	Clearinghouse, Governor's Office of Planning and	d Research	
(Agen <u>P.O.</u>]	ncy) Box 3044		
(Addr	ress)		
Sacra	amento, CA 95812-3044		
Subject:	Notice of Preparation of a Notice of CEC		• •
Lead Agen	ncy:	Consulting Fig	rm (If applicable):
Agency Na	ame State Water Resources Control Board	Firm Name	North State Resources, Inc.
Street Add	ress P.O. Box 2000 or 1001 I Street, 14 th Floor	Street Address	5000 Bechelli Lane, Suite 203
City/State/Z	Zip Sacramento, CA 95812-2000	City/State/Zip	Redding, CA 96002
-	Sharon Stohrer	_	Paul Uncapher
Project Tit	tle: Environmental Impact Report for Upper Water Quality Certification	North Fork Feathe	er River Hydroelectric Project
Project Lo	ocation: Chester		Plumas
Project De	City (nearest) escription (Brief)		County
The attache	ed Environmental Checklist contains the project de	escription and loca	tion and describes the potential environmental
	time limits mandated by State law, your response 30 days after receipt of the notice.	should be sent at t	he earliest possible date but must be received no
	d your written response to Sharon Stohrer waterboards.ca.gov. We will need the name for a		ress shown above or at your agency.
S	Scoping Workshop: A public workshop will be h and to receive comments to t		
v	When: September 27, 2005 Where: Chester Memorial Hall, corner of Gay an 3:00 p.m. to 7:00 p.m.	nd Stone Streets, C	
Doto	Siam atoms		T:tle
Date	Signature		
			Telephone

Reference: California Code of Regulations, Title 14, (CEQA Guidelines) Sections 15082(a), 15103, 15375.

UPPER NORTH FORK FEATHER RIVER HYDROELECTRIC PROJECT

WATER QUALITY CERTIFICATION

CEQA ENVIRONMENTAL CHECKLIST

1. **Project title:** Upper North Fork Feather River Hydroelectric

Project Water Quality Certification

2. Lead agency name and address: State Water Resources Control Board

1001 I Street, 14th Floor Sacramento, CA 95814

3. Contact person and phone

number:

Sharon Stohrer (916) 341-5397

4. Project location: Plumas County, California

Plumas and Lassen National Forests

5. Project sponsor's name and

address:

Pacific Gas and Electric Company

245 Market Street

San Francisco, CA 94105

6. General plan designation:

The Plumas County General Plan (updated 2004) has identified the following General Plan Designations: Residential, Commercial, Industrial, and Resource Production.

7. Zoning:

The Plumas County General Plan (updated 2004) has identified the following zoning categories for each designation:

Residential: Industrial:

Multiple Family Prime Industrial
Single Family Limited Industrial

Suburban

Secondary Suburban

Rural

Rural Agriculture Buffer

Rural Prime Expansion

Resource Production:

Agricultural Preserve

Important Agriculture

Important Timber

Limited (20 acres per dwelling)

Timberland Production Zone (TPZ)

Prime Mining Recreation

Commercial: Recreation
Periphery Commercial Open Space

Convenience Commercial Lake

8. Description of project:

The project description begins on page 3.

9. Surrounding land uses and setting:

See Section 7 for land uses.

The general setting for the UNFFR Project can be characterized as rural forested landscapes influenced by water-based recreational activities, primarily on Lake Almanor, Butt Valley Reservoir, and the North Fork Feather River. Lands within and adjacent to the UNFFR Project area are also used in the forest products industry and offer a wide range of habitats for a diverse assemblage of wildlife species.

10. Other public agencies whose approval may be required (e.g., permits, financing approval, or participation agreement):

USDA Forest Service

U.S. Fish and Wildlife Service

U.S. Department of Commerce – NOAA Fisheries

U.S. Army Corp of Engineers - Sacramento District

California Resources Agency - California Department of Fish and Game

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

\boxtimes	Aesthetics	☐ Agriculture Resources	Air Quality
\boxtimes	Biological Resources		☐ Geology/Soils
\boxtimes	Hazards & Hazardous Materials		Land Use/Planning
	Mineral Resources	Noise Noise	☐ Population/Housing
\boxtimes	Public Services	□ Recreation	☐ Transportation/Traffic
\boxtimes	Utilities/Service Systems		ce

UNFFR Project Description

Introduction

Pursuant to the Federal Power Act (FPA) and Federal Energy Regulatory Commission (FERC) regulations, Pacific Gas and Electric Company (PG&E) submitted an application for a new license for its Upper North Fork Feather River (UNFFR) Hydroelectric Project (FERC No. 2105) to FERC on October 23, 2002 (Pacific Gas and Electric Company 2002). PG&E's license to operate the UNFFR Project expired in October 2004, and FERC has issued a one-year extension that expires in October 2005. It is anticipated that FERC will continue to issue annual license extensions until the relicensing process has been completed.

Section 401 of the Clean Water Act (CWA) (33 U.S.C. § 1341) requires every applicant for a federal license or permit that may result in a discharge into navigable waters to provide the federal licensing or permitting agency with certification that the project will be in compliance with specified provisions of the CWA. Section 401 provides that conditions of certification shall become conditions of any federal license or permit for the project. The State Water Resources Control Board (State Water Board) is the agency in California that is responsible for water quality certification of any potential discharge from an activity that requires a FERC license or amendment. (Wat. Code, § 13160; Cal. Code Regs., tit. 23, § 3855, subd. (b).)

The issuance of a Section 401 certification is a discretionary action subject to California Environmental Quality Act (CEQA) compliance. Because of the level of controversy surrounding the UNFFR Project and the likelihood of significant impacts, the State Water Board has decided to prepare an environmental impact report (EIR). The State Water Board will be the lead agency for the CEQA process.

Under the provisions of the CWA, a Section 401 certification for the UNFFR Project may be issued if the State Water Board determines that the UNFFR Project will comply with specified provisions of the CWA, including water quality standards and implementation plans. The State Water Board will determine whether the UNFFR Project adequately protects the beneficial uses and meets the water quality objectives for water bodies in the project area, as defined in the Water Quality Control Plan (Basin Plan) for the California Regional Water Quality Control Board, Central Valley Region (Regional Water Board) (California Regional Water Quality Control Board, Central Valley Region 2004).

Water quality conditions resulting from controllable factors must be protective of the beneficial uses designated in the Basin Plan. The Basin Plan designates beneficial uses for two specific water bodies associated with the UNFFR Project, Lake Almanor and North Fork Feather River. Additional information concerning the Basin Plan and designated beneficial uses for these two water bodies and their tributaries is available at the following web site: http://www.waterboards.ca.gov/centralvalley/.

Background

The UNFFR Project impounds the North Fork Feather River at Canyon dam, creating Lake Almanor. Butt Creek is impounded by Butt Valley dam, resulting in Butt Valley Reservoir. The dominant features of the UNFFR Project are located on public lands managed by the USDA Forest Service (USFS) and watershed lands managed by PG&E. These lands are located in Plumas County in the general vicinity of Chester, California (Figure 1) (all figures are at the end

of this document). In general, the project boundary established by FERC coincides with the water bodies identified as Lake Almanor, Butt Valley Reservoir, and the North Fork Feather River between Canyon dam and the Belden powerhouse. As currently licensed, the UNFFR Project is capable of generating 362.3 megawatts (MW) of electricity.

FERC prepared a draft environmental impact statement (DEIS) for the relicensing of the UNFFR Project (Federal Energy Regulatory Commission 2004) pursuant to the National Environmental Policy Act (NEPA). The DEIS was circulated for public review in September 2004. The document evaluates the effects of continued project operations in accordance with environmental measures presented in a partial Settlement Agreement (Federal Energy Regulatory Commission 2004) signed by some stakeholders in the Project 2105 Collaborative Licensing Group (Licensing Group). The DEIS also evaluates a FERC "staff's alternative" that modifies the set of recommended settlement agreement measures and adds environmental measures determined necessary by FERC. The DEIS includes a no-action alternative. In developing the EIR, the lead agency will use information and analyses provided in the DEIS, as determined adequate and appropriate.

Although State Water Board staff provided guidance to the collaborative Licensing Group, the State Water Board was not a party to the Settlement Agreement. The Licensing Group was unable to achieve consensus concerning several water quality issues for which the State Water Board is responsible. After reviewing the DEIS, the State Water Board determined that the document is not adequate to support the Section 401 certification process because it does not address all resource issues and does not fully satisfy the requirements of CEQA. The State Water Board has determined that an EIR is required to comply with CEQA.

Proposed Project

For purposes of CEQA, the proposed project can be defined as the operation of the UNFFR Project as proposed in PG&E's Application for License of the UNFFR Project (October 2002) plus the protection, mitigation, and enhancement measures for the UNFFR Project as described in the partial Settlement Agreement (April 2004). The following section provides a brief overview of the UNFFR Project features, the operational configuration, and the changes to the UNFFR Project proposed in the partial Settlement Agreement. Additional information on the UNFFR Project can be accessed at the web sites below:

- http://www.ferc.gov
- http://project2105.org/

The physical features of the UNFFR Project include three dams that impound water from the North Fork Feather River and Butt Creek, five powerhouses, and three stream bypass reaches. Figures 2a and 2b show the dams, impoundments, and bypass reaches associated with the UNFFR Project. Generation and transmission facilities are also shown on these figures, as well as the recreational facilities located near the reservoirs and bypass reaches. The UNFFR Project also includes numerous roads and administrative facilities to support operation and maintenance activities.

UNFFR Project reservoirs include Lake Almanor (1,142,251 acre-feet), Butt Valley Reservoir (49,891 acre-feet), and Belden Forebay (2,477 acre-feet). Generation capacity is provided by Butt Valley powerhouse (41 MW), Caribou No. 1 powerhouse (75 MW), Caribou No. 2 powerhouse (120 MW), Oak Flat powerhouse (1.3 MW), and Belden powerhouse (125 MW).

Features of the UNFFR Project are operated in an integrated manner. Operation of the UNFFR Project is coordinated with other PG&E facilities in the North Fork Feather River watershed, including the upstream Hamilton Branch Project (unlicensed) and the downstream Rock Creek—Cresta (FERC No. 1962), Bucks Creek (FERC No. 619), and Poe (FERC No. 2107) projects. Downstream of these hydroelectric projects, the waters of the North Fork Feather River flow into Lake Oroville and the FERC No. 2100 project operated by the California Department of Water Resources, then to the Feather River, and ultimately into the Sacramento River system.

Under existing conditions, water levels in Lake Almanor, Butt Valley Reservoir, and Belden Forebay are controlled by PG&E's streamflow requirements and operational decisions made for power generation. Lake Almanor is managed to ensure that the lake level does not exceed the full-pool elevation of 4,494 feet mean sea level (msl) and to avoid spill at Canyon dam. Typically, outflows from Canyon dam and the Prattville intake are controlled in the spring to allow the lake to refill with snowmelt, though in drier years the lake may not completely fill. During the summer, the lake is managed for power production and recreational opportunities. The Canyon dam intake tower is designed to selectively draw from either the lower water column or higher in the lake strata, allowing some control over the temperature of flow releases. The Canyon dam outlet structure has a maximum capacity of 2,100 cubic feet per second (cfs), but is generally operated to release minimum instream flows to the Seneca bypass reach (Seneca reach) of the North Fork Feather River. Although current minimum flow releases are established at 35 cfs, the Settlement Agreement provides for a comprehensive revised flow release schedule that will be evaluated in the EIR.

Butt Valley Reservoir is operated to meet power system needs, while also providing recreational opportunities, including fishing, swimming, boating, and camping. Flow enters the reservoir from the upper Butt Valley Creek and from Lake Almanor through the Prattville diversion tunnel to the Butt Valley powerhouse. Butt Valley dam has no outlet structure for releases to the bypass reach of lower Butt Creek. Currently, there is no minimum instream flow requirement for Butt Creek, and all surface flow entering the reservoir is diverted through the Caribou No. 1 and No. 2 intakes. A 1997 seismic retrofit of Butt Valley dam altered the natural drainage course of Benner Creek, a tributary to Butt Creek located immediately below Butt Valley dam, converting it from a perennial to an intermittent stream. Lower Butt Creek receives limited leakage from the bottom of the dam, and operation of the Caribou No. 1 and No. 2 powerhouses prevents spill at the dam.

Belden Forebay functions as a regulating facility, buffering the effects of the Caribou powerhouse discharges prior to intake of flows through the Belden tunnel or through the Oak Flat powerhouse to the Belden bypass reach (Belden reach). Because it is a regulating impoundment, the operational parameters provide for daily surface-level fluctuations of up to 10 feet. These fluctuations may be a limiting factor for recreational opportunities at Belden Forebay. The Oak Flat powerhouse, an integral part of Belden dam, has a maximum capacity of 140 cfs and currently serves as the release structure for minimum flows to the bypass reach. Minimum flow requirements for the Belden reach of the North Fork Feather River are set at 60 cfs, with flow increases to 140 cfs during the spring and summer fishing season. Data indicates that summer water temperatures in the Belden reach often exceed thresholds protective of cold freshwater habitat necessary to support a healthy, reproducing population of rainbow trout. The partial Settlement Agreement provides for a comprehensive revised flow-release schedule, but does not include measures that fully address seasonal water temperature concerns.

In addition to power generation, the UNFFR Project facilities provide a range of recreational opportunities, including contact and non-contact water-based recreation. Lake Almanor and Butt Valley Reservoir offer a variety of recreational facilities, including campgrounds, marinas, and day-use areas. The partial Settlement Agreement includes protection, mitigation, and

enhancement measures for recreation facilities recommended for inclusion in a new license for the UNFFR Project. Additional information on recreational facilities associated with the UNFFR Project is available at the web sites listed in the preceding section.

Potential Alternatives

CEQA requires that an EIR incorporate a reasonable range of alternatives. The *CEQA Guidelines* suggest that alternatives analyzed in an EIR should be limited to those that would avoid or substantially lessen any of the significant impacts of the project and that the EIR need examine in detail only the alternatives that the lead agency determines could feasibly attain most of the basic objectives of the project.

In addition to alternatives to the proposed project, CEQA requires consideration of the incidental environmental impacts of any potential conditions of project approval. In this case, measures in addition to those specified in PG&E's application and the Settlement Agreement may be necessary to ensure compliance with Basin Plan requirements. Through impoundments and changes in the magnitude and seasonal timing of flows, the UNFFR Project has affected water quality in the North Fork Feather River downstream of Canyon dam. Effects of the UNFFR Project on downstream water temperatures have been recognized since 1980, when PG&E, along with the California Department of Fish and Game, began studies of the river in connection with the relicensing of the Rock Creek-Cresta Project (FERC No. 1962). In that relicensing effort, a settlement agreement (2000) stipulated that additional studies must be conducted to determine the feasibility of modifying UNFFR Project facilities, operations, or other measures to achieve desired water temperatures in the North Fork Feather River. Conditions of the Rock Creek-Cresta Settlement Agreement and FERC License No. 1962 establish goals for restoring water temperatures of 20° Celsius or lower through the Rock Creek and Cresta reaches of the North Fork Feather River to achieve consistency with Basin Plan requirements to protect cold freshwater habitat as a designated beneficial use. The partial Settlement Agreement for the UNFFR Project does not resolve the issue of whether additional measures may be necessary to achieve temperature objectives.

A wide range of alternative measures have been suggested to the State Water Board that may address the water quality impacts associated with the UNFFR Project features and operation. Through the CEQA scoping process, the State Water Board seeks additional data and input on project alternatives from responsible agencies, trustee agencies, Tribes, and the interested public. Some of the alternative measures that have been discussed to date include:

- Installation of a temperature control device for selective withdrawal of cold water through the Prattville intake structure;
- Reoperation of the Caribou No. 2 powerhouse to deliver reduced flows to the North Fork Feather River in coordination with an equivalent increase in flows from the lowlevel outlet at Canyon dam;
- Construction of mechanical water chillers at reach-specific locations in the North Fork Feather River watershed;
- Riparian vegetation enhancement measures on the North Fork Feather River;
- Reoperation of Belden dam to provide increased flow to the Belden reach; and
- Off-site compensatory mitigation for cold freshwater habitat "North Fork Feather River Watershed Restoration Alternative" (Alternative "D" as presented by the Licensing Group, if other on-site mitigation options are not feasible or do not fully mitigate impacts of the UNFFR Project).

The State Water Board has not yet formulated project alternatives or decided whether to include any of the alternative measures listed above in the EIR. The State Water Board is in the process of conducting a preliminary evaluation of the feasibility of these alternative measures and developing CEQA alternatives.

The State Water Board will consider all comments received during the CEQA scoping process concerning the alternatives and alternative measures that should be considered in the EIR. In conducting the preliminary evaluation of the feasibility of alternatives, the State Water Board will consider all available and relevant information. Appraisals of the various proposed alternatives will include the application of feasibility criteria, including: (1) the ability of the measure to provide temperature moderating benefits to the affected North Fork Feather River reaches; (2) the cost of implementation versus predicted benefits; and (3) the potential for incidental environmental impacts that may result from implementation of the measure. As the CEQA process proceeds, measures may be subject to varying degrees of evaluation and analysis to ensure that a reasonable range of alternatives is presented in the EIR. In addition to fully evaluating a reasonable range of alternatives, the EIR will identify alternatives that were considered by the State Water Board but were determined to be infeasible during the scoping process. To ensure full disclosure, the EIR, supported by the administrative record, will explain the rationale for this determination.

EVALUATION OF ENVIRONMENTAL IMPACTS:

- 1) An explanation for each of the answers shown in the checklist follows each section of the checklist.
- 2) All answers take into account the whole proposed action, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction (short-term: 1–5 years) as well as operational (long-term: 30-50 years) impacts.
- 3) If a particular physical impact may occur, the checklist indicates whether the impact is potentially significant, potentially significant unless mitigation is incorporated, or less than significant; the checklist also indicates whether no impact would occur. Designation of a "potentially significant impact" is appropriate if there is substantial evidence that an impact may be significant and that mitigation measures would not reduce the impact to a less-than-significant level.
- 4) "Potentially significant unless mitigation [is] incorporated" applies if implementation of a mitigation measure would reduce effects to a less-than-significant level.

			Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
1	AES	STHETICS Would the project:				
	a)	Have a substantial adverse effect on a scenic vista?		\boxtimes		
	b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?		\boxtimes		
	c)	Substantially degrade the existing visual character or quality of the site and its surroundings?		\boxtimes		
	d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?		\boxtimes		

a) The scenery in the project area has a high and growing value. The natural beauty of the Sierra/Cascade provinces is widely known, and residents of and visitors to the project area regularly experience scenic views and dramatic landscape features. Highly scenic views include those of 10,457-foot-high Mt. Lassen; Dyer Mountain, the most noticeable mountain feature because of its proximity to Lake Almanor; and the broad meadow landscapes found north of State Route 36 (SR 36) and on the extensive lowlands (Pacific Gas and Electric Company 2002). Plumas County's General Plan provides scenic protection for the Feather River Highway corridor (SR 70), the Lake Almanor Scenic Area, and the Johnson Fields—North Causeway Scenic Area.

Some of the existing facilities associated with the UNFFR Project are clearly visible and contrast markedly with the region's water bodies and the natural, forested environment, particularly near Lake Almanor, Butt Valley Reservoir, and the Belden and Seneca reaches of the North Fork Feather River. Project components identified in PG&E's license application and the construction of new operational and recreation facilities and enhancements to existing facilities identified in the Settlement Agreement could alter the visual character in these portions of the project area.

Project-related impacts on scenic vistas, including impacts resulting from the construction, operation, and maintenance of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.

b) SR 89 has been designated a California State Scenic Highway by the California State Legislature, although the portion of SR 89 that crosses Canyon dam is not part of the state scenic highway system. In addition, portions of SR 89, SR147, and SR36 that circle Lake Almanor are part of the Lassen Scenic Byway, which is part of the larger Volcanic Legacy Scenic Byway designated by the Federal Highway Administration's Scenic Byways Program on June 13, 2002. The Feather River Scenic Byway follows SR 70 and was designated for inclusion in the National Scenic Byways system in 1990 (Pacific Gas and Electric Company 2002). To protect scenic resources, Plumas County zoning regulations guide the types and extent of development within a 100-foot scenic corridor along SR 70 and SR 147 and portions of SR 89 and SR 36; any elements of the proposed project that lie within the scenic corridor would be analyzed for compliance with these regulations.

Construction and operation of project components, particularly the construction of new facilities and enhancement of existing facilities, could alter the visual character in these portions of the project area.

Project-related impacts on scenic resources along a state scenic highway, including impacts resulting from the construction, operation, and maintenance of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.

- c) The UNFFR Project lies in the generally forested environment that surrounds the North Fork Feather River, including Lake Almanor and Butt Valley Reservoir. Project components identified in PG&E's license application and the construction of new facilities and enhancement of existing facilities identified in the Settlement Agreement could degrade the existing visual character of the project area.
 - PG&E has proposed to plant evergreen trees to reduce the visual dominance of some structures and establish native plants between roads and spoil sites in some areas. Water in Lake Almanor and Butt Valley Reservoir would be maintained at levels that would retain their visual quality.
 - Project-related impacts on the visual character and quality of the project area, including impacts resulting from the construction, operation, and maintenance of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.
- d) Construction of new facilities and enhancement of existing facilities identified in PG&E's license application and/or Settlement Agreement could result in increased lighting of project elements, such as recreation areas, appurtenant facilities, and gaging stations. If construction occurred at night, construction lighting would also temporarily increase the amount of light in portions of the project area.
 - Project-related impacts on day or nighttime views in the project area, including impacts resulting from the construction, operation, and maintenance of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.

			Impact	Unless Mitigation Incorporated	Impact	,
2	whe envi Cali Asso Dep use	ther impacts to agricultural resources are significant ronmental effects, lead agencies may refer to the fornia Agricultural Land Evaluation and Site essment Model (1997) prepared by the California artment of Conservation as an optional model to in assessing impacts on agriculture and farmland.				
	a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				\boxtimes
	b)	Conflict with existing zoning for agricultural use or a Williamson Act contract?				
	c)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?			\boxtimes	

Potentially

Significant

Potentially

Significant

Less than

Significant

No

Impact

Narrative Responses

- a) The lands that would be influenced or affected by the proposed project are not mapped as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance by the Farmland Mapping and Monitoring Program (Department of Conservation 2002).
- b) Areas zoned for agriculture in the project area include important timber, timberland production zones, and important agriculture (Plumas County 2005). The proposed project would not conflict with any existing areas currently zoned or planned for agricultural use in the project area. In addition, none of the project area is under a Williamson Act contract.
- c) There are few agricultural uses in the area of the UNFFR Project. Agricultural uses are found primarily outside the project boundary on open space lands north of SR 36 and in the area surrounding Cool Springs Campground, adjacent to Butt Valley Reservoir; these lands have been used for cattle grazing on a recurring basis (Pacific Gas and Electric Company 2002). Implementation of the proposed project would not result in the conversion of existing farmland to non-agricultural uses. The construction of new facilities and enhancements to existing facilities would not convert farmland to non-agricultural uses. Those portions of the project area currently being used for grazing would remain available for that purpose.

			Significant Impact	Significant Unless Mitigation Incorporated	Significant Impact	Impact
3	crite mai relie	QUALITY Where available, the significance eria established by the applicable air quality nagement or air pollution control district may be ed upon to make the following determinations. uld the project:				
	a)	Conflict with or obstruct implementation of the applicable air quality plan?				
	b)	Violate any air quality standard or contribute to an existing or projected air quality violation?		\boxtimes		
	c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?				
	d)	Expose sensitive receptors to substantial pollutant concentrations?		\boxtimes		
	e)	Create objectionable odors affecting a substantial number of people?		\boxtimes		

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Narrative Responses

- a) There are no air quality or attainment plans for Lassen or Plumas counties (Ozanich, pers. comm.; K. Smith, pers. comm.).
- b) PG&E periodically obtains permits from the Northern Sierra Air Quality Management District to burn debris from canals, levees, ditches, and reservoirs. Internal combustion engines at PG&E's UNFFR Project facilities are exempt from permitting requirements, either because they are operated infrequently or because they generate only low amounts of emissions. PG&E's portable equipment is exempt from registration by the California Air Resources Board (CARB) because it does not meet the horsepower thresholds required for registration (Pacific Gas and Electric Company 2002).

Construction of new facilities, enhancements to existing facilities, and other proposed measures included in PG&E's license application and/or the Settlement Agreement (e.g., removal of the Gansner Bar fish barrier) would include ground-disturbing activities that could temporarily increase levels of PM10. Vehicular traffic to and from the work site, operation of construction equipment, and burning of debris during construction of these facilities would result in increases in emissions of PM10 or other pollutants above the existing background levels. The operation of new and enhanced recreational facilities could generate additional vehicular traffic to and from the project area, which would result in long-term increases in vehicular exhaust emissions in the project area. Increased recreational use could also result in increases in smoke and PM10 emissions.

Project-related impacts on local air quality, including impacts resulting from the construction, operation, and maintenance of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.

c) The UNFFR Project is located in an area designated non-attainment for the criteria pollutant PM10 under the state standard and is in attainment or is unclassified for all other state and federal air quality standards (California Air Resources Board 2005). Construction of new facilities and enhancements to existing facilities and other proposed measures included in PG&E's license application and/or Settlement Agreement (e.g., removal of the Gansner Bar fish barrier) would include ground-disturbing activities that could temporarily contribute to higher PM10 levels in the project area.

Project-related impacts on local air quality, including impacts resulting from the construction, operation, and maintenance of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.

- d) Sensitive receptors in the project area consist primarily of permanent and seasonal residents and transitory recreational users. Hydroelectric facilities generally do not produce substantial air pollutant concentrations; however, construction activities associated with new facilities and enhancements to existing facilities could expose sensitive receptors to brief increases in local concentrations of PM10 and other pollutants.
 - Project-related impacts on local air quality, including impacts resulting from the construction, operation, and maintenance of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.
- e) The proposed project has the potential to create objectionable odors. Hydrogen sulfide odors emanating seasonally from Canyon dam releases have been reported in the past, and measures to modify releases, as described in the Settlement Agreement, have the potential to continue to generate odors in the general vicinity of Canyon dam, depending on the water year type.
 - Project-related impacts involving objectionable odors, including impacts resulting from the construction, operation, and maintenance of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.

			Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
4	BIC	DLOGICAL RESOURCES Would the project:				
	a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				
	b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?				
	c)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		\boxtimes		
	d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				
	e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			\boxtimes	
	f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				\boxtimes

a) PG&E conducted surveys for special-status plants in spring and summer 2000. No plant species listed as threatened or endangered under the federal Endangered Species Act or the California Endangered Species Act or candidates for state or federal listing were documented in the project area. Occurrences of 12 rare plant species were documented and mapped. Most of these rare plants are located in upland areas and would not be affected by water-related project operations. Fluctuating water levels may have an adverse impact on a few rare plant populations located closer to water bodies, and populations of noxious weeds may affect other rare plant species.

PG&E conducted extensive wildlife surveys in the project area in 2002. There are a large number of wildlife species in the project vicinity that carry some form of protective designation, including species listed as threatened or endangered under the federal Endangered Species Act and the California Endangered Species Act as well as California Species of Special Concern and Forest Service Sensitive species. Through the FERC relicensing process, PG&E, in consultation with the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Game (DFG),

identified 18 special-status wildlife species that may occur in or near the project area. Three of these species—valley elderberry longhorn beetle (VELB) (*Desmocerus californicus dimorphus*), bald eagle (*Haliaeetus leucocephalus*), and California redlegged frog (*Rana aurora draytonii*)—are federally listed as threatened. Two of these species—American peregrine falcon (*Falco peregrinus anatum*) and willow flycatcher (*Empidonax trailii*)—are state listed as endangered, and three of the species—greater sandhill crane (*Grus canadensis tabida*), California wolverine (*Gulo gulo luteus*), and Sierra Nevada red fox (*Vulpes vulpes necator*)—are state listed as threatened.

Other special-status wildlife species with the potential to occur in the project area include the California spotted owl (*Strix occidentalis occidentalis*), northern goshawk (*Accipiter gentilis*), Pacific fisher (*Martes pennanti pacifica*), pine marten (*Martes americanus*), pallid bat (*Antrozous pallidus*), Townsend's big-eared bat (*Plecotus townsendii pallescens*), western red-bat (*Lasiurus blossivillii*), Cascades frog (*Rana cascadae*), foothill yellow-legged frog (*Rana boylii*), mountain yellow-legged frog (*Rana muscosa*), northern leopard frog (*Rana pipiens*), and western pond turtle (*Clemmys marmorata*).

The project area supports both warmwater and coldwater fisheries, with the warmwater fish concentrated in the reservoirs. Two special-status fish species are present in the project area: hardhead (*Mylopharodon conocephalus*) and Sacramento perch (*Archoplites interruptus*). Hardhead has been documented only in the tailrace of the Belden powerhouse. The instream flow regimes stipulated in the Settlement Agreement are not expected to have an adverse impact on hardhead. Sacramento perch is found in Lake Almanor and Butt Valley Reservoir and is thought to have been introduced to the project area. Alterations to minimum streamflows and pulse flow rates are stipulated in the Settlement Agreement. Habitat for most fish, including the Sacramento perch, as well as macroinvertebrate species is expected to remain the same or improve under the new flow regime. Federal and state resource agencies have defined a goal of attempting to return flow regimes toward a more natural hydrograph, which would benefit coldwater fish, particularly rainbow trout (*Oncorhynchus mykiss*).

Project-related impacts on species identified as a candidate, sensitive, or special-status species, including impacts resulting from the construction, operation, and maintenance of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.

b) Riparian areas are identified in the Sierra Nevada Forest Plan Amendment as important habitats for preservation and restoration because they provide essential habitat for riparian and aquatic species. Native riparian habitat in the project area consists primarily of narrow, discontinuous patches along the North Fork Feather River and its tributaries. In areas of high disturbance, such as around powerhouses and below dams, native riparian species have been replaced by invasive vegetation, generally dominated by Himalayan blackberry (*Rubus discolor*). Increases in flows could result in the establishment of additional riparian vegetation in areas where it is currently lacking as well as the potential for loss of current riparian areas that would be inundated. The loss of riparian vegetation could have an impact on wildlife species that rely on riparian vegetation. Ultimately, increased flows would likely benefit riparian areas as they would better mimic a natural riverine system.

PG&E's license application proposes to implement a vegetation management plan that would include attempting to remove of some of the more invasive plant species from the project area, such as Himalayan blackberry. Removal of invasive species would improve access for recreation and enhance opportunities for the establishment of native riparian vegetation and riverine habitat.

Project-related impacts on riparian habitat or other sensitive natural community, including impacts resulting from the construction, operation, and maintenance of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.

c) Persistent emergent wetlands in the project area are prevalent along the west shore of Lake Almanor, although riparian wetlands are also found along the North Fork Feather River and its tributaries. The project area contains abundant riverine and lacustrine open water wetlands. In addition, freshwater seeps and wet meadow habitats occur locally. All of these wetland features may be considered jurisdictional features by the U.S. Army Corps of Engineers (Corps) under Section 404 of the Clean Water Act. The Lassen National Forest Land and Resource Management Plan (LRMP) calls for protection of wetlands as important wildlife habitat. PG&E's license application proposed a resource management plan that would benefit sensitive biological resources in the project area, including protecting and enhancing wetlands in the causeway area of Lake Almanor. In addition, a wildlife habitat enhancement plan is proposed that would benefit and protect wetland habitats.

Project-related impacts on federally protected wetlands, including impacts resulting from the construction, operation, and maintenance of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.

d) If any structural fish barriers (e.g., the Gansner Bar fish barrier on the Belden reach) or weirs are removed, movement of fish and other aquatic species would be improved. Under the existing flow regime, summer water temperatures in the Belden reach often exceed the conditions recognized to be fully protective of cold water species, including rainbow trout. Proposed reductions in summer flow for dry and critically dry water year types could create thermal barriers to the movement of trout within the Belden reach. The use of wildlife breeding areas should not be impeded if mitigation measures are implemented, including seasonal considerations for construction activities and pre-construction surveys for sensitive wildlife species. Migratory birds use the project area during their fall and spring migration; their use of the resources should not be affected by project implementation.

Project-related impacts on the movement of native resident or migratory fish, established native resident or migratory wildlife corridors, or the use of native wildlife nursery sites, including impacts resulting from the construction, operation, and maintenance of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.

- e) The EIR will evaluate whether the proposed project will be consistent with Plumas County General Plan policies for biological resources.
- f) Based on a review of the license application materials and the Plumas County General Plan, there is no adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan associated with the project area.

			Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
5	CU	LTURAL RESOURCES Would the project:				
	a)	Cause a substantial adverse change in the significance of a historical resource as identified in Section 15064.5?		\boxtimes		
	b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?		\boxtimes		
	c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		\boxtimes		
	d)	Disturb any human remains, including those interred outside of formal cemeteries?	П	\boxtimes		

Professional archaeological fieldwork in and around the area of potential effect (APE) for the UNFFR Project was initiated in the late 1940s. Since that time, 31 professional surveys have been conducted throughout the Lake Almanor, Butt Valley Reservoir, and North Fork Feather River region by university teams and professional archaeological consultants, resulting in coverage of approximately 75 percent of the APE. The 25 percent of the APE that has not been surveyed is considered inaccessible because of the steepness of the terrain (Federal Energy Regulatory Commission 2004).

A total of 57 prehistoric (pre-Euro-American settlement) or aboriginal archaeological sites as well as 50 historic (post-Euro-American settlement) archaeological sites and structures have been documented within the APE. Many of these sites, particularly the prehistoric and aboriginal sites, are located beneath, or in very close proximity to, Lake Almanor, Butt Valley Reservoir, or the North Fork Feather River; these sites are inundated or are affected by project facilities and operations, including wave action, changing water levels, and recreational facilities and activities.

In 2001, PG&E commissioned an ethnographic study to identify traditional cultural properties (TCPs) for the relicensing of the UNFFR Project. The Native American population in the area consists primarily of the Mountain Maidu, represented by the federally recognized Greenville Rancheria and the Susanville Indian Rancheria. The Mountain Maidu, the Honey Lake Maidu, and the Maidu Cultural and Development Group have demonstrated a strong interest in the project because their ancestors historically used or resided in the area (Federal Energy Regulatory Commission 2004).

Based on interviews with members of the Maidu groups who have expressed interest in this project, 14 potential TCPs have been identified within the APE. In addition, past research (Compas 2001) found references to nine ethno-historic Maidu villages in the Lake Almanor area, although the existence of the majority of these villages could not be verified and they are assumed to be inundated beneath Lake Almanor (Federal Energy Regulatory Commission 2004).

a) The California State Historic Preservation Officer (SHPO) has determined that the majority of the historic archaeological sites and standing structures in the APE are not eligible for listing on the National Register of Historic Places (NRHP); however, many of these sites are listed, or may qualify for listing, on the California Register of Historical Resources (CRHR). The proposed project includes the construction of new facilities and the enhancement of some existing facilities. Construction of these new facilities and enhancements could result in impacts on several historic archaeological sites that occur within the APE. Among these is the Stover Ranch site located along the northwest shore of Lake Almanor; this site is not currently listed on the NRHP, but may be eligible for listing. Other examples of eligible or potentially eligible historic archaeological sites that may be affected by new or enhanced recreational facilities include the Caribou Camp Historic District, Caribou Powerhouse No. 1, the Prattville Public Service Employees Association Camp, and Lake Almanor itself. Lake Almanor appears to be eligible for listing on the NRHP because of its association with the development of California's hydroelectric infrastructure and because it was world's largest man-made reservoir at the time it was constructed (Federal Energy Regulatory Commission 2004). An assessment of a specific site's NRHP eligibility will be made in compliance with the Draft Programmatic Agreement (DPA) described in Appendix E4-A of PG&E's license application.

PG&E's license application proposed measures for the future management or treatment of most of the sites and structures currently listed on the CRHR as well as those eligible or potentially eligible for listing on the CRHR. In addition, a Cultural Resources Management Plan (CRMP) will serve as the implementing mechanism for the DPA.

Project-related impacts on historic cultural resources, including impacts resulting from the construction, operation, and maintenance of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.

b) None of the 57 prehistoric archaeological sites has been officially evaluated for the NRHP by FERC or the SHPO; however, many of these sites are listed on the CRHR. Several TCPs and ethnographic villages are also included on the CRHR, although none has been evaluated for listing on the NRHP by FERC or the SHPO. Many of the prehistoric archaeological sites known to occur within the APE are located along the shoreline of Lake Almanor, are partially or completely inundated by the lake, or, depending on water level fluctuations, are sometimes partially inundated and sometimes completely inundated. Increased recreational opportunities around the lake could lead to increased disturbance of some of these sites.

Project-related impacts on prehistoric cultural resources, including impacts resulting from the construction, operation, and maintenance of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.

- c) No known paleontological sites or unique geological features occur within the APE.
- d) Two human burial sites are known to occur within the APE, the Belden Cemetery and a Maidu burial ground; the Maidu site is inundated by Lake Almanor. PG&E does not anticipate that the project would affect the Belden Cemetery, but drawdown of lake levels could expose the Maidu site. In addition, currently unknown human burial sites within the APE could be encountered during construction or enhancement of new or existing facilities.

Project-related impacts involving the disturbance of human remains, including impacts resulting from the construction, operation, and maintenance of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.

			Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
6	GEC	LOGY AND SOILS Would the project:				
	a)	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
	i)	Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				\boxtimes
	ii)	Strong seismic ground shaking?			\boxtimes	
	iii)	Seismic-related ground failure, including liquefaction?			\boxtimes	
	iv)	Landslides?			\boxtimes	
	b)	Result in substantial soil erosion or the loss of topsoil?		\boxtimes		
	c)	Be located on strata or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?				
	d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial risks to life or property?		\boxtimes		
	e)	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?		\boxtimes		

- ai) The most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the project vicinity does not identify any known earthquake faults in the project area. Therefore, the proposed project would not expose people or structures to the potential rupture of a known earthquake fault
- aii) As stated above, the most recent Alquist-Priolo Earthquake Fault Zoning Map for the project vicinity shows that there are no known earthquake faults within the project area. There are, however, known faults near the Plumas-Lassen county border northeast of the project area. Strong seismic shaking, possibly originating at one of the faults/fault complexes northeast of the project area, has the potential to expose people or structures in the project area to adverse effects associated with new or modified recreational facilities. New and expanded facilities included in the proposed project would not increase the risk of seismic activity in the project area but they could increase the number of people exposed to such risk.

Impacts to people or structures from strong seismic ground shaking, including impacts resulting from the construction and operation of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.

aiii) As described above, strong seismic shaking within the project area could possibly originate at one of the faults/fault complexes northeast of the project area. Ground shaking has the potential to trigger mass wasting and/or soil liquefaction where there are in situ bedrock and soils prone to these effects. The UNFFR Project includes a number of existing and proposed facilities that, depending on their geologic and soils context, could expose people or structures to adverse effects from earthquake-triggered mass wasting and/or liquefaction. New and expanded facilities included in the proposed project would not increase the risk of mass wasting and/or liquefaction in the project area but they could increase the number of people exposed to such risk.

Impacts to people or structures from seismic-related ground failure, including impacts resulting from the construction and operation of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.

aiv) The project area is spanned by the geologic contact zone between the Cascades and Sierra Nevada geologic provinces, which is known to contain extensive bodies of weakly consolidated, highly weathered, or otherwise landslide-prone rocks. These rocks are observable throughout much of the project area, particularly in association with the drawdown zones of the reservoirs. PG&E has conducted a geomorphic study of the project area; among other findings, the study showed that sediment sources to the Seneca and Belden reaches of the North Fork Feather River are dominated by chronic shallow landsliding (i.e., rockfalls) and, probably, deep-seated episodic landsliding. The vast majority of these landslides occur in the steep canyon reaches of the North Fork Feather River and deposit material into the river.

New and expanded facilities included in the proposed project would not increase the risk of landslides in the project area but they could increase the number of people exposed to such risk.

Impacts to people or structures from landslides, including impacts resulting from the construction and operation of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.

b) The UNFFR Project includes numerous roads in upland areas that could be subject to substantial soil erosion. To address the potential for upland soil erosion that could affect water quality in nearby water bodies, PG&E and the Plumas National Forest entered into a road maintenance agreement in 1998 to ensure that the two parties regularly reevaluate maintenance needs and prioritize maintenance activities.

Construction of new facilities and enhancements to existing facilities would involve ground-disturbing activities that could require site-specific erosion control techniques. These techniques would be designed in accordance with the requirements of the Clean Water Act (i.e., USFS Best Management Practices [BMPs] and erosion-control guidelines adopted by CalTrans and Plumas County).

Impacts related to soil erosion, including impacts resulting from the construction and operation of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.

The project area also contains reservoirs that are subject to shoreline erosion and loss of topsoil. PG&E conducted studies to map the severity, location, and elevation of shoreline erosion occurring at Lake Almanor. The study found that about 7 percent of the reservoir's shoreline has experienced substantial erosion. The draft Shoreline Management Plan (SMP) contained in PG&E's license application

stipulates annual surveys of erosion along the Lake Almanor shoreline and implementing shoreline erosion control measures, as necessary, to limit erosion that would affect cultural resource sites, threatened or endangered species, PG&E-owned facilities, and other sites of high value, such as developed recreation sites. The draft SMP further committed to provide shoreline erosion control measures at Westwood Beach and Stumpy Beach day-use areas, close and rehabilitate user-created vehicular and off-road vehicle (ORV) access routes along the shoreline, and determine annually the need to update the SMP based on discussions with the USFS, Plumas County, and other interested parties.

There is also a potential for shoreline erosion at Butt Valley Reservoir and Belden Forebay. Any shoreline erosion at these locations would primarily affect PG&E facilities.

Impacts related to shoreline erosion around Lake Almanor, Butt Valley Reservoir, and Belden Forebay, including impacts resulting from the construction, operation, and maintenance of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.

c) The proposed project includes a number of existing and proposed facilities (e.g., roads, recreational facilities, powerhouses, reservoirs) that, depending on the stability of the geology and soils at the specific site, could expose people or structures to adverse effects from on- or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse. Available soils mapping information held by PG&E, the USFS, Plumas County, and other sources will be reviewed to determine if these facilities are or would be located in areas with known or potentially unstable soils. New and expanded facilities included in the proposed project would not increase the risk of unstable geology or soils occurring in the project area but they could increase the number of people exposed to such risk.

Impacts related to on- or off-site landslides, lateral spreading, subsidence, liquefaction, and collapse, including impacts resulting from the construction, operation, and maintenance of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.

- d) The proposed project includes a number of existing and proposed facilities (e.g., roads, recreational facilities, reservoirs) that may be located on expansive soils, as defined by Table 18-1-B of the Uniform Building Code. Available soils mapping information held by PG&E, the USFS, Plumas County, and other sources will be reviewed to determine if the these facilities are or would be located in areas with known or potentially expansive soils. New and expanded facilities included in the proposed project would not increase the risk of expansive soils occurring in the project area but they could increase the number of people exposed to such risk.
 - Impacts related to expansive soils will be evaluated in the EIR, including impacts resulting from the construction, operation, and maintenance of new or enhanced facilities, to determine if the impacts would be significant.
- e) The proposed project includes a number of proposed facilities that may be located on soils incapable of supporting the use of septic tanks or alternative wastewater disposal systems; some of these facilities may be proposed for areas where sewers are not available. Soils mapping information held by PG&E, USFS, Plumas County, and other sources will be reviewed to determine if the facilities are or would be located in areas with known or potentially expansive soils.

Impacts related to soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available will be evaluated in the EIR to determine if the impacts would be significant.

			Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
7		ZARDS AND HAZARDOUS MATERIALS Would project:				
	a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?		\boxtimes		
	b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				
	c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				\boxtimes
	d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				\boxtimes
	e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?			\boxtimes	
	f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				\boxtimes
	g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?		\boxtimes		
	h)	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?		\boxtimes		

a) A variety of hazardous materials would be used in the during the construction and maintenance of new facilities or enhanced existing facilities. Construction, operation and maintenance of these facilities may require the use of lubricating oils, paint, solvents, and fuels for vehicles, watercraft, and aircraft. Operation and maintenance activities may involve materials such as lubricating oils, paint, solvents, lead acid batteries, and fuels for vehicles, watercraft, and aircraft. Project operations may influence concentrations of metals and polychlorinated biphenyls (PCBs) in project area waters. There may be residual hazardous materials in soils and sediments near the Caribou No. 1 penstock and Caribou No. 2 powerhouse as a result of a large rockslide that severely damaged these facilities in 1984 and included the

release of PCB-contaminated mineral oil into the environment. MTBE, an additive to gasoline, could enter project reservoirs as a result of any increases in power boating stemming from new and enhanced recreational facilities. There is also the potential for hydrocarbon deposits to enter the water bodies as a result of increased use of powerboats and marina facilities.

All hazardous materials are and would continue to be used in a manner consistent with federal, state, and local requirements, as well as PG&E's policies, standard operating procedures, and BMPs. Adherence to these guidelines would reduce the potential for exposure of the public or the environment to hazardous materials.

Project-related impacts involving the routine transport, use, or disposal of hazardous materials, including impacts resulting from the construction, operation, and maintenance of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.

b) Most of the hazardous materials used during construction, operation, and maintenance of new and enhanced facilities would be stored at project facilities. In the event of an upset or accident, these materials could leak and thereby release hazardous materials into the environment. Hazardous wastes associated with the construction, operation, and maintenance of new and enhanced facilities would be stored at the Canyon Dam Service Center, located at Canyon dam, or at approved staging areas. All hazardous materials would be used in a manner consistent with federal, state, and local requirements, as well as PG&E's policies, standard operating procedures, and BMPs. Adherence to these guidelines would reduce the potential for exposure of the public or the environment to hazardous materials.

There is also the potential for accidental spills of hazardous materials into water bodies such as Lake Almanor from vehicle, powerboat, fire, flood, and lakeshore-related accidents. Increased numbers of people in the project area as a result of new and enhanced recreational facilities would increase the risk of such accidents.

Project-related impacts involving the release of hazardous materials into the environment as a result of upset and accident conditions, including impacts resulting from the construction, operation, and maintenance of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.

- c) The nearest schools, Almanor High School, Chester Junior/Senior High School, and Chester Elementary School, are located approximately 1 mile from the project boundary. The proposed project would not emit hazardous emissions or handle hazardous materials within one-quarter mile of an existing or proposed school.
- d) Government Code section 65962.5 requires the California Environmental Protection Agency to develop at least annually an updated Hazardous Waste and Substances Sites List (Cortese List). A review of the California Department of Toxic Substances Control website (http://www.dtsc.ca.gov/database/Calsites/Cortese_List.cfm) indicated that there are two hazardous waste sites on Army Depots in Herlong, which is approximately 50 miles east of Lake Almanor. Additionally, a review of the U.S. Environmental Protection Agency's Comprehensive Environmental Response, Compensation and Liability Information System website (http://www.epa.gov/superfund/sites/cursites/index.htm) indicated that four hazardous waste sites are located near Quincy, which is approximately 20 miles south of Canyon dam. There are no known hazardous waste sites located in the project vicinity.
- e) The northern edge of the project site is located directly adjacent to Rogers Field Airport in Chester. The proposed project is not anticipated to affect this airport.
- f) The project site is not located within the vicinity of a private airstrip. However, there are heliports at the Indian Valley Hospital in Greenville and the Plumas District Hospital in Quincy. The proposed project is not anticipated to affect these facilities.

- g) The principal highways in the project area are SR 36, SR 70, SR 89, and SR 147. Major roads in the project area include Old Town Road, Mooney Road, Caribou Road, Prattville-Butte Reservoir Road, Peninsula Road, Big Springs Cut-Off Road, Old Haun Road, Seneca Road, Rocky Point Campground Road, Almanor Drive West Road, and Lake Almanor West Drive.
 - Project-related impacts involving implementation of or interference with an adopted emergency response plan or an emergency evacuation plan, including impacts resulting from the construction, operation, and maintenance of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.
- h) The project area is surrounded by National Forest Service lands and private forested lands that may be prone to wildland fires. Portions of the project area are adjacent to Chester, which is an urbanized community, and to residential developments, particularly those around Lake Almanor. The California Department of Forestry and Fire Protection recorded more than 350 small fires in the Lake Almanor region from 1981 through 2001 (Federal Energy Regulatory Commission 2004). The Sierra Nevada Forest Plan includes standards and guidelines that provide direction for managing "defense and treat zones" to prevent loss of life and property and for interrupting the spread of wildland fire and reducing fire intensity (Foster Wheeler Environmental Corporation 2002). PG&E's license application included preparation and filing of a Fire Prevention and Response Plan.

The levels and types of recreational activities in the project area offer conditions conducive to human-caused wildfires. Construction of new facilities and enhancements to existing facilities would increase the potential for human caused wildfires in the project area.

Project-related impacts involving the exposure of people or structures to the adverse effects of wildland fires, including impacts resulting from the construction, operation, and maintenance of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.

			Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
8		DROLOGY AND WATER QUALITY Would the ject:				
	a)	Violate any water quality standards or waste discharge requirements?		\boxtimes		
	b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				
	c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?		\boxtimes		
	d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off- site?		\boxtimes		
	e)	Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?		\boxtimes		
	f)	Otherwise substantially degrade water quality?		\boxtimes		
	g)	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?			\boxtimes	
	h)	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?		\boxtimes		
	i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?		\boxtimes		
	j)	Inundation by seiche, tsunami, or mudflow?		\boxtimes		

Impacts of the UNFFR Project on water temperature and dissolved oxygen (DO) levels in the project reservoirs and bypass reaches is one of the most technical issues evaluated during the relicensing process. The Settlement Agreement for the downstream Rock Creek—Cresta Project (FERC No. 1962) stipulated additional studies to determine the technical feasibility of modifying UNFFR Project facilities and/or operations in order to achieve water temperatures in the UNFFR Project and Rock Creek—Cresta Project bypass reaches that would be consistent with the Basin Plan objective of protecting cold freshwater habitat as a designated beneficial use. To date, the issues have been extensively scoped and studied, but feasible alternatives for environmental analysis have not yet been completely developed.

The Settlement Agreement for the UNFFR Project stipulates several flow-related measures that have the potential to affect water quality and subsequently affect beneficial uses. These measures include minimum and pulse flows released to the North Fork Feather River based on water year type and ramping rates. The license application and Settlement Agreement acknowledge the unresolved nature of water temperature management within UNFFR Project waters. The Settlement Agreement also stipulates requirements that may have unanticipated water quality effects associated with modification of existing streamflow measurement facilities, including Gages NF-2, NF-9, and NF-70.

a) If the UNFFR Project were licensed according to the minimum instream flow provisions of the Settlement Agreement, it would generally benefit water quality (i.e., water temperature, DO, metals) in all of the bypass reaches and would have an unknown but negligible impact on water quality in the project reservoirs. The only exception would be in the Belden reach during dry and critically dry years, when, according to the Settlement Agreement, the minimum flow releases would be less than under current operations during summer months. At the same time, operating the UNFFR Project in accordance with the Settlement Agreement provisions may not meet all of the water quality standards specified in the Basin Plan, most notably water temperature, DO, and metals.

The Basin Plan provides for narrative and numeric objectives for water temperatures in the North Fork Feather River: The narrative objective states," The natural receiving waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Water Board that such alteration in temperature does not adversely affect beneficial uses." The numeric objective states that "At no time or place shall the temperature be increased more that 5° Fahrenheit (°F) above the natural receiving water temperature." The Rock Creek—Cresta Settlement Agreement set a goal of providing a daily mean water temperature of 20° Celsius (°C) or less along the entire lengths of the Rock Creek and Cresta bypass reaches; it additionally stipulated consideration of facilities modifications and operational measures for the UNFFR Project that would meet the temperature objective for the Rock Creek and Cresta bypass reaches.

PG&E modeling predicts that operation of the UNFFR Project to meet the minimum instream flow provisions identified in the Settlement Agreement (without other facilities modifications and operations measures) could reduce the percentage of time that mean daily water temperatures exceed 20°C in the Belden reach, but that temperatures would still exceed 20°C during parts of the year in the Belden reach and the downstream North Fork Feather River bypass reaches. Meeting the increased minimum instream flow in the Seneca reach via increased releases from the Canyon dam low level outlet could result in increased total metals loading in the Seneca reach, but the concentrations of metals, nutrients, and DO would be changed only negligibly, if at all. During dry and critically dry years in the Belden reach, there would likely be an increase in water temperature.

Project-related impacts on water quality, including impacts resulting from the construction, operation, and maintenance of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.

b) Groundwater affected by the UNFFR Project surrounds Lake Almanor and occurs to a much lesser degree adjacent to Butt Valley Reservoir and Belden Forebay. Alluvial groundwater occurs to an unknown extent within and along the relatively narrow and steep canyon bottomlands through which the bypass reaches flow.

The proposed project includes a new instream flow regime in the project bypass reaches. Under the flow regime proposed in the Settlement Agreement, project operations affecting storage and the seasonal fluctuation of water surface elevations in the project reservoirs would be relatively unchanged. The proposed instream flows that would be released into the bypass reaches would have a minor, perhaps unmeasurable, effect on any adjacent alluvial groundwater because the resulting seasonal changes to the controlling stream water surface elevation would be small (less than 0.5 feet).

The proposed operational changes that would affect seasonal water level fluctuations in Butt Valley Reservoir and Belden Forebay would potentially affect groundwater elevations adjacent to those reservoirs and could therefore affect supplies for any producing groundwater wells in their vicinity to an unknown degree.

In the past, PG&E operated Lake Almanor such that the lake level fluctuated seasonally, typically as much as 5 feet and, under very dry conditions, as much as 10 feet. Most or all of the groundwater supplies used for wells that could be affected by the proposed operational changes would be associated with rock units (alluvial, volcanic) surrounding Lake Almanor. It is unknown what, if any, impact potential lake level fluctuations would have on the groundwater supplies surrounding the lake.

Project-related impacts on ground water supplies, including impacts resulting from the construction, operation, and maintenance of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.

c) The project includes reservoirs that interrupt the natural transport of sediment (i.e., sand, gravel, etc.) and discharge nearly sediment-free water into the project bypass reaches. The project reservoirs also reduce the frequency and magnitude of peak flows occurring in the project bypass reaches by capturing natural runoff and diverting some percentage of the peak flow discharge into penstocks for power generation. The combined effects of reduced sediment supply and reduced peak flows have the potential to change the condition of the channel bed substrate, with associated effects on substrate-dependent riparian and aquatic vegetation and aquatic habitats.

The project bypass reaches are generally relatively steep channels, with channel bed substrates dominated by bedrock, boulders, and cobble-sized materials. Lesser amounts of gravel and sand-sized sediment occur in patches where near-bed flow velocities are relatively small because of local flow obstructions, such as bedrock outcrops or large channel bed elements. In reaches with slopes that are locally more gradual and with channels that are wide enough, there are more extensive depositional units containing a substantial amount of gravel-sized sediment that could be suitable for trout spawning.

In general, current sediment transport theory is not well developed for steep mountain channels with mixed sediment sizes, including large, relatively immobile bed elements. Calculations using typical sediment transport equations indicate that the capacity to transport spawning gravel-sized sediment is much greater than the supply of spawning gravel-sized sediment available to the reach. However, the best-developed theory suggests that the actual dynamics of sediment transport and deposition are such that increases in the supply of spawning gravel-sized sediment not exceeding the theoretical sediment transport capacity increase the frequency and average size of gravel-sized sediment patches on the bed.

The Settlement Agreement includes pulse flow releases to the Seneca and Belden reaches and, if determined necessary, to the Butt Creek reach, that could disturb or partially transport spawning gravel-sized sediment in these reaches to an unknown degree. PG&E has conducted geomorphic studies of the project bypass reaches that characterized the general channel substrate conditions and sediment source mechanisms and identified the density of potentially suitable and actively used trout spawning substrate. Associated incipient motion studies provide rough guidance on the possible effects of pulse flow releases on bed substrate conditions. The overall quality of the spawning gravel and the suitability of the substrate for successful spawning are unknown. In general, however, the availability of suitable spawning substrate has not been identified as a definite limiting factor for the existing fish populations.

Project-related impacts related to erosion and siltation processes, including impacts resulting from the construction, operation, and maintenance of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.

d) In general, the UNFFR Project is operated to avoid uncontrolled spills from the project reservoirs into the bypass reaches. Only during extreme runoff conditions or outages resulting from emergency maintenance activities have there been uncontrolled spills. The Settlement Agreement identifies the requirement to prepare a plan to both minimize reservoir spills and to improve planning, scheduling, and notification to affected agencies and landowners regarding both planned and emergency spills.

Uncontrolled spills can cause flooding of roads managed by various public and private entities (CalTrans, USFS, Plumas County). Flooding has the potential to affect campgrounds, public safety, sensitive aquatic habitats, and seasonal life stages of aquatic wildlife. A recent uncontrolled spill from Belden Forebay into the Belden reach caused local flooding of a project road. PG&E has conducted geomorphic studies and associated incipient motion studies indicating that flows required to initiate natural geomorphic processes (e.g., disturbing stream-side riparian vegetation) would exceed the capacity of the existing low-flow channel and cause local flooding of roadways along the Belden reach, presumably in the same locations that may have been inundated during the recent uncontrolled spill. Changes to reservoir operations and proposed lake level rule curves may increase or decrease the potential for on-site and off-site flooding.

Project-related impacts on on-site and off-site flooding, including impacts resulting from the construction, operation, and maintenance of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.

e) The proposed project would include construction of new facilities and enhancements to existing facilities, some of which would be located near the shores of the project reservoirs and bypass reaches. Some of these new amenities and recreational improvements would require the construction of new or expanded impervious surfaces. In some locations, new or expanded restroom facilities would also be constructed. The proposed improvements would have the potential to create or contribute runoff water that could either exceed the capacity of existing stormwater facilities, if applicable, or constitute a new and substantial source of polluted runoff.

Project-related impacts on stormwater facilities and the quality of stormwater runoff, including impacts resulting from the construction, operation, and maintenance of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.

f) The proposed project would include numerous ground-disturbing and other activities with the potential to affect water quality. Any instability and local erosion at an engineered, contoured landfill along the Belden reach could affect water quality in the reach. This landfill was constructed for the placement of materials from the landslides near the Caribou powerhouses and is known to contain PCB spoils. In addition, increased recreational use of project waters could affect bacteria levels on a seasonal basis.

Project-related impacts on water quality, including impacts resulting from the construction, operation, and maintenance of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.

Plood Insurance Rate Maps (FIRMs) for Plumas County include maps covering the North Fork Feather River corridor and lands surrounding Lake Almanor and Butt Valley Reservoir. Plumas County flood hazard maps include the shoreline areas immediately upslope from Lake Almanor and Butt Valley within the flood hazard zone. The proposed project would include the construction of new facilities and enhancements to existing facilities along the shoreline of the project reservoirs; the locations of these proposed facilities and enhancements may be within the FIRMs and/or the Plumas County flood hazard zone.

Project-related impacts on water quality, including impacts resulting from the construction, operation, and maintenance of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.

h) The proposed project includes new facilities and modifications to existing facilities, many of which would be within or immediately adjacent to the Plumas County flood hazard areas mapped around the perimeter of Lake Almanor and Butt Valley Reservoir.

Project-related impacts from the placement of structures within a 100-year flood hazard area, including impacts resulting from the construction of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.

i) UNFFR Project reservoirs were generally designed to minimize or prevent catastrophic downstream flooding that could result from partial or complete dam failure, failure of reservoir outlet works, penstock failure, etc. In addition, the reservoirs are operated to prevent uncontrolled reservoir spills. However, the reservoirs are potentially subject to catastrophic failure that would result in downstream flooding due to strong seismic shaking or seismically induced landslides into reservoirs, causing flow to overtop the project dams and potentially initiate structural damage leading to complete dam failure. New and expanded facilities included in the proposed project would not increase the risk of flooding in the project area but they could increase the number of people exposed to such risk.

Increases in baseflow, along with whitewater recreational flows identified in the Settlement Agreement, could increase safety risks to recreational users, including those engaging in whitewater activities, swimming, and angling.

Project-related impacts concerning the potential for flooding will be evaluated in the EIR to determine if the impacts would be significant.

j) The North Fork Feather River flows from the volcanic terrain associated with Lassen Volcanic National Park. A recent U.S. Geological Survey report (U.S. Geological Survey 2005) identifies the Chester/Lake Almanor area as within the area that could be subject to lahars/mudflows and secondary flooding associated with volcanic activity. Because the project area is not located in a coastal area, it is not subject to tsunamis. New and expanded facilities included in the proposed project would not increase the risk of lahars/mudflows in the project area but they could increase the number of people exposed to such risk.

Project-related impacts concerning the potential for catastrophic mudflows will be evaluated in the EIR to determine if the impacts would be significant.

			Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
9	LAI	ND USE AND PLANNING Would the project:				
	a)	Physically divide an established community?				\boxtimes
	b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				
	c)	Conflict with any applicable habitat conservation plan or natural communities conservation plan?			\boxtimes	

- a) Much of the project area lands are undeveloped or are developed for residential, commercial, industrial, agricultural, resource extraction, and recreational purposes. The proposed project would not physically divide an established community.
- b) Construction of proposed project facilities (e.g., recreation facilities) identified as conditions of approval for the FERC relicensing may conflict with land use plans, policies, or regulations such as the following:
 - Lassen National Forest Land and Resource Management Plan, as amended
 - Plumas National Forest Land and Resource Management Plan, as amended
 - Plumas County General Plan
 - Bureau of Land Management Resource Management Plans

Construction of new facilities and enhancements to existing facilities will be evaluated to ensure compliance with the goals and objectives of the Plumas County General Plan and the lands managed by the USFS.

PG&E proposes to amend the FERC boundary to include certain lands currently managed by the USFS. It also proposes to assume responsibility for the operation and maintenance of two day-use areas and two boat launches. Each of these activities will be evaluated against the Plumas County General Plan and the USFS LRMPs to ensure consistency with goals and objectives of the pertinent planning documents.

PG&E proposes to implement the Lake Almanor Shoreline Management Plan (SMP) included in the license application within 30 days after license issuance. The SMP integrates existing shoreline management policy and permitting documents into one comprehensive plan. The SMP will be evaluated against the other planning documents that cover shoreline use and management to ensure consistency.

Project-related impacts concerning conflicts with applicable land use plans, policies, and regulations, including impacts resulting from the construction, operation, and maintenance of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts are significant.

c) There are no adopted habitat conservation plans or natural community conservation plans that cover the proposed project area.

			Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impac
10	MIN	IERAL RESOURCES Would the project:				
	a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?			\boxtimes	
	b)	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?			\boxtimes	

- a) There are 203 active mining claims located on federal land situated along the North Fork Feather River within the southern portion of the FERC re-licensing project boundary. These claims include both lode and placer claims. Lode claims include rock-in-place bearing veins or lodes of valuable minerals. Placer claims are mineral deposits not subject to lode claims and generally consist of unconsolidated material, such as sand and gravel, containing free gold or other materials (Federal Energy Regulatory Commission 2004). These mining claims occur in or adjacent to both the Seneca and Belden bypass reaches. Most of these claims are placer claims located in the vicinity of Seneca, although lode claims also occur in this area.
 - It is not anticipated that the proposed project would result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. The Department of Conservation, State Mining and Geology Board does not identify the presence of significant mineral deposits within Plumas County (Department of Conservation 2000).
- b) The Plumas County General Plan identifies prime mining resource production areas within the study area. These are defined as areas where accessibility, surrounding land uses, and the environmental setting will permit extraction of materials (Plumas County 2005).
 - Project-related impacts on the availability of a locally important mineral resource recovery site, including impacts resulting from the construction, operation, and maintenance of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.

			Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
11	NO	ISE Would the project result in:				
	a)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				
	b)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?		\boxtimes		
	c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				
	d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?		\boxtimes		
	e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?		\boxtimes		
	f)	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				\boxtimes

 Activities associated with the proposed project include the construction of new facilities and the enhancement of existing facilities. Noise from construction and from the enhanced and expanded carrying capacity of these facilities could affect sensitive receptors located within the vicinity of the proposed project (e.g., nearby residences and recreation facilities).

Noise impacts from construction would be temporary and would cease at the termination of construction. It is anticipated that PG&E would continue to engage in operation and maintenance activities that could lead to short-term or intermittent noises (e.g., traffic use on roads accessing the project sites). However, it is not anticipated that these activities would generate noise levels in excess of standards established in the Plumas County General Plan.

Project-related noise impacts, including impacts resulting from the construction, operation, and maintenance of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.

b) The construction of new facilities and enhancements to existing facilities could involve the use of heavy equipment that would generate a minimal amount of localized groundborne vibration and groundborne noise. These construction activities could expose sensitive receptors, including nearby residences and temporary and seasonal recreational users to groundborne vibration or groundborne noise. Potential sensitive receptors would be residences and/or existing providers and users of recreational facilities located within the vicinity of the existing and proposed recreational facilities. These facilities include the North Shore Campground and the Stover Ranch, Catfish Beach, Westwood Beach, and Stumpy Beach day-use areas.

Project-related impacts from groundborne vibration or groundborne noise levels, including impacts resulting from the construction, operation, and maintenance of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.

- c) The construction of new facilities and enhancements to existing facilities would increase ambient noise levels within the vicinity of sensitive receptors (i.e., recreational facilities, residences and businesses).
 - Project-related impacts from permanent increases in ambient noise levels, including impacts resulting from the construction, operation, and maintenance of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.
- d) The construction of new facilities and enhancements to existing facilities could generate temporary and intermittent ambient noise that is discernibly higher than existing noise levels within the project area. The effect would depend on how much noise the equipment generated, the distance between construction activities and the nearest sensitive receptors (i.e., recreational facilities, residences, and businesses), and the existing noise levels experienced by those sensitive receptors. Please refer to narrative responses b and c above for a description of these sensitive receptors. It is anticipated that project construction activities would comply with the Plumas County General Plan.

Project-related impacts from temporary or periodic increases in ambient noise levels, including impacts resulting from the construction, operation, and maintenance of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.

- e) The northern edge of the FERC boundary for the project is located within 2 miles of Rogers Field Airport in Chester. The proposed project includes the construction of new facilities and enhancements to existing facilities (e.g., Westwood Beach and Stover Ranch day-use areas and North Shore Boat Launch) within 2 miles of this airport. Implementation of the proposed project would therefore cause an increase in the number of recreational users within 2 miles of the airport. These users could be exposed to excessive noise levels from arriving and departing aircraft.
 - Project-related noise impacts stemming from the proximity to an airport, including impacts resulting from the construction, operation, and maintenance of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.
- f) The FERC boundary for the UNFFR Project is not located within the vicinity of a private airstrip.

			Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impac
12	PO	PULATION AND HOUSING Would the project:				
	a)	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				
	b)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				\boxtimes
	c)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				\boxtimes

- a) The proposed project would not include any facilities that would directly or indirectly induce population growth.
- b) The proposed project would not displace any housing.
- c) The proposed project would not displace any people.

			Potentially Significant Impact	Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
13	PU	BLIC SERVICES Would the project:				
	a)	Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
		Fire protection?		\boxtimes		
		Police protection?		\boxtimes		
		Schools?			\boxtimes	
		Parks?			\boxtimes	
		Other public facilities?				

Potentially

Narrative Responses:

a) Public services in rural areas are typically provided by county governments and limited purpose special districts. In general, county services provide schools, police, and fire protection.

Currently, the public services in the project area are associated with public safety and the protection of natural resources (e.g., law enforcement, fire protection). These services are provided by the USFS, CalTrans, Plumas County Sheriff's Office, California Highway Patrol, and California Department of Forestry and Fire Protection from locations within and adjacent to the project area. The UNFFR Project encompasses lands already served by these public service agencies. The proposed project includes the development of new facilities that, in turn, could create a need for new or expanded governmental facilities (i.e., fire and police protection).

Project-related impacts on fire and police protection, including impacts resulting from the construction, operation, and maintenance of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.

Almanor High School, Chester Junior/Senior High School, and Chester Elementary School are located in the community of Chester in the general vicinity of the UNFFR Project. There are no state or county parks in the project area (Plumas County 2005). It is unlikely that the proposed project would have an adverse effect on schools. There is a small municipal park in Chester but it is unlikely that the proposed project would affect this park.

Although there are a number of public facilities within and adjacent to the UNFFR Project, these are predominantly recreational. Recreational facilities are discussed in Section 14 of this checklist.

14	RE	CREATION	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
	a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?		\boxtimes		
	b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?		\boxtimes		

a) FERC requires licensees to construct, maintain, and operate recreational facilities where possible to meet recreational demand, given the unique characteristics of each site and public safety concerns. In addition to constructed facilities, lands contained within the FERC boundary are open to the public for recreational use, with the exception of lands secured for safety or security reasons. FERC requires licensees to provide the public with reasonable free access to these lands for recreational purposes (Pacific Gas and Electric Company 2002).

The exisiting UNFFR Project provides public recreational opportunities along the shorelines of Lake Almanor, Butt Valley Reservoir, and the bypass reaches. PG&E and the USFS share areas of responsibility in the region (Federal Energy Regulatory Commission 2004). Recreational facilities in the project area are abundant and varied, although they are concentrated around Lake Almanor, Butt Valley Reservoir, and along the Belden and Seneca reaches. The license application and Settlement Agreement provide for numerous recreational enhancements and the construction of new facilities, which could reduce recreational pressure on local parks and other regional recreational facilities.

The recreational facilities at Lake Almanor are owned and operated by PG&E, USFS, or various commercial enterprises. All recreational facilities at Butt Valley Reservoir are owned and operated by PG&E. Recreational facilities on Lake Almanor and Butt Valley Reservoir include campgrounds/campsites, swimming areas, trails, day-use areas, picnic areas/tables, boat ramps/launches, angler access sites, and dispersed recreation sites.

Recreational facilities along the Belden reach include picnic areas/tables, campgrounds/campsites, angler access sites, swimming areas, and trails. The Seneca Reach has a fishing trail (Pacific Gas and Electric Company 2002). Additional private recreational facilities exist within the FERC boundary, and a municipal recreational facility, Chester Park, is located in the town of Chester. In addition, PG&E leases some of its privately held lands for recreational uses to non-profit organizations and similar groups (e.g., Public Service Employees Association Camps). These organizations are generally responsible for operating and maintaining the facilities on leased lands.

The Settlement Agreement provides for future decisions on the feasibility of whitewater recreational flow releases in the Belden reach. This potential recreation opportunity could increase the variety of on-water recreation in the project area and allow for a greater distribution of whitewater boater days throughout the North Fork Feather River system. Although additional whitewater recreation opportunities would help to satisfy the demand demonstrated for this use during relicensing studies, it could cause conflict between user groups and greater competition for the limited ancillary recreation facilities in the area.

Project-related impacts on parks and other recreational facilities, including impacts resulting from the construction, operation, and maintenance of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.

- b) The proposed project includes the construction of new recreational facilities and the enhancement of existing recreational facilities. The following measures are stipulated in the Settlement Agreement:
 - Modify campsites and restroom facilities to be compliant with the Americans with Disabilities Act (ADA)
 - Create boat launches
 - Convert overflow camping areas into day-use swim areas
 - Relocate campsites
 - Provide ADA accessible access routes
 - Widen entrance roads and improve internal road circulation
 - Construct new restrooms and shower facility buildings
 - Construct and improve access trails for anglers
 - Construct new bear-proof food lockers
 - Replace older Klamath stoves with campfire rings
 - Expand parking areas to include gravel parking areas
 - Construct informational kiosks and signage
 - Expand group camping areas and create new tent campgrounds
 - Develop new trailhead parking areas
 - Expand sandy beach areas

Some new construction of recreational facilities will depend on future monitoring of use levels to justify the need for management actions and/or new facilities. The Recreation Resource Management Plan concentrates new recreational development in appropriate locations, thereby retaining as much of the natural open space as possible to protect a range of resource values, such as wildlife, aesthetics, and cultural resources. PG&E plans to implement protection measures, such as restoring and revegetating decommissioned campgrounds and campsites, and implementing erosion control where appropriate.

Impacts of project-related recreational facilities that could have an adverse physical effect on the environment, including impacts resulting from the construction, operation, and maintenance of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.

			Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
15	TRA	ANSPORTATION/TRAFFIC Would the project:				
	a)	Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?				
	b)	Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?				
	c)	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				\boxtimes
	d)	Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			\boxtimes	
	e)	Result in inadequate emergency access?			\boxtimes	
	f)	Result in inadequate parking capacity?			\boxtimes	
	g)	Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?			\boxtimes	

a) The construction of new facilities and enhancements to existing facilities has the potential to generate an increase in traffic within and adjacent to the project area. PG&E has conducted a traffic study that provides an inventory and classification of all roads within the project area. The study analyzed traffic use levels and made regional projections. In addition, daily traffic counts were collected in the project area during the 2001 recreation season. Based on the data collected, it was determined that the project road system is suitable for the traffic expected during the life of the proposed license. The results of these studies along with ongoing monitoring performed by PG&E in accordance with FERC Form 80 requirements will be used to evaluate the potential impacts on traffic of the proposed project.

Project-related impacts on traffic, including impacts from construction of new facilities and enhancements to existing facilities, will be evaluated in the EIR to determine if the impacts would be significant.

b) As discussed above, it is unlikely that the proposed project would have a significant effect on roadway capacity or level-of-service standards, including for those roadways and highways designated as part of the congestion management network.

- c) The UNFFR Project currently uses fixed-wing and rotary aircraft in conjunction with operation and maintenance activities. No changes in air traffic patterns are anticipated.
- d) The proposed project would comply with applicable USFS and Plumas County requirements. PG&E maintains several road maintenance agreements with the USFS that ensure that roadways within the National Forest System are maintained in a safe driving condition. In addition, PG&E will be required to prepare a Road Traffic Survey Plan, as stipulated in the Settlement Agreement. The plan will include provisions for traffic monitoring every 6 years, in accordance with FERC Form 80 requirements. The proposed project includes developing recreational day use and campground areas that would be accessible from SR 36 and SR 147. Some of these facilities would require recreational users to cross a retired railroad spur (i.e., North Shore and East Shore campgrounds and Stover Ranch, North Shore, Catfish Beach, Westwood Beach day use areas). However, impacts associated with recreational traffic crossing the railroad spur are not anticipated since it is no longer in use.

Turnouts will be developed for each of the facilities located along SR 36 and SR 147 to improve traffic safety conditions. No dangerous intersections are anticipated as part of the proposed recreational facilities.

- e) The proposed project would not substantially change existing emergency access within the project area. As discussed above, PG&E has an existing road maintenance agreement with the USFS that requires it to maintain roads on National Forest System lands in a safe, drivable condition.
- f) PG&E is proposing to develop new recreational facilities (i.e., North Shore, Catfish Beach, and East Shore campgrounds; Stover Ranch, Westwood Beach, and Stumpy Beach day-use areas) and to construct enhancements to existing recreational facilities. Therefore, there is a potential for the proposed project to generate a substantial increase in long-term traffic in the project area. Additionally, there is a potential for the project to result in long-term increases in parking demand; however, the proposed new facilities listed above would include parking areas, and the parking capacity at existing recreational facilities (i.e., Rocky Point Campground, East Shore Group Campground area, North Shore Public Boat Launch, etc.) would be increased.
- g) The proposed project would not have any components that are likely to conflict with adopted policies, plans, or programs supporting alternative transportation.

			Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
16		LITIES AND SERVICE SYSTEMS Would the ject:				
	a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				
	b)	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				
	c)	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				
	d)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				
	e)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				
	f)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				
	g)	Comply with federal, state, and local statutes and regulations related to solid waste?			\boxtimes	

- a) The UNFFR Project complies and will continue to comply with state and local public health and safety codes and regulations in designing and operating project facilities, including recreation facilities. Any wastewater associated with the UNFFR Project would continue to be treated either on site for primary treatment or transported to an approved facility. Any new disposal systems would be designed and installed in conformance with PCEHD (Plumas County Environmental Health Division) and USFS requirements to ensure that wastewater treatment requirements of the Regional Water Board are met.
- b) The proposed project includes the construction and operation of new recreational facilities and enhancements to existing recreational facilities. These facilities will require the construction of new, or the expansion of existing, on-site wastewater treatment facilities.

Project-related impacts concerning wastewater treatment, including impacts resulting from the construction, operation, and maintenance of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.

- c) UNFFR Project facilities that generate stormwater runoff include service centers, switchyards, and parking lots associated with power generation or recreational facilities (PG&E 2000). Currently, there are no known stormwater facilities, including surface or subsurface drainage facilities, in the project vicinity. Parking lots associated with new or expanded recreational facilities would require the construction of self-contained stormwater drainage facilities.
 - Project-related impacts related to stormwater drainage facilities, including impacts resulting from the construction, operation, and maintenance of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.
- d) The UNFFR Project could increase water demand through land use intensification, particularly in areas associated with new recreational facilities identified in the Settlement Agreement.
 - Project-related impacts concerning water supply, including impacts resulting from the construction, operation, and maintenance of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.
- e) Wastewater treatment in the project area is usually provided by individual septic tanks, although the USFS provides sewer service for recreational uses on or adjacent to USFS land (Almanor Campground and Day Use Area, Canyon dam, Hutchins Meadows Campground, Sundew Campground, and Mill Creek Campground)
 - Project-related impacts concerning the capacity of wastewater treatment facilities, including impacts resulting from the construction, operation, and maintenance of new or enhanced facilities, will be evaluated in the EIR to determine if the impacts would be significant.
- f) Day-to-day operations at PG&E administrative facilities generate little solid waste. PG&E provides solid waste collection and disposal services at most, but not all, of its campgrounds and other recreational facilities and at the powerhouses themselves. Hazardous wastes are removed periodically by a contracted hazardous waste disposal service. Waste is removed to the appropriately classified landfill, recycler, or incinerator. Ordinary trash collection is part of normal facility maintenance and management; solid waste is typically disposed of through commercial providers. These providers have indicated that they can serve the projected future development associated with existing and planned facilities associated with the UNFFR Project.
- g) Any solid waste generated by the UNFFR Project would be disposed of at an approved landfill, in compliance with local, state, and federal regulations pertaining to solid waste disposal.

17 CUMULATIVE IMPACTS

CEQA requires that environmental impact reports consider the contribution of the proposed project to the cumulative impacts of closely related past, present, and reasonably foreseeable, probable future projects. The EIR for this project will consider the cumulative impacts of the proposed project, taking into consideration all of PG&E's hydroelectric projects within the watershed, from the Mountain Meadows Reservoir/Hamilton Branch powerhouse facilities above Lake Almanor downstream on the North Fork Feather River to Big Bend dam where flow is delivered into Lake Oroville. The analysis will also include the evaluation of impacts contributed by all other water-related projects in the watershed. The cumulative impacts analysis will analyze the incremental contribution of the proposed project to various flow-related impacts, including water temperature, geomorphological processes, fisheries, riparian habitat, and recreation.

The purpose of the cumulative impacts analysis is to determine if the proposed project will contribute to "cumulatively considerable" impacts, to these resources. The lead agency will determine if any of the proposed project's impacts will result in significant cumulative impacts to resources.

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