CHAPTER 6

Environmental Setting and Environmental Impacts

6.1 Introduction

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This chapter contains the environmental setting and impact analysis for resources that could be affected by the operation of the Upper North Fork Feather River Hydroelectric Project (UNFFR Project) under a new Federal Energy Regulatory Commission (FERC) license. Chapter 5, Regulatory Framework, contains descriptions of applicable federal, state, and local laws, regulations, and policies that guide the analysis in this chapter. This introduction provides a definition of the environmental baseline used in this environmental impact report (EIR) and an overview of the impact analysis. Discussion and evaluation of the No Project Alternative, which is not discussed in this chapter, can be found in Chapter 8, Alternatives Development.

The following resource topics are evaluated in this chapter (presented in the order they appear):

- Land Use and Mineral Resources
- Geology, Geomorphology, and Soils
- Water Resources
- Water Quality
- Fisheries
- Vegetation, Wildlife, and Sensitive Biological Resources
- Recreation
- Aesthetics
- Public Services and Utilities
- Hazards and Hazardous Materials
- Cultural Resources
- Transportation and Traffic
- Air Quality
- Noise
- Climate Change

6.1.1 Environmental Baseline in This EIR

The environmental setting described for each resource topic in this chapter serves as the environmental baseline for purposes of the impact analysis. The environmental setting is a description of the conditions that existed at the time the Notice of Preparation (NOP) was released in August 2005 (14 Cal. Code Regs. Sec. 15125), including operation of the UNFFR Project under its existing FERC license. The description of the setting, or baseline, for each resource topic includes a regional overview and a more focused discussion of the local setting. The regional setting generally covers the UNFFR Project vicinity, which encompasses the UNFFR Project boundary, as defined by FERC and Pacific Gas and Electric Company (PG&E), and the surrounding environment, the size of which varies by resource topic. The extent of the local setting varies for each resource topic, but each local setting encompasses, at a minimum, the activity areas associated with the alternatives described in Chapter 4, Project Alternatives, and the Proposed UNFFR Project described in Chapter 3, PG&E's Upper North Fork Feather

River Project (Figure 4-1). These activity areas encompass portions of Lake Almanor and Butt Valley reservoir, the North Fork Feather River, and Butt Creek where construction and ground disturbing activities have the potential to occur. For some resources, the extent of the local setting is larger, for example, encompassing downstream drainages, transportation corridors, and other nearby areas that could be directly or indirectly affected by the alternatives.

6.1.2 Overview of the Analysis

An Initial Study (IS) for the UNFFR Project water quality certification was prepared by the State Water Resources Control Board (State Water Board) and distributed with the NOP in August 2005 as part of the scoping process. The IS presented an initial analysis of the continued operation of the UNFFR Project as proposed by PG&E in its application to FERC and the 2004 Settlement Agreement, as well as an initial identification of several potential alternatives to address water quality. The scoping process, including comments submitted on the IS, was used to formulate and refine the alternatives described in Chapter 4, Project Alternatives. Appendix B provides additional information on the scoping process

The resource sections in this chapter focus on issues that are applicable to the activities or activity areas associated with the Proposed UNFFR Project and the alternatives presented in Chapter 4, Project Alternatives. Each section identifies topics that are not discussed in the respective impact analysis and the reason for their exclusion. (Cal. Code Regs., tit. 14, § 15128.)

The impact analysis for each resource section includes a discussion of the methodology used to evaluate impacts, a list of significance thresholds, descriptions of impacts, and descriptions of mitigation measures, as appropriate. Conclusions concerning the level of significance of each impact are provided at the end of the discussion of impacts. The organization of a typical impact analysis section is shown below.

Methodology

The discussion of methodology presents the methods and key assumptions used during the analysis process. This subsection also indicates whether impacts were evaluated quantitatively or qualitatively. For most resource topics, impacts are discussed qualitatively. For some resources, supporting technical information may be found in one of the appendices.

Thresholds of Significance

Thresholds of significance were identified using the CEQA Guidelines; agency standards; legislative or regulatory requirements, as applicable; and professional judgment. The thresholds provide a means to identify the level at which an impact becomes significant. Most thresholds are qualitative, but quantitative thresholds are provided for some resource topics.

Impacts and Mitigation Measures

The impact statements and final levels of significance are summarized in tabular format at the beginning of the Impacts and Mitigation Measures subsection for each resource topic. The remainder of the section presents a discussion of each impact, with conclusions concerning the level of significance before and after mitigation measures, as appropriate. Mitigation measures are identified for each potentially significant impact. In order to minimize redundancy, discussions of the impacts of the alternatives that are the same are not repeated. The differences between the impacts of the two alternatives are emphasized in the discussions.

For each impact, an impact statement is presented to summarize the impact, and the analysis of impacts is presented under each statement. The impact statements are labeled according to the resource topic using an abbreviation of the resource and a number to correspond to the sequential number of the impact within the section. If a mitigation measure applies to both alternatives, it is not repeated for Alternative 2; instead, the reader is referred back to Alternative 1.