

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

Revised

**SUPPORTING DOCUMENT H
Proposed Technical Study Plans**



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CONTENT

Supporting Document H (SD H) contains 28 detailed stakeholder-approved technical study plans for the Middle Fork American River Project (Project or MFP). The study plans are organized into five resource areas - Aquatic, Cultural, Land, Recreation, and Terrestrial. In addition, SD H describes **seven** study plan components that are required by the Federal Energy Regulatory Commission (FERC or Commission) and applicable to all of the technical study plans.

The stakeholder-approved technical study plans included in SD H were developed in consultation with Federal and state resource agencies, Native American tribes, local governments, non-governmental organizations, and members of the public. The study plans were approved during Plenary meetings conducted between May and November 2007.

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1.0 INTRODUCTION

SD H contains 28 detailed stakeholder-approved Technical Study Plans developed for Placer County Water Agency's (PCWA's) Middle Fork American River Project (MFP) (Table SD H-1 and Appendix A). The study plans are organized into five major resource areas - Aquatic, Cultural, Land, Recreation, and Terrestrial. The plans were developed in collaboration with representatives of Federal and state resource agencies, Native American Tribes, local governments, non-governmental organizations, and members of the public. Thirty-eight Technical Working Group (TWG) meetings were held between August 2006 and August 2007 to review, revise, and reach consensus on the Technical Study Plans. The Plenary approved all of the Technical Study Plans during meetings held in May, June, and September 2007. Minor revisions to these study plans were approved by the TWGs and Plenary in October and November 2007 based on information from early implementation of the studies. The stakeholder-approved Technical Study Plans presented in Appendix A reflect these modifications and address all stakeholder study requests received to date.

The overall objective of the technical studies contained in the Pre-Application Document (PAD) is to develop sufficient information to evaluate potential Project impacts and to develop new license conditions that reasonably balance multiple resource interests. The stakeholder-approved studies will be implemented in 2007-2009, with all data collection methods and results provided to stakeholders in draft reports for review and comment (Figure SD H-1). Comments provided by stakeholders will be addressed and incorporated into final reports. Specific timelines for completion of the draft and final reports are provided in each study plan, with the overall goal of providing stakeholders with timely information as studies are completed. Reports for all the studies will be provided to the stakeholders by mid-2009, with all final reports completed by January 2010.

2.0 CONTENT AND ORGANIZATION OF TECHNICAL STUDY PLANS

The following presents the general content and organization of each individual stakeholder-approved Technical Study Plan contained in Appendix A:

- Potential Resource Issues - This section identifies the environmental or cultural resource issues that are specifically addressed in the study plan.
- Project Nexus - This section describes potential direct and indirect effects of Project operation and maintenance activities on environmental and cultural resources.
- Potential License Condition - This section identifies potential license conditions which may be necessary in the new license (based on the Project Nexus) that are directly influenced by information developed from implementation of the study plan.
- Study Objectives - This section describes the specific study objectives or goals of the study .

- Extent of Study Area - This section clearly identifies the limits of the study area based on the potential Project Nexus for each study plan.
- Study Approach - This section provides a detailed description of the study elements and methodologies proposed to meet each study objective.
- Schedule - This section presents a detailed schedule for implementation of each study including data collection and stakeholder consultation, data analysis and report preparation, draft report distribution, stakeholder review and comment period, comment resolution, and final report distribution.

3.0 OTHER TECHNICAL STUDY PLAN COMPONENTS

The following describes six additional technical study plan components that apply to all stakeholder-approved Technical Study Plans. These components are not addressed individually within each Technical Study Plan provided in Appendix A. Additional information regarding the formal study plan development and implementation process is provided in the Executive Summary and SD A - Relicensing Process Plan.

3.1 RESOURCE MANAGEMENT GOALS/OBJECTIVES

Preliminary Resource Management Objectives were provided by resource agencies to PWCA and stakeholders in September 2007. These objectives were not developed by the resource agencies specifically for the MFP, but were adapted from another relicensing proceeding to reflect the general content and range of management objectives that may be under consideration for the MFP. The intent of their distribution was to verify that the Technical Study Plan and analyses proposed for the MFP would result in collection of sufficient information to address each of the known resource management objectives provided by agencies with jurisdiction over the resources to be studied.

Table SD H-2 summarizes the existing and future information sources which address each of the preliminary Resource Management Objectives. It should be noted that multiple sources provide relevant information related to each Resource Management Objective. Existing information sources include results of early information gathering activities by PCWA presented in the Executive Summary, SD E - Existing Resource Information Report and SD G - 2005/2006 Technical Study Plans and Reports. Future information sources include technical study reports that will summarize information developed during implementation of the stakeholder-approved Technical Study Plans and analyses completed to support proposed new license conditions to be provided in the License Application.

Table SD H-2 was distributed to stakeholders for review and comment and discussed during TWG meetings in October and November 2007 and in the November 2007 Plenary meeting. All comments received from stakeholders were incorporated into the table. The overall consensus of the stakeholders is that the technical studies and analyses proposed in the PAD would collect sufficient information to adequately

address each of the preliminary Resource Management Objectives provided by the resource agencies.

3.2 EXISTING INFORMATION AND ADDITIONAL INFORMATION NEEDS

As discussed above, the overall objective of the technical studies contained in the PAD is to develop sufficient information to evaluate potential Project impacts and to develop new license conditions that reasonably balance multiple resource interests. The first step in meeting this objective involved educating the stakeholders on the MFP facilities and operations and soliciting and summarizing relevant existing resource information.

Beginning in 2005, PCWA's Board of Directors requested staff to begin early consultation with state and federal resource agencies, non-governmental organizations, Native American Tribes, and other stakeholders in preparation for the MFP relicensing. The intent of these early meetings was to identify potential stakeholders and understand their resource interests, describe MFP facilities and operations to interested parties, and solicit existing resource information. Existing resource information relevant to the MFP was acquired, compiled and summarized by PCWA and provided to stakeholders in a series of draft Existing Resource Information Reports. These reports were intended to provide the foundation for understanding resources in the vicinity of the MFP and for determination of additional information needs. Upon receipt of these reports, some stakeholders identified additional information that would be beneficial to include in the Existing Resource Information Reports. This information is included in the updated resource reports provided in SD F - Existing Resource Information Report.

In reviewing the existing information, PCWA identified several resources areas that lacked basic information necessary to developed focused site-specific studies for inclusion in the PAD. PCWA elected to conduct early information gathering in 2005 and 2006 to augment the existing information. PCWA collaborated with resource agencies to develop appropriate scopes of work for the early environmental and cultural data gathering activities. These activities focused on documenting river and stream channel characteristics (geomorphology), riparian vegetation, aquatic habitat, historical Project and pre-Project flows, water temperatures, and meteorological conditions in streams and rivers upstream and downstream of Project diversions and reservoirs. Cultural resource inventories within the FERC Project Boundary were also initiated. Results of these early environmental and cultural studies were distributed to stakeholders in a series of technical reports for consideration during the PAD study plan development. The technical study plans and reports are provided in SD G -2005/2006 Technical Study Plan and Reports. PCWA also discussed the existing resource information with stakeholders during Plenary and TWG meetings in 2006 and early 2007 to facilitate dissemination of known resource information relevant to the MFP.

Beginning in August 2006, PCWA initiated collaboration with stakeholders to identify additional information needed in the PAD Technical Study Plans to fully evaluate potential Project impacts and to develop new license conditions. Thirty-eight TWG meeting were held between August 2006 and August 2007 to review, revise, and reach consensus on the scope of additional information gathering necessary to include in the

Technical Study Plans. The Plenary approved all the Technical Study Plans during the May, June, and September 2007 meetings.

3.3 CONSISTENCY WITH GENERALLY ACCEPTED PRACTICE IN THE SCIENTIFIC COMMUNITY

The proposed study methodologies (including data collection and analysis techniques, field schedules, and study durations) in the stakeholder-approved Technical Study Plans are consistent with generally accepted practice in the scientific community. The study plans were collaboratively developed with technical experts representing the licensee, state and federal resource agencies, Native American tribes, non-government organizations and the public. Many of these technical experts have experience in multiple relicensing proceedings in California. The scope of each of the technical studies provided in the PAD are consistent with common approaches used for other relicensing proceedings in California and the nation and, where appropriate, reference specific protocols and survey methodologies.

3.4 CONSIDERATIONS OF LEVEL OF EFFORT AND COST

As discussed above, the overall objective of the technical studies contained in the PAD is to develop sufficient information to evaluate potential Project impacts and to develop new license conditions that reasonably balance multiple resource interests. Proposed technical study approaches were evaluated first to verify that the desired information was focused on potential Project impacts associated with the MFP (i.e., Project Nexus), second to confirm that the information collected would substantially influence decisions on new license conditions (i.e. clear linkage between information obtained and decision process), and third to substantiate that the study approaches and resulting level of efforts were consistent with generally acceptable practices in the scientific community. The stakeholder-approved Technical Study Plans included in the PAD meet these evaluation criteria and reflect consensus of PCWA and the stakeholders on the scope of the technical studies. Table SD H-3 presents the estimated level of effort and cost for completion of each of the Technical Study Plans.

3.5 PERIODIC PROGRESS REPORTS

PCWA has a well-defined process for the manner and extent information obtained during implementation of the Technical Study Plans will be provided to the stakeholders. Each Technical Study Plan contains a detailed schedule for data collection and analysis, development and distribution of draft Technical Study Reports, and stakeholder review and comment. Figure SD H-1 provides an overview of these activities for each study plan. In general, a 60 day comment period is provided for stakeholder review of each draft Technical Study Report. The comment period is extended to 90 days if the distribution of the draft Technical Study Report is scheduled between Thanksgiving and New Year's. An additional 60-90 day period has also been allocated in the schedule to resolve stakeholder comments on the draft Technical Study Reports and to develop and distribute the final Technical Study Reports.

In addition to the formal distribution of draft and final Technical Study Reports, PCWA will also present an overview of the content and key findings of each Technical Study Report to stakeholders during regularly scheduled TWG meetings. The timing of these meetings will be emailed to stakeholders in advance and posted on PCWA's relicensing website <http://relicensing.pcwa.net/>.

3.6 ANNUAL STUDY PLAN REPORT AND MEETING

Annually, during study implementation, PCWA will file a study report to the Federal Energy Regulatory Commission (Commission or FERC) and stakeholders describing overall progress in implementation of the study plans including data collected to date, any deviations in technical approaches or schedules, and a proposed schedule for completion of the remaining study plan components. The study report will also include a description of any proposed modifications to the approved studies or new studies proposed by PCWA.

Within 15 days following filing of the study report, PCWA will hold a meeting with stakeholders and FERC to discuss the study results and PCWA's or other participant's proposals, if any, to modify the study plans in light of the progress of the study plan and data collected. Within 15 days following the meeting, PCWA will file a meeting summary, including any modification to ongoing studies or new studies proposed by PCWA.

PCWA began implementing elements of the stakeholder-approved Technical Study Plans in May 2007, which is consistent with the schedule provided in the study plans. PCWA will distribute a Study Plan Report to FERC and MFP stakeholders on January 22, 2008 describing overall progress in implementation of the study plans in 2007 including data collected to date, any deviations in technical approaches or schedules, and a proposed schedule for completion of the remaining study plan components. PCWA has also scheduled a Study Plan Report Meeting for February 4, 2008 to discuss the study results and PCWA's or other participant's proposals, if any, to modify the study plans in light of the progress of the study plan and data collected. PCWA will file a meeting summary with FERC, including any modification to ongoing studies or new studies proposed by PCWA on February 19, 2008 for review and comment by stakeholders.

In subsequent years, during study plan implementation, PCWA will follow a similar schedule for distributing annual Study Plan Reports (January 2009 and 2010), conducting a Study Plan Report Meeting (February 2009 and 2010), and filing a meetings summary (February 2009 and 2010). The timing of these activities in 2009 and 2010 will be emailed to stakeholders in advance and posted on PCWA's relicensing website <http://relicensing.pcwa.net/>.

3.7 DEVELOPMENT OF SPECIFIC, DETAILED PLAN

Each of the stakeholder-approved Technical Study Plans, provided in Appendix A, identify potential license conditions which may be necessary depending on the study

results and potential Project effects. These potential license conditions may include development of detailed management plans (e.g., Recreation Plan or Historic Properties Management Plan) as well as specific environmental measures requiring an implementation plan. For each of these potential license conditions included in the Preliminary Licensing Proposal (PLP) and License Application, PCWA will develop and concurrently file a specific, detailed plan. The plans will be developed in consultation with appropriate resource agencies, tribes and other interested parties including participants in the PCWA's MFP relicensing. Each plan will be provided to the stakeholders for a minimum 30-day review and comment period.