

**DON PEDRO HYDROELECTRIC PROJECT
FERC NO. 2299**

AMENDMENT OF APPLICATION

EXHIBIT E – ENVIRONMENTAL REPORT

**APPENDIX E-5
WOODY DEBRIS MANAGEMENT PLAN**



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List of Acronyms

AFLA	Amendment to the Final License Application
BLM.....	U.S. Department of the Interior, Bureau of Land Management
Districts	Turlock Irrigation District and Modesto Irrigation District
FERC.....	Federal Energy Regulatory Commission
ft	feet
MID.....	Modesto Irrigation District
TID	Turlock Irrigation District
WD.....	woody debris

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 are the co-licensees of the 168-megawatt Don Pedro Hydroelectric Project (the Project) located on the Tuolumne River in western Tuolumne County in the Central Valley region of California. This document presents the Woody Debris Management Plan (the Plan) for the Don Pedro Project, which is intended to provide guidance for ensuring the continued public safety benefit of the Districts' woody debris management efforts while limiting the potential for these efforts to result in detrimental effects on local resources.

1.1 General Description of the Don Pedro Project

The Districts are the co-licensees of the 168 megawatt Project located on the Tuolumne River in western Tuolumne County, in the Central Valley region of California. Don Pedro Dam is located at river mile 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 (National Geodetic Vertical Datum 1929). At elevation 830 ft, the reservoir stores over 2,000,000 acre-feet of water and has a surface area slightly less than 13,000 ac. The watershed above Don Pedro Dam is approximately 1,533 square miles.

The current Project Boundary extends from approximately one mile downstream of the dam to approximately river mile 80.8 upstream of the dam. Upstream of the dam, the Project Boundary runs generally along the 845 ft contour interval. The top of the Don Pedro Dam is at elevation 855 ft. The current Project Boundary encompasses approximately 18,370 acres with 74 percent of the lands owned jointly by the Districts and the remaining 26 percent (approximately 4,802 ac) owned by the United States and administered as a part of the U.S. Bureau of Land Management (BLM) Sierra Resource Management Area.

The primary Don Pedro Project facilities include the 580-foot-high Don Pedro Dam and Reservoir completed in 1971; a four-unit powerhouse situated at the base of the dam; related facilities including the Project spillway, outlet works, and switchyard; four dikes (Gasburg Creek Dike and Dikes A, B, and C); and three developed recreational facilities (Fleming Meadows, Blue Oaks, and Moccasin Point Recreation Areas). The location of the Don Pedro Project and its primary facilities is shown in Figure 1.1-1.

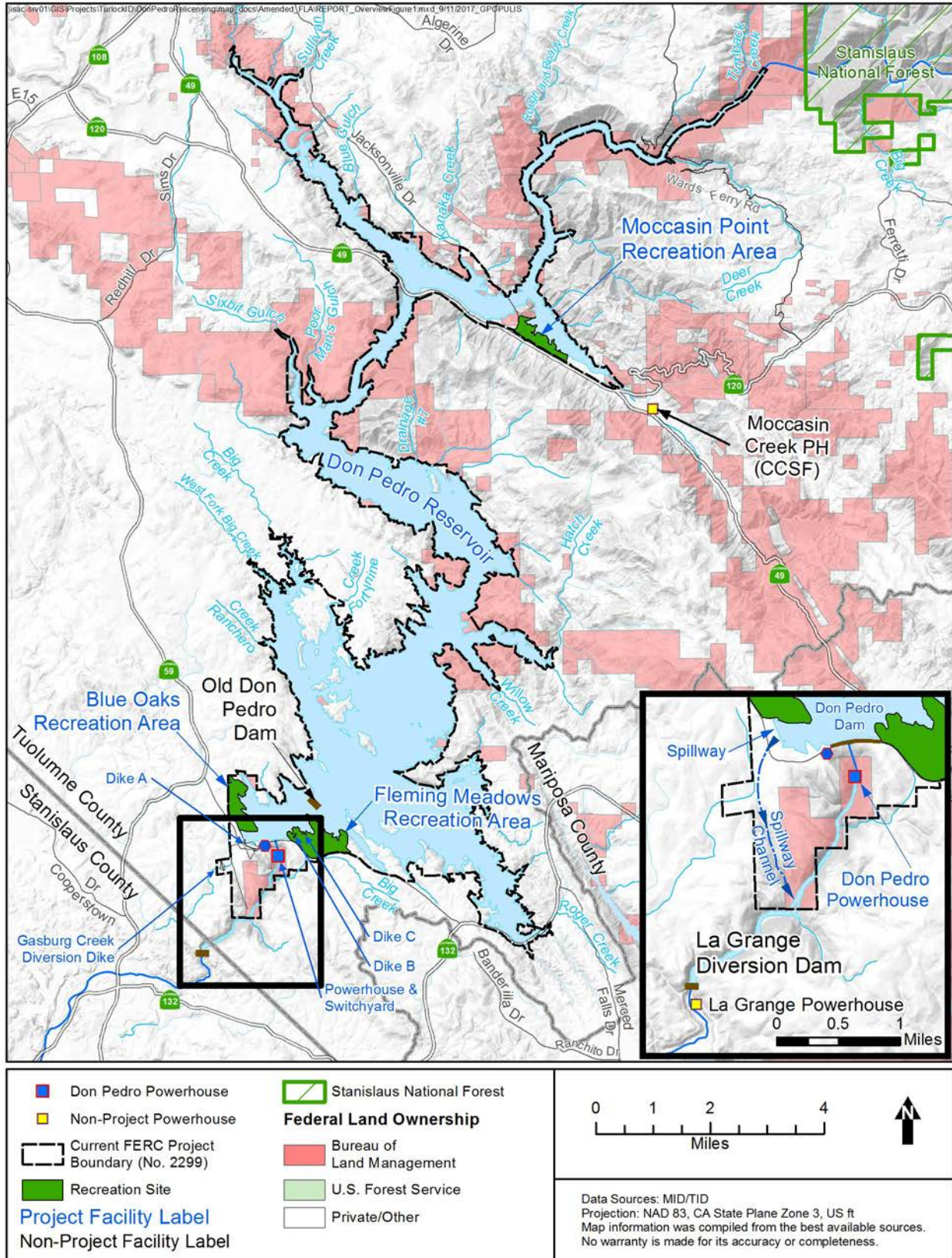


Figure 1.1-1. Don Pedro Project site location map.

2.0 WOODY DEBRIS MANAGEMENT

2.1 Goal of the Woody Debris Management Plan

The goal of the Woody Debris Management Plan (the Plan) is to ensure the continued public safety benefit of the Districts' woody debris (WD) management efforts while limiting the potential for these efforts to result in detrimental effects on local resources.

2.2 Current Woody Debris Management and Conditions

Article 52 of the current FERC license requires the implementation of the Districts' Log and Debris Removal Plan. Under the Log and Debris Removal Plan, the Districts collect and remove floating debris at Don Pedro Dam, in the upper Tuolumne River portion of the reservoir, and in other dispersed areas of the reservoir as needed. Debris is collected in boom rafts, anchored along the reservoir edge, and burned during fall and winter under low reservoir levels. WD removal is conducted in order to limit the public safety hazard to recreational users of Don Pedro Reservoir.

The Districts' relicensing studies documented that the lower Tuolumne River has limited WD (TID/MID 2017). Most WD captured in Don Pedro Reservoir originates upstream of the reservoir, and is of a size that would pass through the lower Tuolumne River during high flows if it were not trapped in the reservoir. As a result, the Districts' current WD practices do not substantially affect WD presence or distribution in the lower Tuolumne River.

2.3 Woody Debris Management

Under the Plan, the Districts will continue WD management practices as described above. The following practices will be followed during implementation of the Districts' WD management:

- The Districts will obtain a burn permit from CalFire and an Air Quality permit from Tuolumne County Air Pollution Control District before any WD burning is conducted.
- The Districts will file a Fire Plan with the BLM prior to any WD burning on BLM-managed lands.
- No WD staging or burning will occur within ½ mile of active bald eagle nests.
- No WD staging or burning will occur in areas known to support occurrences of special-status species.
- WD staging and burning will be done consistent with the Districts Fire Plan.

2.4 Consultation and Plan Modifications

Beginning the second calendar year after license issuance, the Districts will provide the BLM with a memorandum describing all activities conducted under the Plan in the prior calendar year. If requested by the BLM, the Districts will also convene a meeting or conference call to discuss

the memo and any potential modifications to the Plan. Major changes to the Plan, if required, would be presented to the agencies for comment and subsequently filed with FERC for approval.

3.0 REFERENCES

Turlock Irrigation District and Modesto Irrigation District (TID/MID). 2017. *Oncorhynchus mykiss* Habitat Survey Study Report (W&AR-12). September 2017.