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ASSESSMENT OF BLACK COTTONWOOD ABUNDANCE, RECRUITMENT AND MORTALITY STUDY PLAN

**BISHOP CREEK HYDROELECTRIC PROJECT
(FERC PROJECT NO. 1394)**

Prepared for:



Bishop, California

Prepared by:

Kleinschmidt

Portland, Oregon
www.KleinschmidtGroup.com

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SOUTHERN CALIFORNIA EDISON

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**ASSESSMENT OF BLACK COTTONWOOD ABUNDANCE, RECRUITMENT AND MORTALITY
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SOUTHERN CALIFORNIA EDISON

1.0 INTRODUCTION

Southern California Edison Company (SCE) is the licensee, owner and operator of the Bishop Creek Hydroelectric Project (Project) (Federal Energy Regulatory Commission [FERC] Project No. 1394). The Project is located on Bishop Creek in Inyo County, California, approximately 5 miles southwest of the city of Bishop (Figure 1-1). The licensee operates the Project under a 30-year license issued by FERC on July 19, 1994. As the current license is due to expire on June 30, 2024, SCE has initiated the formal relicensing process utilizing the Integrated Licensing Process (ILP) by filing the Notification of Intent (NOI) and Pre-Application Document (PAD) with FERC on XXXX.

In advance of filing the NOI and PAD, SCE worked with stakeholders to identify necessary studies, with the goal of accelerating FERC’s ability to issue a Study Plan Determination. Efforts began over a year before formal initiation of the process with FERC, through a series of Technical Working Group (TWG) meetings held in Bishop, California.

During these TWG meetings, stakeholders identified the need for an Assessment of Black Cottonwood, including a review of monitoring data to assess changes in cover, recruitment and mortality. If changes are identified, the study will assess any potential relationship between these changes and Project flows and or operations. This study plan details the study objectives, study area, methods and schedule for the Assessment of Black Cottonwood Abundance, Recruitment and Mortality Study.

Appendix A to this plan is a consultation summary of discussions specific to this plan, along with a table that summarizing stakeholders’ comments on previously reviewed versions, and how SCE has addressed those comments. If SCE does not incorporate a comment or request, SCE will provide a rationale based on Project specific information and FERC ILP study plan criteria.

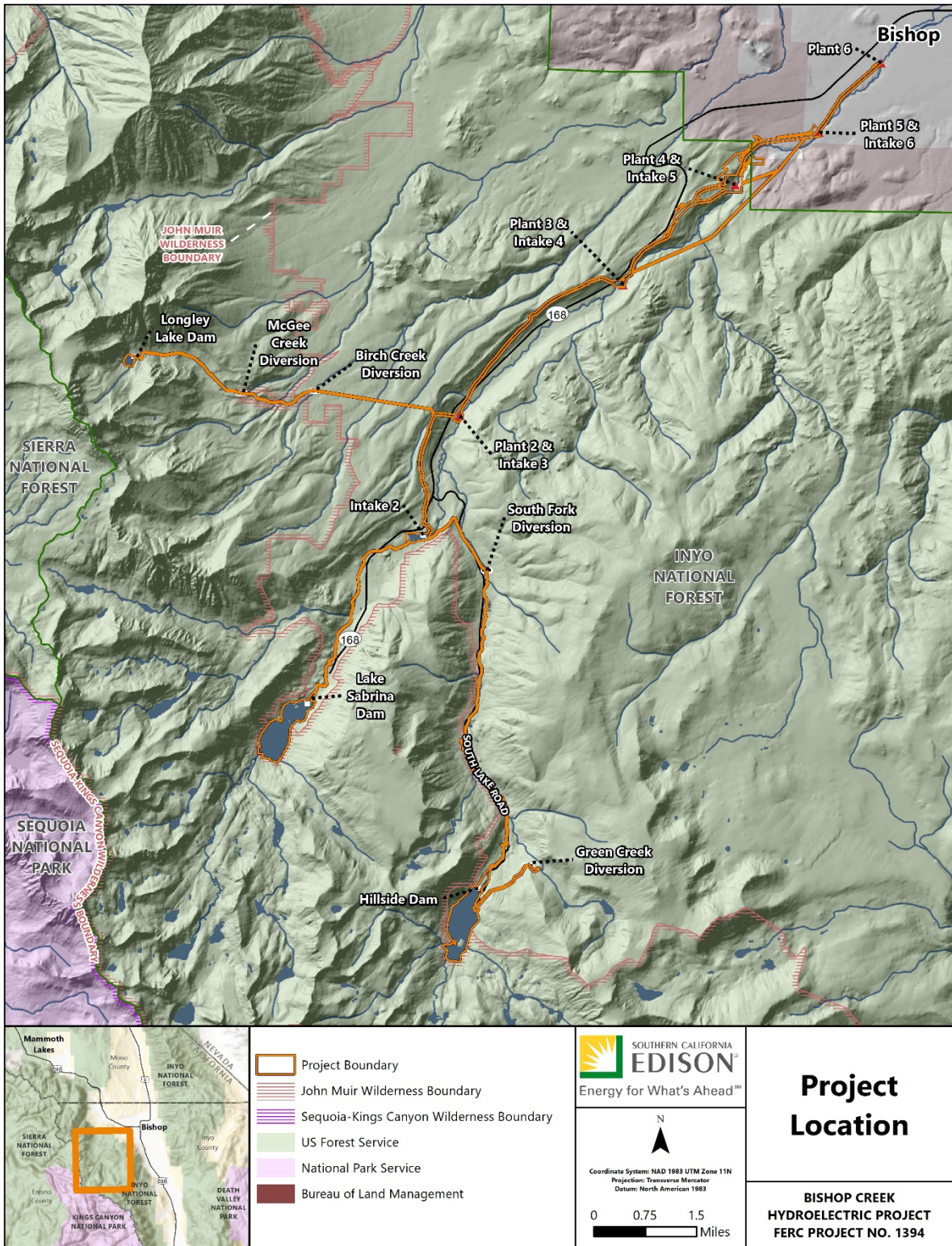


FIGURE 1-1 PROJECT LOCATION MAP

2.0 PROJECT NEXUS

Anecdotal observations from resource agencies indicate a possible decline in black cottonwood abundance in the study area.

3.0 STUDY GOALS AND OBJECTIVES

- Review monitoring data to assess changes in cover, recruitment, and mortality.
- If changes are detected, assess relationship to Project flows and operations.

4.0 STUDY AREA

The study area will include lands within the current Project boundary.

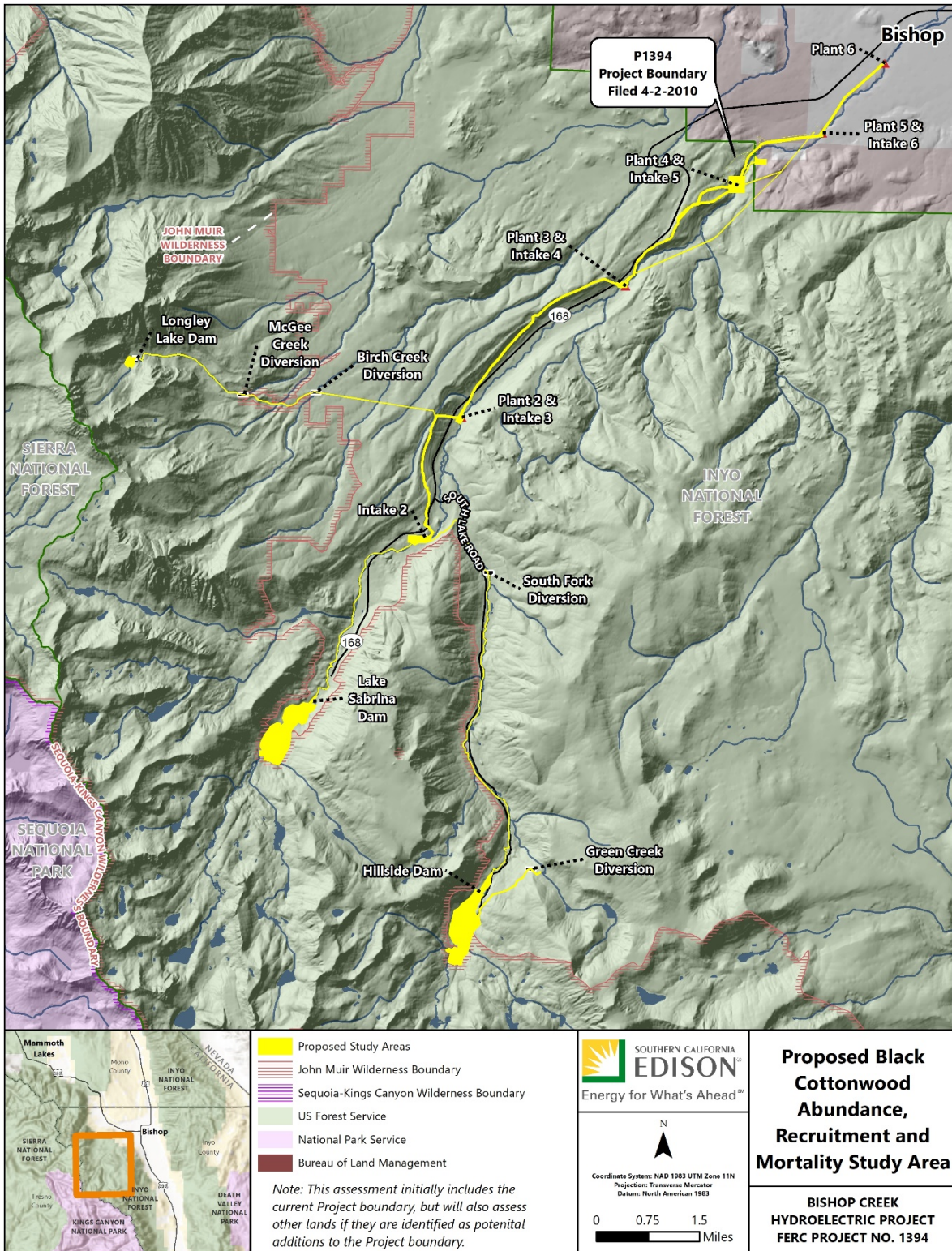


FIGURE 4-1 PROPOSED BLACK COTTONWOOD ABUNDANCE, RECRUITMENT AND MORTALITY STUDY AREA

5.0 METHODS

Monitoring data collected from 1991 through 2014 in compliance with Federal Power Act Section 4(e) conditions of the existing license will be analyzed to assess trends in abundance, recruitment and mortality. If a trend of population decline is identified, the data will be assessed in relation to hydrologic data available for depth to groundwater and stream flow to determine the extent to which Project operations (as differentiated from natural variability in precipitation and other factors) may have contributed to the population decline trend. If a relationship is identified, a plan to facilitate population recovery will be developed.

6.0 SCHEDULE AND REPORTING

Following FERC's anticipated study plan determination in early 2020, it is anticipated to implement the first field season in 2020. FERC's ILP requires an initial study report 1 year following the determination. This provides opportunities to review results and as necessary adjust scope and methods.

7.0 REFERENCES

To be added.

APPENDIX A: Study Plan Consultation Record

Appendix A

Study Plan Consultation Record

This study plan has been developed in consultation with the Bishop Creek Terrestrial and Botanical Resources Technical Working Group (TWG). The intent of the consultation process is to achieve consensus, to the degree possible, on the need for specific studies, the key resource questions to be addressed by the studies, and the appropriate methodology and level of effort for the study.

This appendix summarizes the key consultation milestones for each study plan (Table 1), and how Southern California Edison Company (SCE) has addressed comments received through the consultation process. Table 2 is a Response to Comments Table for comments received from stakeholders, and how comments have been addressed in the final study plan. Where stakeholder comments requests have not been incorporated, Table 2 provides a rationale based on Project specific information and Federal Energy Regulatory Commission’s (FERC) Study Plan Criteria (18 Code of Federal Regulation [CFR] § 5.9).

**TABLE 1 KEY STUDY PLAN DEVELOPMENT MILESTONES
AND TECHNICAL WORK GROUP PLANNING SCHEDULE**

DELIVERABLE	MATERIAL DISTRIBUTED	MEETING TYPE	DATES	PROPOSED DATES FOR COMMENTS
Project Description	5/25/2018	TWG	6/4/2018, 6/5/2018, and 6/7/2018	7/9/2018
Annotated Study Plans, Goals, Objectives	7/26/2018	TWG	8/14/2018 and 8/15/2018	8/31/2018
Draft Study Plans	9/17/2018	TWG	10/9/2018 to 10/11/2018	10/26/2018
Final Study Plans	11/15/2018	TWG	12/4/2018 to 12/6/2018	1/7/2019

TABLE 2 SCE RESPONSES TO COMMENTS RECEIVED ON STUDY PLANS

COMMENT NO.	DATE OF TWG MEETING	ENTITY	COMMENT	SCE RESPONSE