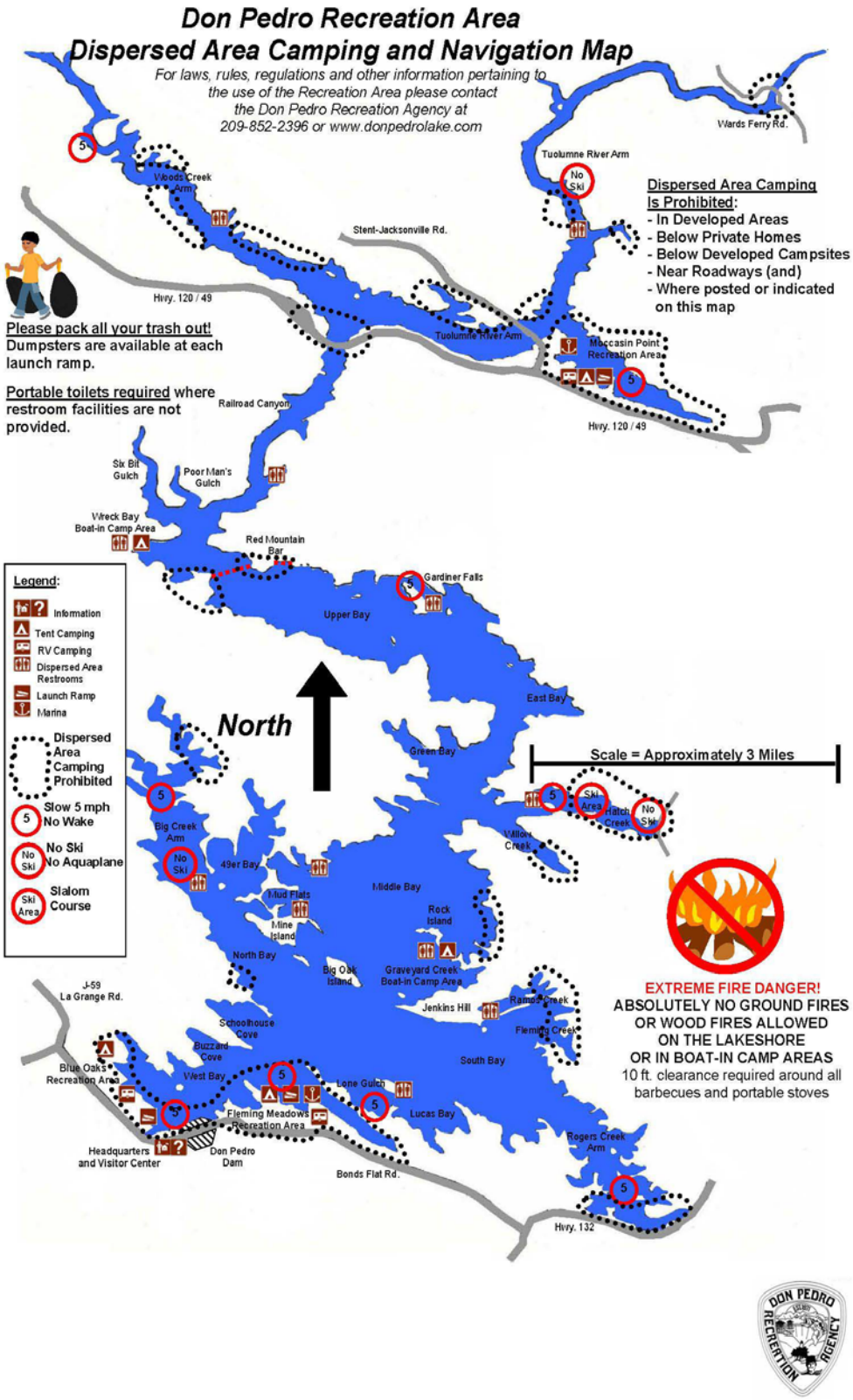

Figure 1.3-1. Developed facilities inventoried and evaluated as part of the recreation facility condition and public accessibility assessment, and recreation use assessment.

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 marina, 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 2017). 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 2013b). 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.

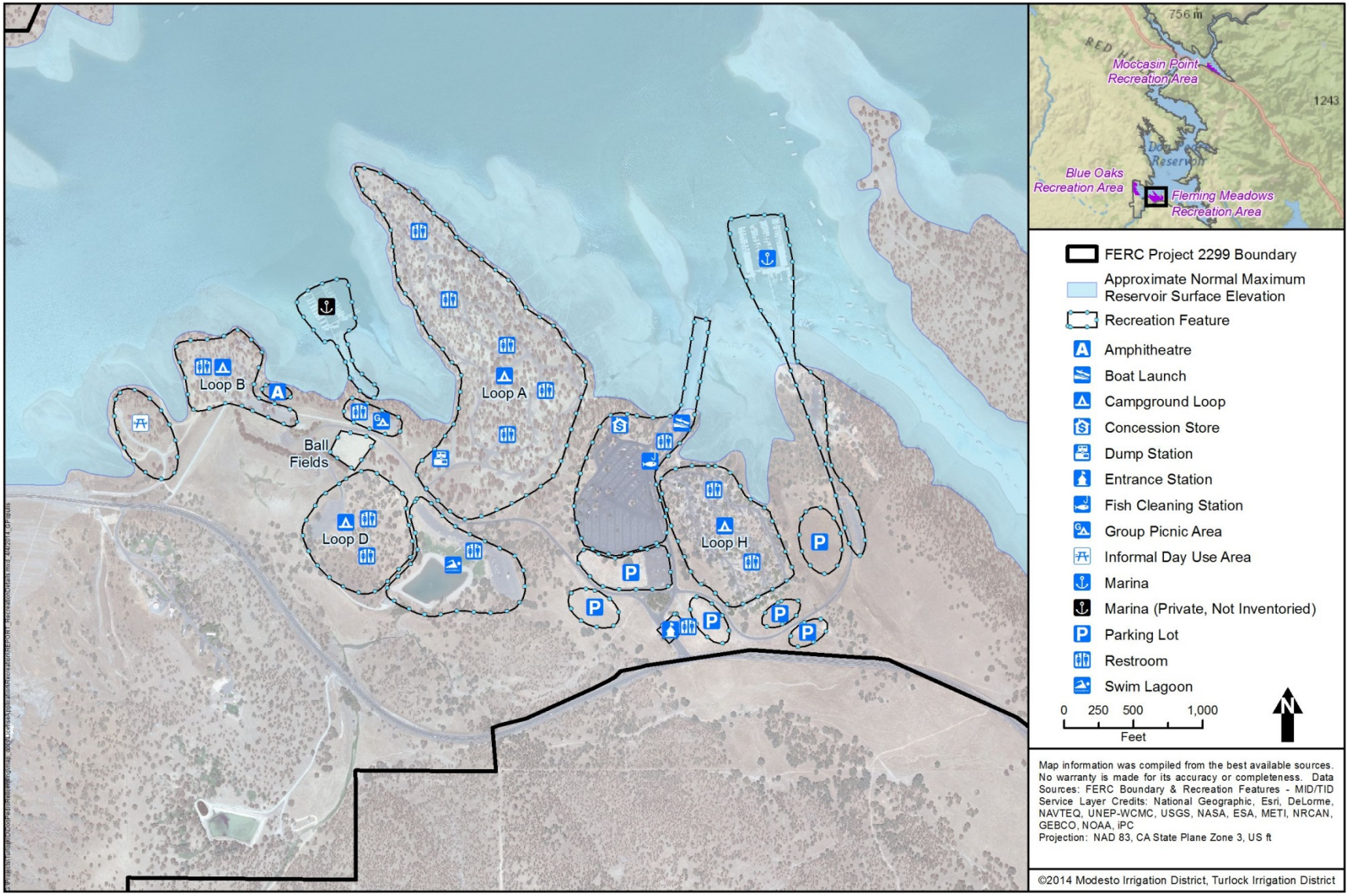

Figure 1.3-2. Recreation facilities at the Fleming Meadows Recreation Area.

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).

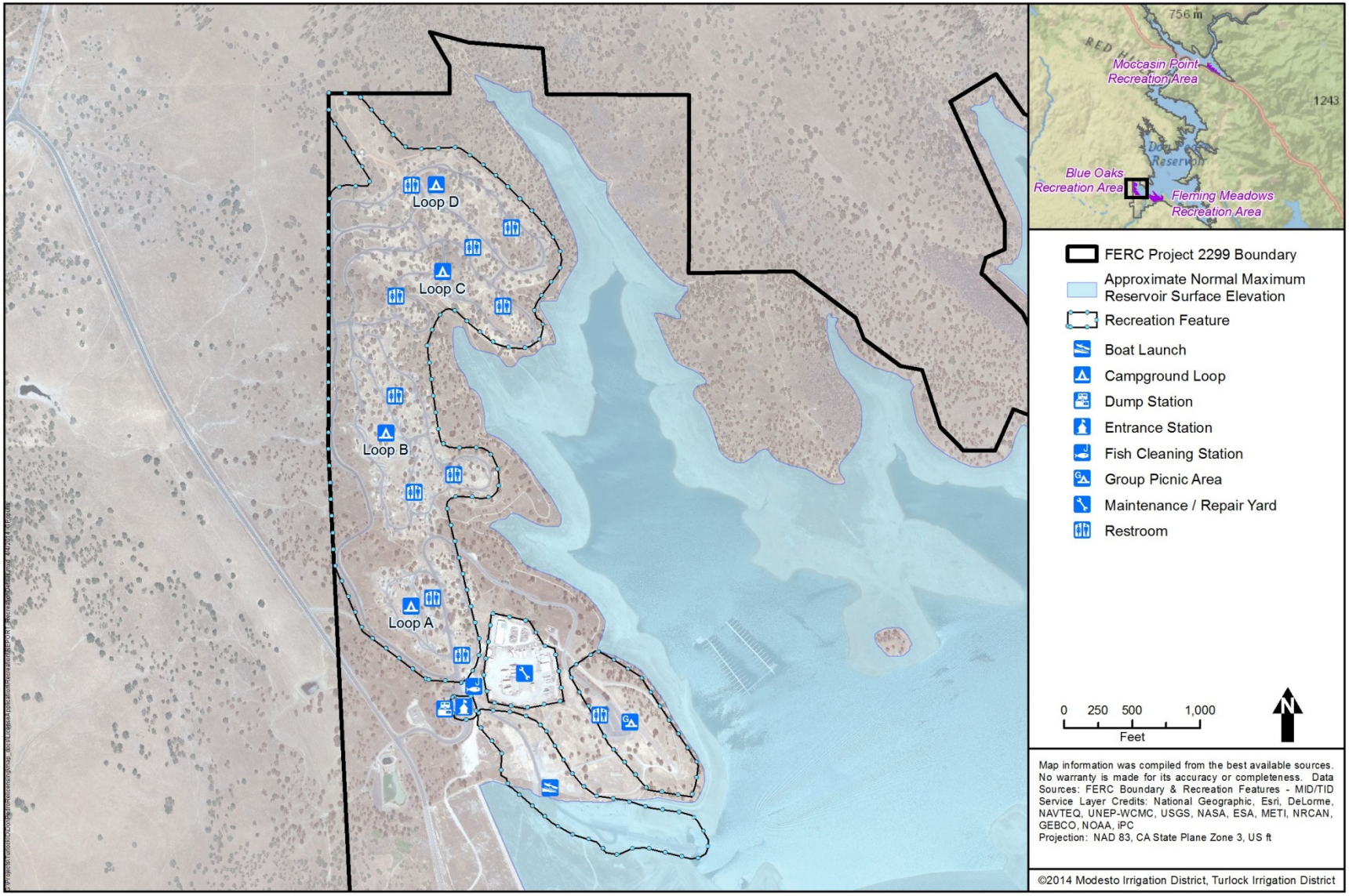

Figure 1.3-3. Recreation facilities at the Blue Oaks Recreation Area.

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 marina, 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.

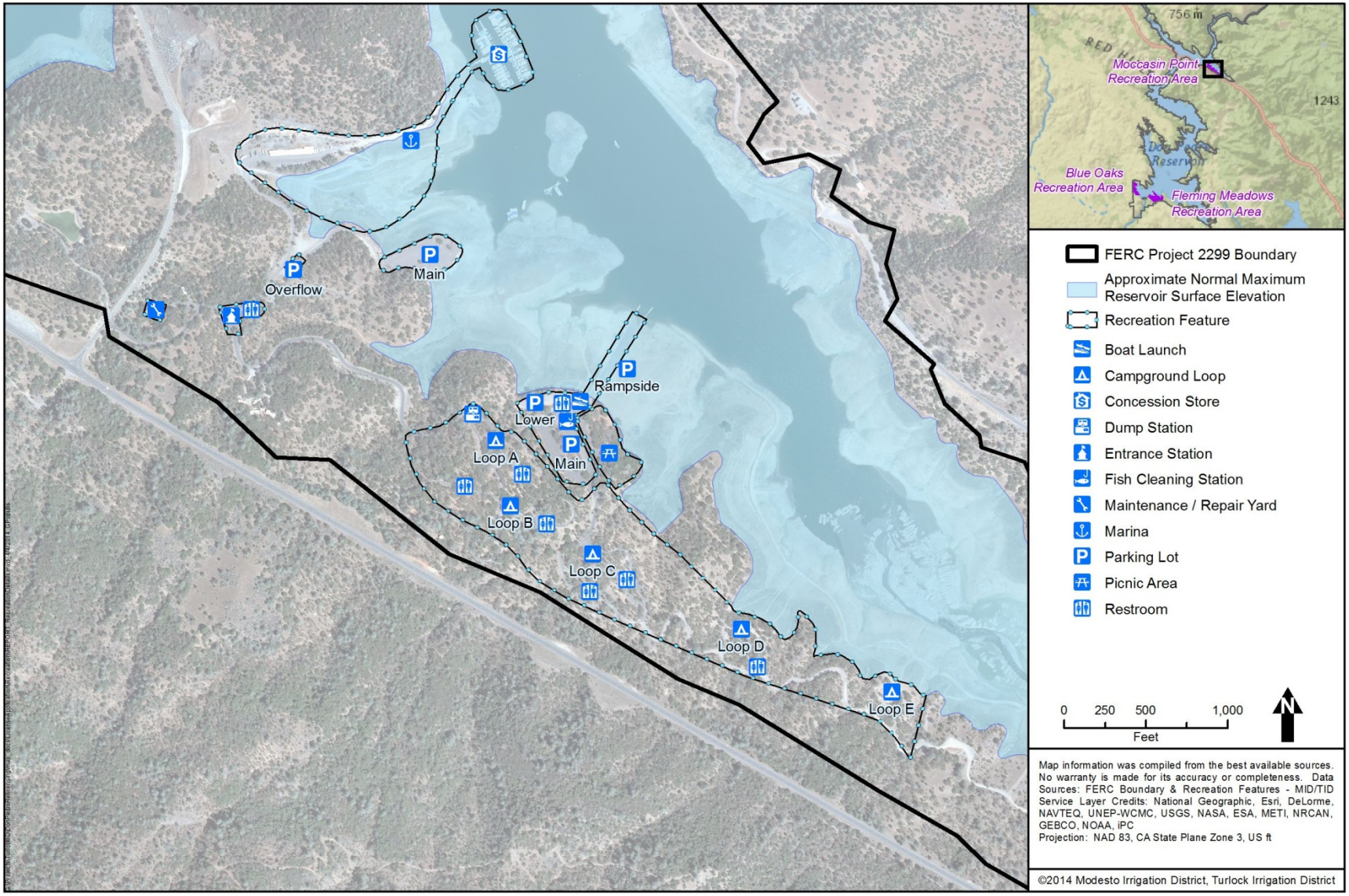

Figure 1.3-4. Recreation facilities at the Moccasin Point Recreation Area.

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 user-defined parking along the shoulders of the County Road 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 percent) 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 2013d). After this report was filed, the Districts continued assessing the site to better understand use patterns and opportunities for site improvement (TID/MID 2017). 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.

1.3.3 Lower Tuolumne River Lowest Boatable Flow Study

The primary goal of the Lower Tuolumne River Lowest Boatable Flow Study (TID/MID 2013a) in 2012 and 2013 was to determine if the minimum flows required under the current license provide boatable flows for non-motorized, recreational river boating in portions of the lower Tuolumne River where put-ins and take-outs are available (TID/MID 2013a).

The study reported that flows as low as 100 cubic feet per second (cfs) as recorded at the U.S. Geological Survey La Grange gage were determined to be boatable in the reach between Old La Grange Bridge and Turlock SRA in 2012. In 2013, a greater number of volunteers participated in the study, and results indicate 200 cfs and 175 cfs were equally judged boatable by an overwhelming majority of participants. More than half of the boaters who participated in the study reported that 150 cfs was boatable on the study reaches – Old LaGrange Bridge to Riverwalk Park in Waterford and Riverdale Park to Shiloh Bridge.

Study results and the level of volunteer participation in both 2012 and 2013 indicate that shallow draft canoes and kayaks are ideally suited for the boating opportunities on the lower Tuolumne River. Very few drift boaters/rafters participated in the study, and of those who did participate, the majority reported the river unboatable at study flows of 175 cfs and lower.

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 (CFR) 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.	This RRMP identifies BLM-managed and District-owned locations for existing and new recreation facilities. The Districts will obtain all land rights necessary to construct and operate a new non-motorized boat take-out/put-in facility near the proposed fish counting and barrier weir at RM 25.5.
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.

3.1 New Recreation Opportunities at RM 25.5

The Districts are proposing fish habitat enhancements on the lower Tuolumne River that will include improvements to recreational opportunities. As part of the proposed fish counting and barrier weir at RM 25.5, the Districts will construct a new take-out/put-in facility for non-motorized canoeing and kayaking (Figure 3.1-1). The fish counting and barrier weir will include a fishway and counting window available for public viewing. The concept plans for fish counting and barrier weir and take-out/put-in facility are presented in Figure 3.1-2. The cost to construct the take-out/put-in facility is a component of the cost to construct the fish counting and barrier weir, which is provided in Exhibit C of the AFLA.

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.

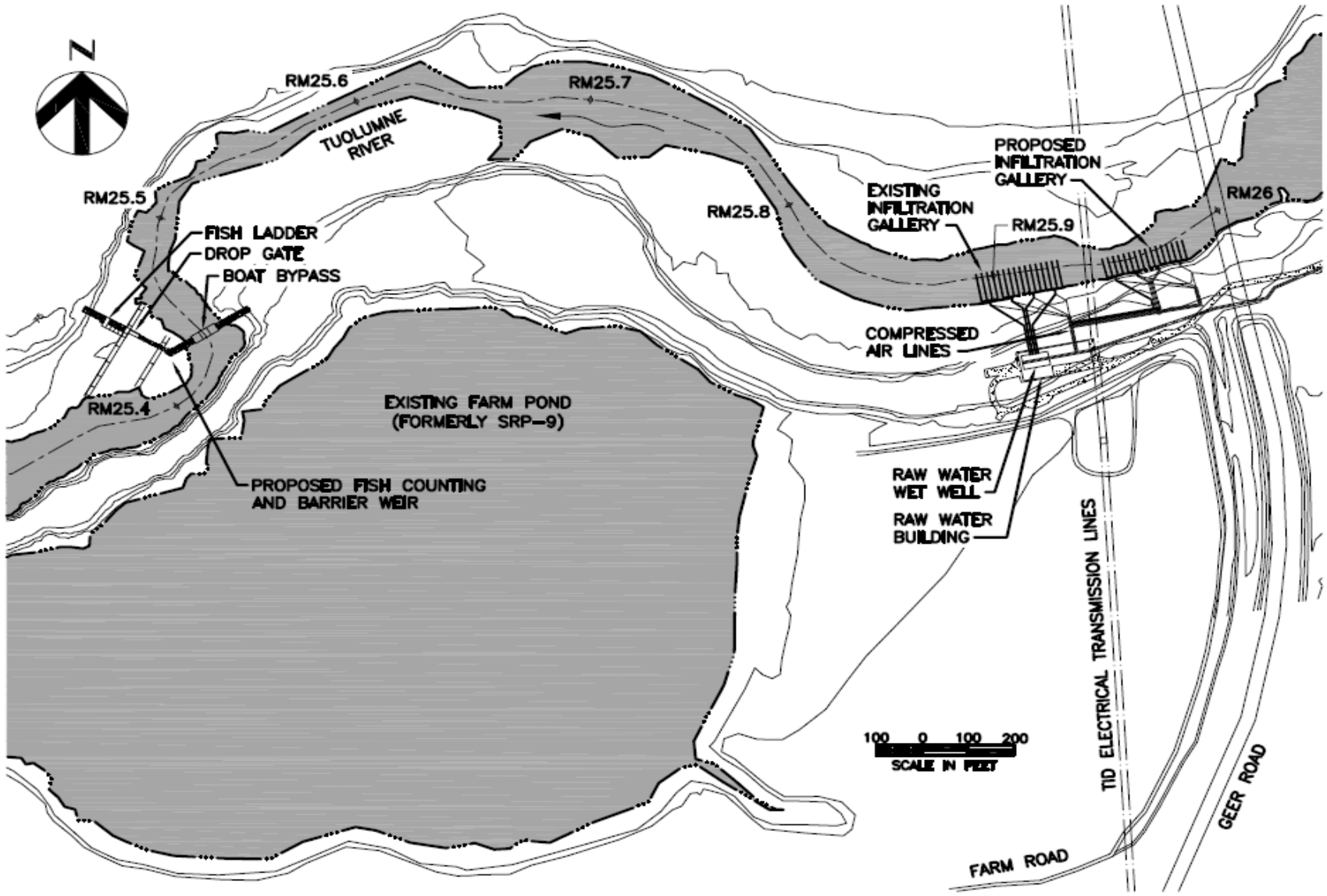

Figure 3.1-1. Location of proposed take-out/put-in (boat bypass) facility.

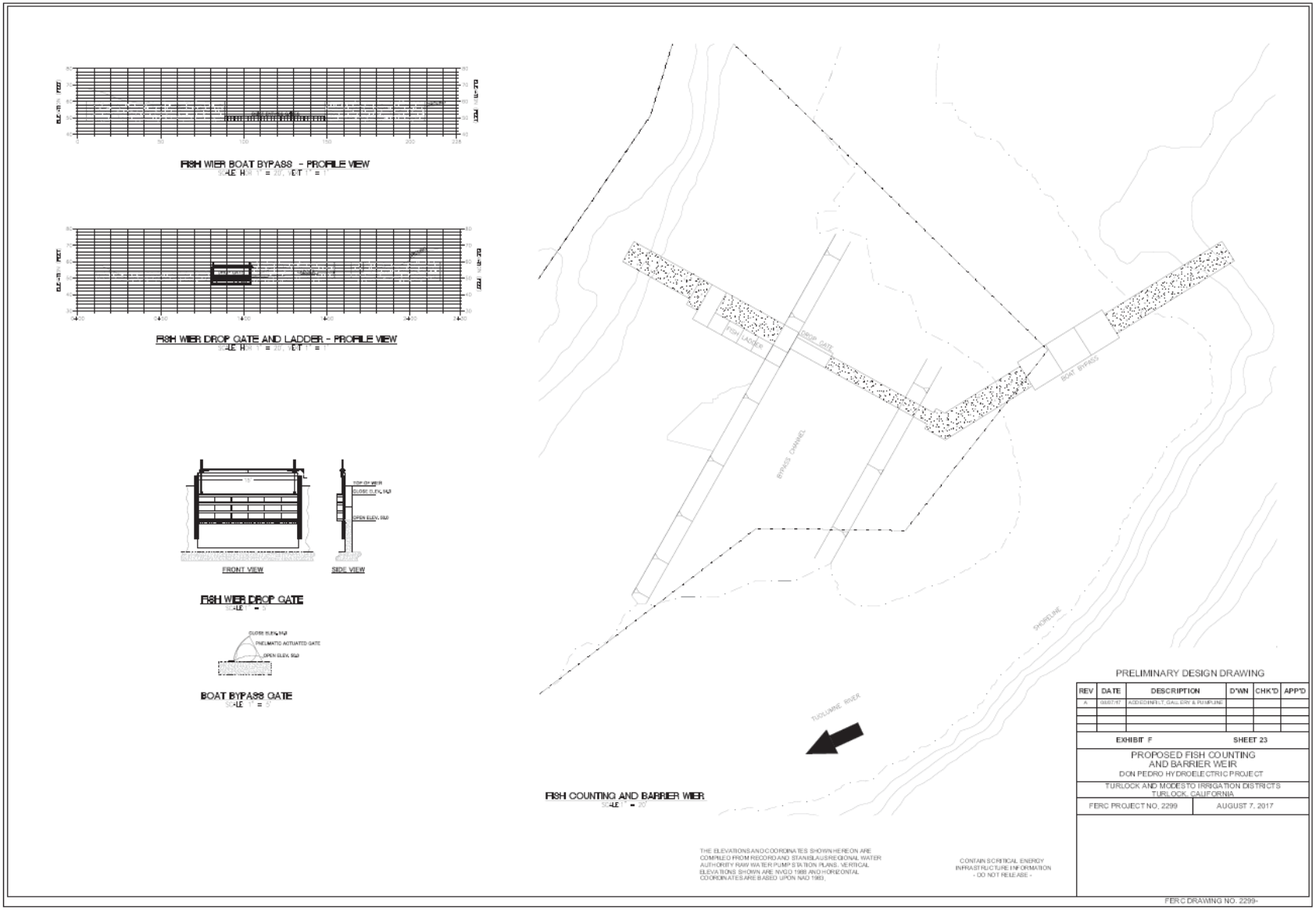

Figure 3.1-2. Plan view for proposed fish counting and barrier weir and take-out/put-in (boat bypass).

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.

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 2013c) 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. A small cinderblock structure[1] near the A2 restroom in the Blue Oak campground is used by pallid bats as a night roost and anecdotal evidence suggests visitors may be accessing the building, creating a potential disturbance for the bats. To prevent visitors from accessing the building, 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

[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.

toilets and four dispersed shoreline toilets) (Figure 4.2-1). 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.

This Page Intentionally Left Blank.

\

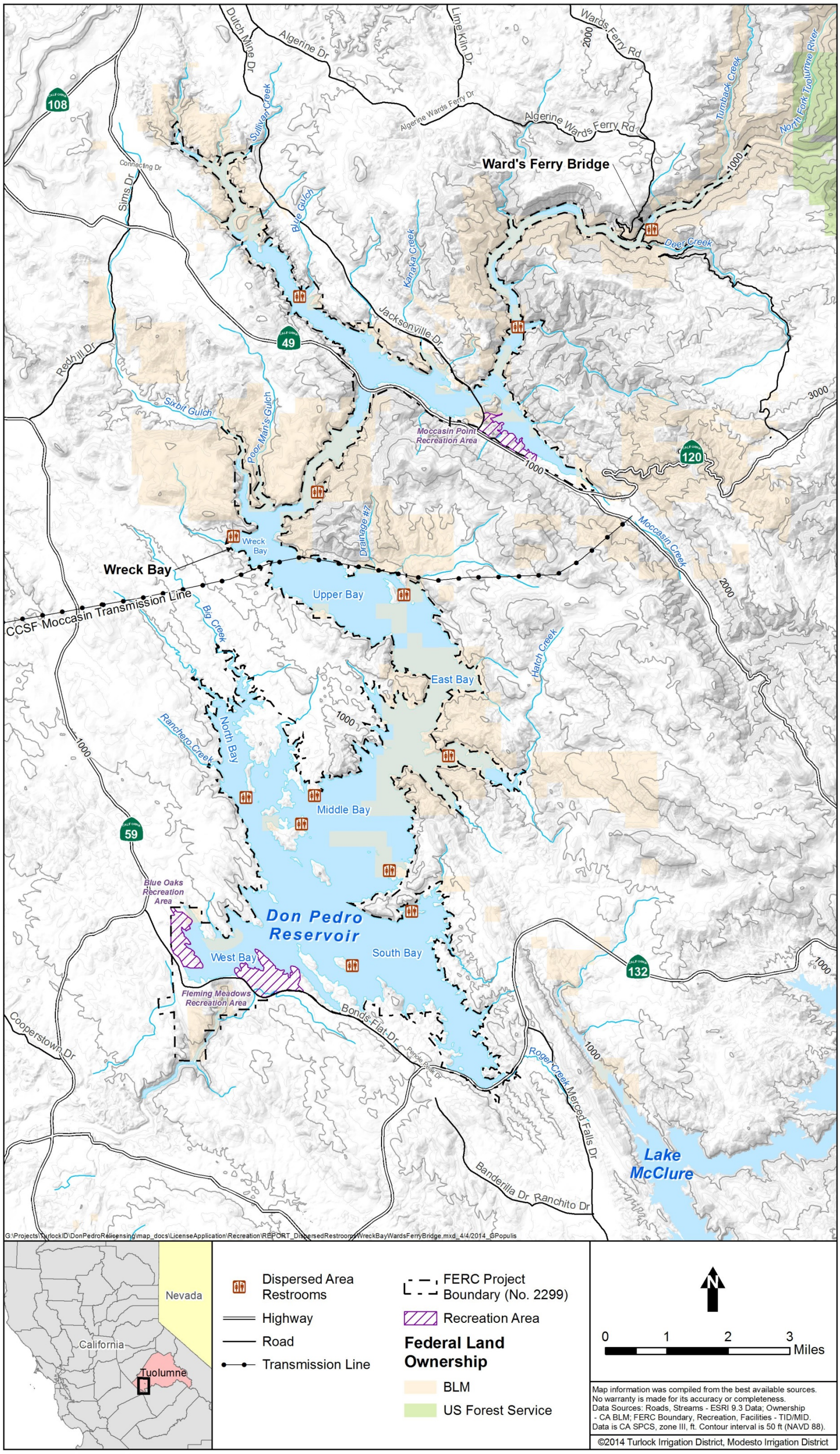

Figure 4.2-1. Remote and limited-facility infrastructure locations.

This Page Intentionally Left Blank.

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.

This Page Intentionally Left Blank.

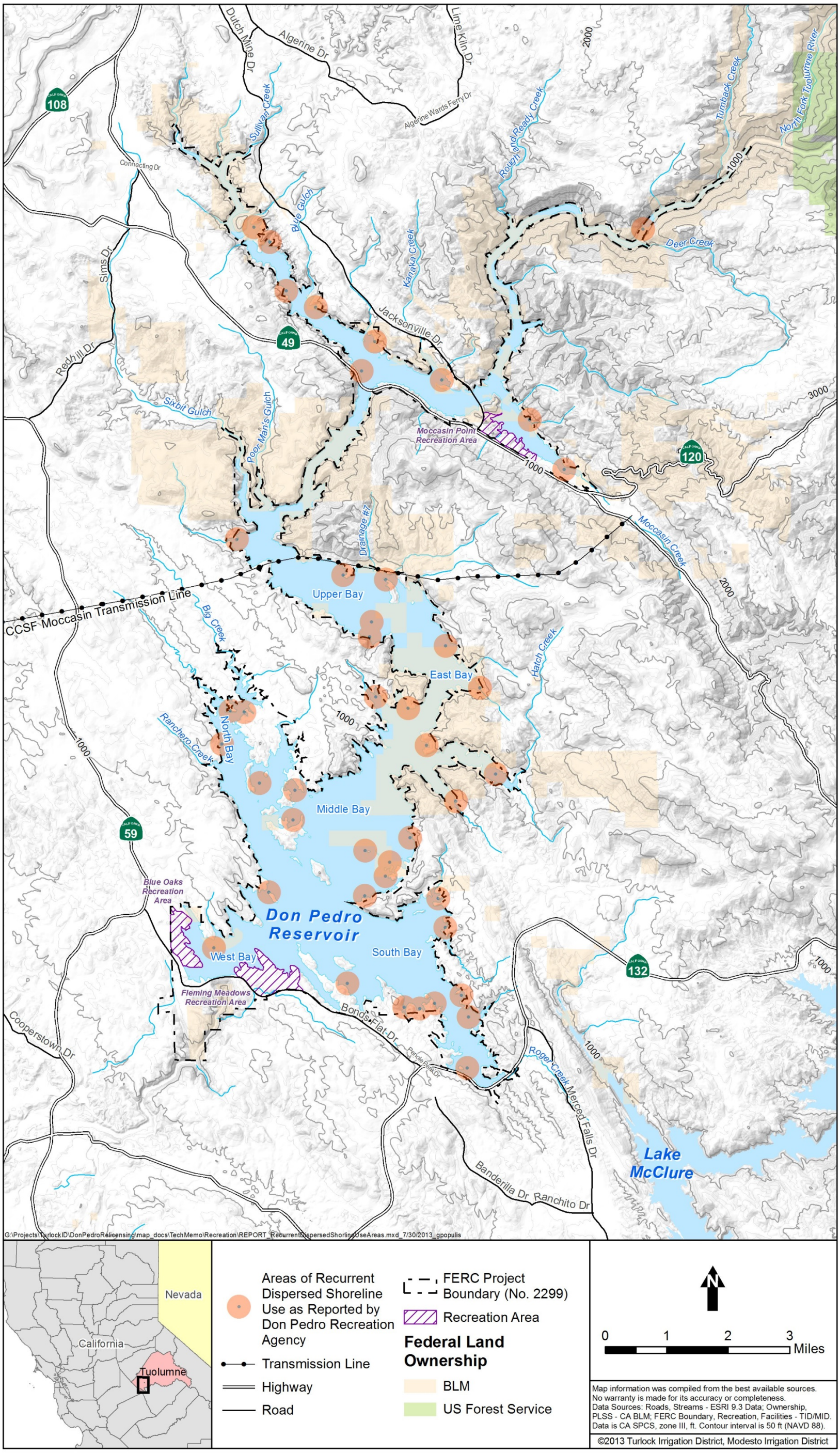

Figure 4.3-1. Dispersed recreation areas.

This Page Intentionally Left Blank.

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

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

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 five-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 Division 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 relicensing participants, 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 REFERENCES

Turlock Irrigation District and Modesto Irrigation District (TID/MID). 2017. Ward's Ferry Take-Out 2016 Observations Technical Memorandum. Prepared by HDR, Inc. September 2017.

_____. 2013a. Lower Tuolumne River Lowest Boatable Flow Study Report (RR-03). Prepared by HDR Engineering, Inc. December 2013.

——. 2013b. Recreation Facility Condition and Public Accessibility Assessment, and Recreation use Assessment Study Report (RR-01), Attachment to Don Pedro Hydroelectric Project Updated Study Report. December 2013.

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

____. 2013d. 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). 2017. Americans with Disabilities Act and Architectural Barriers Act Accessibility Guidelines (ABAAG). Washington, D.C. [Online] URL: https://www.access-board.gov/guidelines-and-standards/buildings-and-sites/about-the-ada-standards/background/ada-aba-accessibility-guidelines-2004. (Accessed September 19, 2017).