

CHAPTER 1

Introduction

Chapter 1 Introduction

The State Water Resources Control Board (State Water Board) prepared this Environmental Impact Report (EIR) in response to Pacific Gas and Electric Company's (PG&E's) application for a water quality certification for operation of its Upper North Fork Feather River Hydroelectric Project (UNFFR Project) under a new license from the Federal Energy Regulatory Commission (FERC). This chapter provides background information on the UNFFR Project and water quality certification process and presents an overview of the EIR and the California Environmental Quality Act (CEQA) process.

1.1 Background

The UNFFR Project is located in the upper reaches of the North Fork Feather River watershed, upstream of Lake Oroville, in Plumas County, California (Figure 1-1). [All figures in this EIR are at the ends of the chapters in which they are first referenced.] The UNFFR Project was originally licensed by FERC in 1955 and is referenced in FERC documents as FERC Project No. 2105. Before FERC can issue a new license, PG&E must obtain a water quality certification from the State Water Board pursuant to Section 401 of the Clean Water Act (33 U.S.C. § 1341) (CWA). Public agencies with discretionary authority over a project are required to comply with CEQA (Pub. Resources Code, § 21000 et seq.) to evaluate and disclose the environmental impacts of their decisions. [See Chapter 10, Glossary, for a definition of discretionary authority and other technical terms used in this document.] The State Water Board has prepared this EIR to comply with CEQA before acting on PG&E's application for water quality certification.

The Regional Water Quality Control Boards (Regional Water Boards) prepare basin plans that designate the beneficial uses of waters to be protected and establish the water quality objectives necessary to protect those uses, as required under Section 303 of the CWA (33 U.S.C. § 1313) and Sections 13240 and 13241 of the California Water Code. When establishing water quality objectives, the Regional Water Boards consider the past, present, and future beneficial uses of the water bodies; their environmental characteristics; economics; and water quality conditions that could be reasonably achieved through coordinated control of the factors affecting water quality. When the State Water Board considers issuing a water quality certification for a project, it evaluates whether the project will comply with the applicable basin plan and whether the beneficial uses of the applicable water bodies will be protected.

In 2006, the United States Environmental Protection Agency (USEPA) listed the North Fork Feather River upstream of Lake Oroville as a water quality limited segment under Section 303(d) of the CWA. The listing was based on the State Water Board's determination that elevated water temperatures are impairing the cold freshwater habitat beneficial use of the North Fork Feather River. The State Water Board cited hydromodification and flow regulation as potential sources of the impairment (State Water Board Resolution No. 2006-0079).

With respect to temperature, the State Water Board's determination of whether, and under what conditions, to issue a water quality certification for the future operation of the UNFFR Project will entail consideration of: the extent to which UNFFR Project operations increase temperatures in the North Fork Feather River; whether UNFFR Project operations are consistent with the water quality objectives for temperature set forth in the *Water Quality Control Plan for the Sacramento*

and San Joaquin River Basins (Basin Plan) (Central Valley Regional Water Quality Control Board 2011); and the extent to which PG&E can feasibly reduce temperatures in the North Fork Feather River by implementing reasonable temperature control measures. The State Water Board must also ensure that UNFFR Project operations, including any water quality measures designed to benefit the North Fork Feather River, will not unreasonably affect water quality in Lake Almanor.

1.2 Purpose of This Environmental Impact Report

An EIR is an informational document used in the planning and decision-making process to disclose information about the effects of implementing a project. CEQA requires government agencies to consider the environmental consequences of their actions—in this case, issuance of a water quality certification by the State Water Board—before approving plans and policies or committing to a course of action on a project. This EIR was prepared to fulfill the following CEQA objectives:

- identify any significant adverse environmental impacts associated with the State Water Board's decision on PG&E's application for a water quality certification for the UNFFR Project,
- indicate the manner in which any adverse impacts can be mitigated or avoided,
- facilitate public involvement, and
- foster coordination among various governmental agencies.

The State Water Board's responsibility for regulating water quality is further described in Chapter 2, State Water Board's Regulatory Responsibilities.

1.3 Relationship to the UNFFR Environmental Impact Statement and Settlement Agreement

PG&E submitted an application to FERC in October 2002 to renew its license for operation of the UNFFR Project, which expired on October 31, 2004. Serving as the lead agency under the National Environmental Policy Act (NEPA), FERC prepared an environmental impact statement (EIS) for the continued operation of the UNFFR Project (Federal Energy Regulatory Commission 2005) to comply with NEPA and the FERC regulations implementing NEPA (18 Code of Federal Regulations Part 380). Because a new long-term license was not issued before the original license expired, FERC has issued annual licenses allowing PG&E to continue operating the UNFFR Project until a decision is made on the new license.

Concurrent with the FERC NEPA process, PG&E organized and facilitated a collaborative effort by a broad-based group of resource agencies, public entities, and non-governmental organizations to reach agreement on protection, mitigation, and enhancement (PM&E) measures for inclusion in the new license. As described in Chapter 3, PG&E's Upper North Fork Feather River Project, the collaborative group, known as the Project 2105 Licensing Group or 2105 Collaborative, was able to reach agreement on numerous PM&E measures, which are contained in the Project 2105 Relicensing Settlement Agreement dated April 22, 2004 (2004 Settlement Agreement; see Appendix A to this EIR).

Although State Water Board staff participated in the deliberations leading up to the 2004 Settlement Agreement, the State Water Board did not sign the agreement. The State Water Board and its staff are therefore not considered Relicensing Participants within the meaning of

the term used in the 2004 Settlement Agreement. The 2004 Settlement Agreement is a partial settlement agreement as not all concerns were resolved in the agreement.

The role of State Water Board staff during settlement discussions was to provide guidance, input, and analysis for the development of new license conditions and potential measures proposed by the Relicensing Participants that related to water quality standards and other applicable state law. Concerns not resolved by the 2004 Settlement Agreement include shoreline erosion, water temperature, flow effects on water temperature in the Belden and Seneca reaches of the North Fork Feather River, the term of the new UNFFR Project license, angler access improvements in the Seneca Reach, and offsite mitigation for impacts on wetland and riparian habitat. Concerns related to water temperature were of particular importance to State Water Board staff due to the listing of the North Fork Feather River as a temperature-impaired segment under Section 303(d) of the CWA. In accordance with the CWA, the State Water Board has the responsibility and authority to impose conditions of approval necessary to ensure that the UNFFR Project will be protective of water quality.

The Draft EIS prepared by FERC analyzed the measures in the 2004 Settlement Agreement, but did not include an analysis of water temperature. In response to comments on the Draft EIS related to water temperature, the Final EIS examined potential measures that could be implemented to provide colder water to the North Fork Feather River during the summer. FERC provided an opportunity to comment on the Final EIS, and the State Water Board submitted comments. In its comment letters on the Draft and Final EISs, the State Water Board notified FERC that it was addressing the water temperature issues by preparing an EIR and considering measures for Basin Plan compliance. FERC cannot issue a new license unless the State Water Board issues a water quality certification, or waives its authority, pursuant to Section 401 of the CWA.

CEQA Guidelines Section 15221 states that when a project will require compliance with both CEQA and NEPA, state or local agencies should use the EIS or Finding of No Significant Impact (FONSI) rather than prepare an EIR or Negative Declaration if the EIS or FONSI complies with the necessary provisions of CEQA. Consistent with this section, this EIR incorporates by reference certain areas of the FERC EIS to avoid repetition of information.

1.4 Agency Responsibilities

Several agencies have responsibility for issuing permits or approvals for the UNFFR Project or for resources that may be affected by the UNFFR Project. This section presents an overview of the various agency responsibilities; additional details on the necessary permits and approvals are provided in Chapter 5, Regulatory Framework.

1.4.1 State Water Board and Regional Water Boards

The State Water Board prepared this EIR. As described above, its discretionary action under CEQA is issuance or denial of a water quality certification under Section 401 of the CWA. Additional details on the State Water Board's responsibilities are provided in Chapter 2, State Water Board's Regulatory Responsibilities.

The Central Valley Regional Water Quality Control Board (Central Valley Regional Water Board) shares responsibility with the State Water Board for protecting the water quality and beneficial uses of the North Fork Feather River watershed. The Central Valley Regional Water Board adopted and the State Water Board and the USEPA approved the Basin Plan. The Basin Plan

designates the beneficial uses of water to be protected along with the water quality objectives necessary to protect those uses. These beneficial uses and water quality objectives, along with state and federal anti-degradation requirements, constitute California's water quality standards. The State Water Board must protect these water quality standards in any water quality certification issued.

1.4.2 Resource Agencies

A number of federal, state, and local agencies have responsibility for managing the lands and resources in the UNFFR Project vicinity. Sections 4(e) and 18 of the Federal Power Act (FPA) authorize certain responsible and trustee agencies to submit mandatory measures to FERC during the relicensing process, and Section 10(j) authorizes the submission of non-mandatory recommendations. FERC will incorporate the mandatory measures, as well as conditions of the water quality certification, into the new license for the UNFFR Project and may incorporate the recommendations.

This section identifies agencies that have been active in the relicensing process for the UNFFR Project. Some of these agencies may also be requested to take discretionary actions related to various permits, approvals, and authorizations. The state and local agencies would be considered responsible agencies under CEQA (see Cal. Code Regs., tit. 14, § 15381). Anticipated permits and other environmental approvals are identified in Chapter 5, Regulatory Framework.

United States Department of Agriculture, Forest Service

The United States Department of Agriculture, Forest Service (USFS) is a federal land management agency responsible for the management, protection, and wise use of approximately 193 million acres of national forests and grasslands and about 500 million acres of non-federal rural and urban forests. Within the UNFFR Project boundary, the USFS is responsible for managing the Lassen and Plumas National Forests consistent with its Land and Resource Management Plans (LRMPs), including a number of administrative and recreational facilities along the shores of Lake Almanor. Although the USFS was a party to the 2004 Settlement Agreement, it also exercised its authority to condition the UNFFR Project consistent with Section 4(e) of the FPA (letter dated November 4, 2004). These mandatory 4(e) conditions were incorporated into the Final EIS as part of the recommended alternative.

United States Department of Commerce, National Marine Fisheries Service

The United States Department of Commerce, National Marine Fisheries Service (NMFS) shares responsibility with the United States Department of Interior, Fish and Wildlife Service (USFWS) for implementing the federal Endangered Species Act (ESA). NMFS manages marine and anadromous species and is responsible for issuing incidental take permits for the species it manages. In the upper reaches of the North Fork Feather River watershed, NMFS has management authority over the Central Valley spring-run Chinook salmon (*Oncorhynchus tshawytscha*) evolutionarily significant unit, Central Valley steelhead (*O. mykiss*) distinct population segment (DPS), and green sturgeon (*Acipenser medirostris*) southern DPS. As part of its review of PG&E's application and the FERC EIS and pursuant to its authorities and responsibilities under Sections 10(a), 10(j), and 18 of the FPA, NMFS recommended several measures for inclusion in the new license for the UNFFR Project (letter dated November 22, 2004).

United States Department of Interior, Fish and Wildlife Service

The USFWS shares responsibility with NMFS for administering the federal ESA. The USFWS manages land and freshwater species and is responsible for issuing incidental take permits for the species it manages. The USFWS has management authority over four sensitive species that may occur within the UNFFR Project boundary: the bald eagle (*Haliaeetus leucocephalus*); valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*); California red-legged frog (*Rana aurora draytonii*); and slender orcutt grass (*Orcuttia tenuis*). In January 2005, the USFWS submitted a Biological Opinion (BO) to FERC in response to a request for formal consultation on the bald eagle. The BO concluded that the new license for the UNFFR Project may affect the bald eagle, but is not likely to adversely affect the valley elderberry longhorn beetle or California red-legged frog and would have no effect on slender orcutt grass. Since the opinion was issued, the bald eagle has been removed from the federal list of threatened and endangered species. Also as part of its review of the PG&E application and pursuant to its authorities and responsibilities under the Fish and Wildlife Coordination Act (FWCA), Sections 10(a), 10(j), and 18 of the FPA, and the ESA, the USFWS recommended several measures for incorporation into the new license (letter dated December 1, 2003).

United States Department of the Army, Corps of Engineers

The United States Department of the Army, Corps of Engineers (Corps) has jurisdiction over waters of the United States under the CWA and is responsible for issuing permits under Section 404 of the CWA for the discharge of dredged or fill material into waters of the United States, including wetlands. The North Fork Feather River, its tributaries, and the associated impoundments associated with PG&E dams are waters of the United States and subject to the Corps' jurisdiction; therefore, a Section 404 CWA permit may be required for activities affecting these jurisdictional waters.

California Department of Fish and Wildlife

The California Department of Fish and Wildlife (CDFW) (formerly known as the California Department of Fish and Game) is responsible for maintaining native fish, wildlife, plants, and natural communities in California. CDFW is responsible for administering the California ESA and for issuance of incidental take permits; it is also responsible for issuing lake or streambed alteration agreements for activities that may affect fish or wildlife resources as a result of altering the natural flows of surface waters or other activities that affect rivers, streams, or lakes. As part of its review of the PG&E application and pursuant to its authority under Section 10(j) of the FPA, CDFW recommended several measures for incorporation into the new license (letter dated November 26, 2003).

1.4.3 Other Agencies

Plumas County (County) oversees development and other activities in the county and reviews projects for compliance with the Plumas County General Plan, the county zoning ordinance, and other local laws and regulations. The County was a signatory to the 2004 Settlement Agreement and submitted additional comments and recommended measures to FERC and the State Water Board during FERC's NEPA process and more recently the CEQA scoping process.

The California Department of Transportation (Caltrans) has the discretionary authority to issue special permits for the movement of vehicles and loads exceeding statutory limitations and to issue encroachment permits for the use of California state highways for other than normal

transportation. Transportation permits are required for vehicles and loads exceeding the size, weight, and loading of vehicles contained in Division 15 of the California Vehicle Code. Encroachment permits are required for activities conducted within the right-of-way of a state highway.

1.5 CEQA Process

The State Water Board is responsible for preparing an environmental document pursuant to CEQA in connection with the State Water Board's consideration of PG&E's application for a water quality certification for the UNFFR Project. This EIR was prepared in compliance with CEQA and the CEQA Guidelines (Cal. Code Regs., tit. 14, § 15000 et seq.). An overview of the CEQA process as it relates to this EIR is provided in this section.

1.5.1 Definition of PG&E's Proposed Project in This EIR

For the purposes of this EIR, in accordance with CEQA, a "project" is defined as "the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment" and that is "an activity involving issuance to a person of a lease, permit, license, certificate, or other entitlement for use by one or more public agencies" (Cal. Code Regs., tit. 14, § 15378, subd. (a)(3)). Further, the "term 'project' refers to the activity which is being approved and which may be subject to several discretionary approvals by governmental agencies. The term 'project' does not mean each separate governmental approval" (Cal. Code Regs. tit. 14, § 15378, subd. (c)). In this EIR, PG&E's Proposed Project is generally defined as:

- continued operation of the UNFFR Project under a new FERC license, as outlined in PG&E's application to FERC, the 2004 Settlement Agreement, federal agencies' mandatory conditions, and FERC's Staff Alternative.

1.5.2 Comparison of EIR Analysis and CWA Analysis

This EIR is a project EIR that focuses on the changes in the environment that would result from the issuance of a water quality certification and FERC relicensing of the UNFFR Project. Under CEQA, a project is analyzed for its environmental effects relative to baseline conditions (Cal. Code Regs., tit. 14, § 15126.2.). The baseline conditions for this EIR are the physical environmental conditions at the time the Notice of Preparation (NOP) of this EIR was published on August 30, 2005.

In contrast, water quality certification requires an analysis of the UNFFR Project's ongoing effect on water quality, including whether the designated beneficial uses of the North Fork Feather River identified in the Basin Plan are adequately protected. The determination of the UNFFR Project's ability to adequately protect the beneficial uses requires an understanding of the North Fork Feather River's water quality, including the natural background conditions and the system's potential to support the full range of beneficial uses.

1.5.3 Scoping Process and Public Involvement

The State Water Board initiated a public scoping period in August 2005 to solicit public, tribal, and agency input and comments on PG&E's Proposed Project and key issues that should be addressed in the EIR. A scoping meeting was held on September 27, 2005, to inform the public about PG&E's Proposed Project and the EIR, and to solicit comments. The public involvement

and scoping processes completed to date are documented in Appendix B (Scoping and Public Involvement). Key dates in the scoping process include:

- August 30, 2005** The NOP and Initial Study for PG&E's Proposed Project were sent to the State Clearinghouse, announcing a 30-day review period for state, regional, and local agencies. The NOP and Initial Study were also mailed to more than 200 other interested parties, including tribes and members of the public. The NOP included notice of a scoping meeting to be held in Chester, California, on September 27, 2005. Comments were originally due October 1, 2005.
- September 14, 2005** The State Water Board sent a letter to agencies, tribes, and the public inviting participation at the scoping meeting and extending the deadline for submittal of scoping comments to October 17, 2005.
- September 21, 2005** Notices of the scoping meeting were published in the following newspapers of general circulation: *Chester Progressive*, *Chico Enterprise Record*, *Feather River Bulletin*, *Indian Valley Record*, *Portola Reporter*, *Lassen County Times*, *Westwood Pinepress*, and *Sacramento Bee*.
- September 27, 2005** The State Water Board held the scoping meeting at Chester Memorial Hall in Chester, California. The purpose of the meeting was to describe PG&E's Proposed Project and to solicit comments from members of the public and other interested parties. The meeting was facilitated by the State Water Board and its consultant, North State Resources, Inc. (NSR), and was recorded and transcribed by a certified shorthand reporter (the transcription is provided as an attachment to Appendix B, Scoping and Public Involvement). Questions were answered by representatives of the State Water Board and NSR. Informational materials available at the meeting were provided by the State Water Board, PG&E, and the County.

1.5.4 Availability of Draft EIR

This Draft EIR is being circulated to local, state, and federal agencies involved with the UNFFR Project and is being made available to interested organizations and individuals who may wish to review and comment on the Draft EIR. The public review period will be announced via the State Water Board's "Water Rights Water Quality Certification" email list, and notices will be sent to the UNFFR Project's Interested Parties List. During the review period, written comments on the Draft EIR may be sent to the State Water Board at the following address:

Peter Barnes
 State Water Resources Control Board
 Division of Water Rights
 P.O. Box 2000
 Sacramento, CA 95812-2231
 E-mail: Peter.Barnes@waterboards.ca.gov

Copies of the Draft EIR will be available for review at the following locations no later than December 5, 2014:

State Water Resources Control Board
1001 I Street, 2nd Floor
Sacramento, CA 95814
Phone: (916) 341-5300

Central Valley Regional Water Quality Control Board
Sacramento Office
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670-6114
Phone: (916) 464-3291

Central Valley Regional Water Quality Control Board
Redding Office
364 Knollcrest Drive, Suite 205
Redding, CA 96002
Phone: (530) 224-4845

Plumas County Library–Chester
210 First Street
Chester, CA 96020
Phone: (530) 258-2742

Plumas County Library–Greenville
204 Ann Street
Greenville, CA 95947
Phone: (530) 284-7416

Plumas County Library–Quincy
445 Jackson
Quincy, CA 95971
Phone: (530) 283-6310

Butte County Library–Chico
1108 Sherman Avenue
Chico, CA 95926
Phone: (530) 891-2762

The Draft EIR is also available on the State Water Board's UNFFR Project webpage at:
http://www.waterboards.ca.gov/waterrights/water_issues/programs/water_quality_cert/unffr_ferc_2105.shtml.

1.6 Organization of EIR

This EIR is organized into the following chapters and appendices:

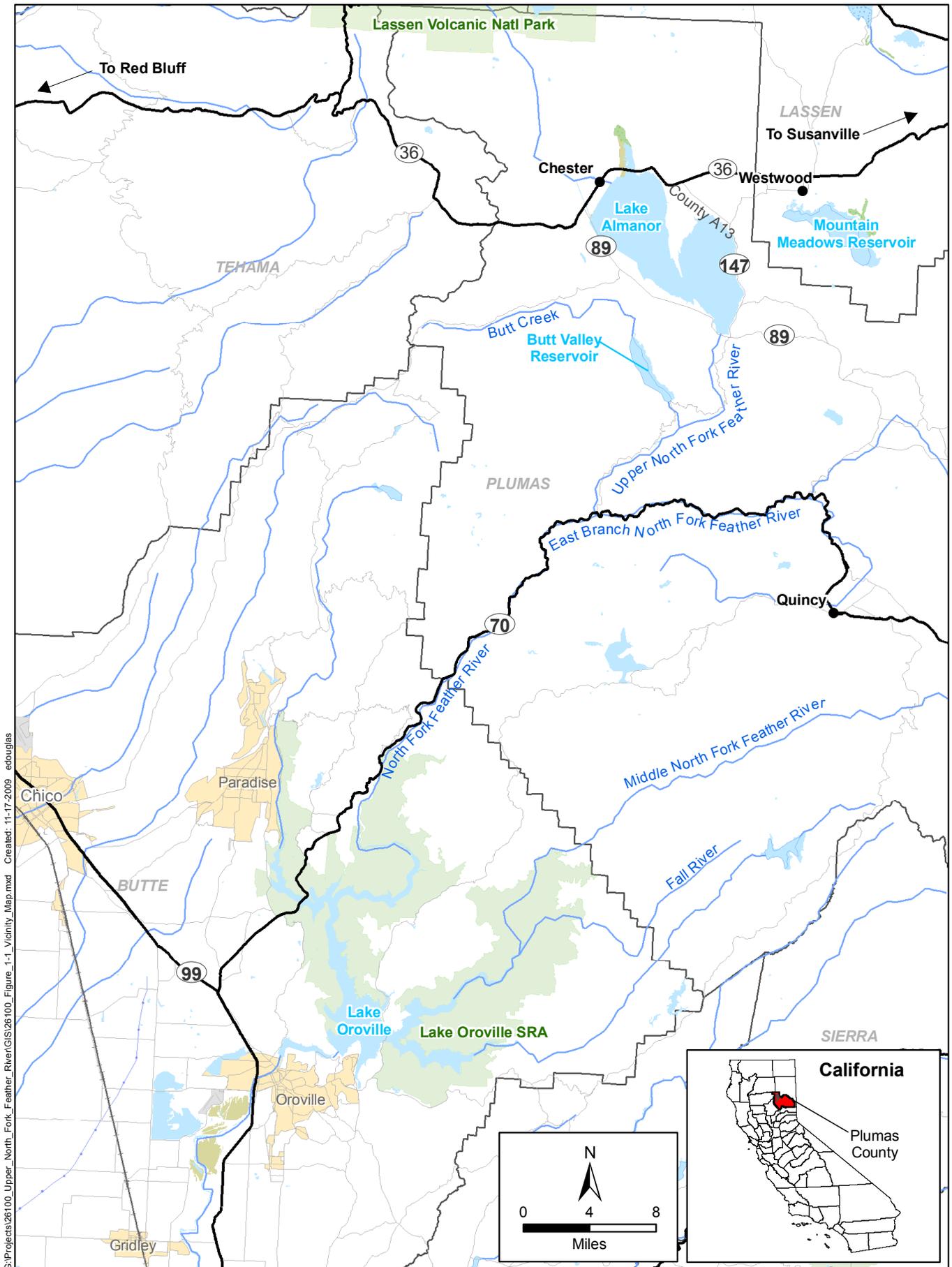
Chapters:

- **Executive Summary:** Provides an overview of the UNFFR Project and the alternatives evaluated in the EIR, a summary of the environmental impacts and mitigation measures, and a discussion of areas of controversy and issues to be addressed.
- **Chapter 1, Introduction:** Provides an overview of the EIR and CEQA process and identifies agency responsibilities.
- **Chapter 2, State Water Board's Regulatory Responsibilities:** Provides an overview of the State Water Board's responsibilities as they relate to issuance of the water quality certification and includes an overview of the Basin Plan.
- **Chapter 3, PG&E's Upper North Fork Feather River Project:** Provides background information on the UNFFR Project as it was defined in PG&E's application to FERC and as it is currently being operated. Provides details on the 2004 Settlement Agreement.
- **Chapter 4, Project Alternatives:** Provides a description of the screening process used by the State Water Board to identify and select the water quality measures evaluated in this EIR and of other water quality measures previously evaluated and eliminated from further consideration.
- **Chapter 5, Regulatory Framework:** Provides an overview of the laws, regulations, and policies that the UNFFR Project may be required to comply with during the term of the new FERC license.
- **Chapter 6, Environmental Setting and Environmental Impacts:** Contains descriptions of the environmental setting for each resource topic and discussions of the environmental impacts of the Proposed UNFFR Project and Alternatives 1 and 2. Mitigation measures are identified for elements of the UNFFR Project and the alternatives that may have significant impacts.
- **Chapter 7, Cumulative Impacts and Other CEQA Considerations:** Provides a discussion of other past, present, and reasonably foreseeable future projects in the vicinity of the UNFFR Project and anticipated cumulative impacts of the project.
- **Chapter 8, Alternatives Development:** Discusses the development of the alternatives and presents a summary of the analysis of the No Project Alternative.
- **Chapter 9, References:** Contains a list of references used in this EIR.

- **Chapter 10, Glossary:** Contains definitions of terms used in this EIR.
- **Chapter 11, List of Preparers:** Provides a list of persons responsible for preparation of this EIR.

Appendices:

- **Appendix A:** 2004 Settlement Agreement
- **Appendix B:** Scoping and Public Involvement
- **Appendix C:** Recreation Improvements
- **Appendix D:** Level 1 and Level 2 Report: Development and Screening of Potentially Effective and Feasible Alternatives to Achieve the Basin Plan Objective for Water Temperature and Protect Cold Freshwater Habitat Beneficial Use Along the North Fork Feather River
- **Appendix E:** Level 3 Report: Analysis of Temperature Control Alternatives Advanced from Level 2 Designed to Meet Water Quality Requirements and Protect Cold Freshwater Habitat Along the North Fork Feather River
- **Appendix E1:** Summary of Supplemental Modeling Results to Support the UNFFR Project EIR
- **Appendix F:** Evaluation of the Biological Performance of Potential Water Quality Measures to Improve Compliance with Temperature Objectives of the Water Quality Control Plan for the Sacramento and San Joaquin River Basins
- **Appendix G:** Terrestrial Biology Lists
- **Appendix H:** PG&E Proposed Supplemental Construction Mitigation Measures — March 3, 2014
- **Appendix I:** Visual Assessment Units and Photographs
- **Appendix J:** Greenhouse Gas Emission Changes from Proposed Operational Measures



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Figure 1-1
Vicinity Map