PINECREST LAKE LEVEL MODIFICATION PROJECT (SPRING GAP-STANISLAUS HYDROELECTRIC PROJECT, FEDERAL ENERGY REGULATORY COMMISSION PROJECT No. 2130)

Initial Study and Mitigated Negative Declaration

The following Initial Study has been prepared in compliance with the California Environmental Quality Act.

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PREPARED FOR:

STATE WATER RESOURCES CONTROL BOARD
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March 2015

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STATE WATER RESOURCES CONTROL BOARD DIVISION OF WATER RIGHTS P.O. BOX 2000 SACRAMENTO, CA 95812-2000

INITIAL STUDY / MITIGATED NEGATIVE DECLARATION

I. BACKGROUND

PROJECT TITLE: Pinecrest Lake Level Modification Project

APPLICANT: Pacific Gas & Electric Company

APPLICANT'S CONTACT PERSON: Richard Doble

INTRODUCTION

This Initial Study addresses the environmental impacts associated with a proposed change in one of the conditions in the Clean Water Act (33 U.S.C. §1251 et seq.) Section 401 water quality certification (certification) issued by the State Water Resources Control Board (State Water Board) for Pacific Gas and Electric Company's (PG&E) Spring Gap-Stanislaus Hydroelectric Project (Hydro Project), Federal Energy Regulatory Commission (FERC) Project No. 2130. Approval of a change to the existing certification is a discretionary action under the California Environmental Quality Act (CEQA), Cal. Public Resources Code Section 21000 et seq. Accordingly, the State Water Board is required to comply with CEQA before it approves changes to the conditions of the certification.

This CEQA document evaluates the environmental effects of lowering Pinecrest Lake between the range of 5,608 feet above mean sea level (msl) to 5,600 feet before Labor Day of each year. The entire Hydro Project was evaluated under CEQA prior to issuance of the certification in 2009; however that CEQA document did not consider Pinecrest Lake levels below 5,608 feet before Labor Day. The State Water Board will consider this CEQA document, along with the Hydro Project and associated Hydro Project records, before making a decision on PG&E's request, which is explained below. If the State Water Board decides to make changes to the existing certification based on PG&E's request, the State Water Board will issue an amended certification for the Hydro Project.

All elevation levels in this document are measured using msl as the point of reference.

The Hydro Project CEQA documents, along with other documents related to the Hydro Project and Pinecrest Lake can be found at:

http://www.waterboards.ca.gov/waterrights/water_issues/programs/water_quality_cert/springgap_ferc2130.shtml
The State Water Board's Executive Director has been delegated the authority to issue a decision on a water quality certification application. (Cal. Code Regs., tit. 23, § 3838, subd. (a).)

PG&E'S REQUEST

A request to modify Condition No. 4 of the certification for the Hydro Project was filed by PG&E with the State Water Board on December 16, 2011. PG&E requested that Condition No. 4 be modified to reduce the level of Pinecrest Lake (also referred to as Pinecrest Reservoir) between the end of spill and Labor Day from the current minimum elevation of 5,608 feet to a minimum of 5,606 feet in wet water years, 5,604 feet in normal-wet water years, and 5,600 feet in normal-dry and dry water years (PG&E's proposed project).

PG&E's proposed project area is within the Stanislaus River watershed in Tuolumne County, is located in Sections 15 and 16, Township 4 North and Range 18 West, Mount Diablo Base & Meridian, and is on the Pinecrest 7.5-minute U.S. Geological Survey (USGS) topographic quadrangle. The proposed project area can be accessed from State Route 108 through the Stanislaus National Forest.

PROJECT DESCRIPTION

PG&E proposes to continue to operate the Spring Gap-Stanislaus Hydroelectric Project (Hydro Project) as it has historically been operated, but with modified Pinecrest Reservoir operations. PG&E requested a modification to Condition No. 4 of its certification for the Hydro Project, issued by the State Water Board under Order WR 2009-0039. Currently, Condition No. 4 requires that after End of Spill each year, PG&E maintain Pinecrest Reservoir above an elevation of 5,608 feet prior to and including Labor Day. In addition, PG&E is required to prepare a drawdown curve for Pinecrest Reservoir by April 15 of each year, which estimates what the lake level will be on Labor Day for that year. After Labor Day, PG&E is allowed to release water from Pinecrest Reservoir down to a minimum storage of 500 acre-feet (AF). Pinecrest Reservoir is generally drawn down by an additional 71 to 94 feet after Labor Day to generate hydropower and supply water to Tuolumne Utilities District (TUD).

If approved, PG&E's proposed project, to modify Condition No. 4, would allow PG&E to lower Pinecrest Reservoir between the end of spill and Labor Day from the current minimum elevation of 5,608 feet to a minimum of 5,606 feet in wet water years, 5,604 feet in normal-wet water years, and 5,600 feet in normal-dry and dry water years. PG&E notes that these elevations are

http://www.waterboards.ca.gov/waterrights/board_decisions/adopted_orders/orders/2009/wro2009_0039.pdf

The request from PG&E can be found at:
http://www.waterboards.ca.gov/waterrights/water_issues/programs/water_quality_cert/docs/springgap_stanislaus_ferc2130/mtgtn_prpsl121611.pdf

End of Spill is defined in the certification as when the reservoir elevation falls below 5,617 feet and the inflow to Pinecrest Reservoir decreases so that the diurnal fluctuation does not cause the water surface elevation to approach 5,617 feet and the outlet valve is used by PG&E to control water releases from Strawberry Dam. End of spill at Pinecrest Reservoir typically occurs around mid-July in wet water years, early July to late June in normal water years, and mid-June in dry water years.

WR 2009-0039 can be found at:

Per Condition No. 4 of the certification, "End of Spill is when the reservoir elevation falls below elevation 5,617 feet and the inflow to Pinecrest Lake decreases so that the diurnal fluctuation does not cause the water surface elevation to exceed elevation 5,617 feet and the outlet valve is used by Licensee to control water release from Strawberry Dam."

Water year types are defined in Condition No. 1 of the certification using the Department of Water Resources Annual Unimpaired Inflow to New Melones Reservoir.

not planned drawdown elevations; they are the minimum elevations to which the Reservoir may be drawn down in the event of a water shortage. The actual yearly drawdown will continue to vary depending on annual runoff. No physical improvements to PG&E's infrastructure are necessary to lower the lake levels under PG&E's proposed project. However, in the study discussed below there were mitigation measures identified to protect recreation at Pinecrest Lake that PG&E would need to employ in order to draw down the lake to 5,600 feet prior to Labor Day.

As part of the certification, PG&E was required to complete a Pinecrest Reservoir minimum lake-level study plan to determine the minimum Pinecrest Reservoir elevation between End of Spill through Labor Day that protects recreational uses (specifically, Day-Use Area beaches, the marina just to the east of the handicap fishing access, and other areas as directed by the State Water Board). PG&E consulted with the United States Forest Service (USFS), California Department of Fish and Wildlife (CDFW; formerly the California Department of Fish and Game), TUD, and the State Water Board in the development of the study plan. The study plan was approved by the Deputy Director for Water Rights (Deputy Director) on May 6, 2010. PG&E conducted the study per the study plan and submitted the Pinecrest Reservoir Lake Level Study Report (Study Report) in April 2011. On December 16, 2011, PG&E submitted the abovereferenced request to the State Water Board to revise Condition No. 4 of the certification. The report identified impacts to certain recreational uses as a result of lower Pinecrest Lake levels before Labor Day, and PG&E put forth a mitigation plan to address the impacts identified in the report. The environmental impacts of lowering the Pinecrest Lake level from 5,608 feet to 5,600 feet prior to and including Labor Day are assessed in this Initial Study/Mitigated Negative Declaration (IS/MND).

ENVIRONMENTAL SETTING

Pinecrest Lake is approximately 25 miles northeast of Sonora off of State Route 108 on the upper reaches of the South Fork of the Stanislaus River (SFSR) within the Stanislaus National Forest (see **Figure 1**, **Regional Location**) in Tuolumne County. Pinecrest Lake stores approximately 18,000 AF of water with a maximum water surface elevation of approximately 5,617 feet. Water stored in Pinecrest Reservoir is used for: (1) hydroelectric generation by PG&E; (2) minimum instream flows in the SFSR; (3) water supply for local and downstream users; and (4) multiple recreational activities, including swimming, boating, fishing, camping, and picnicking. Recreational facilities are located on the southwest shoreline of the Pinecrest Reservoir. These facilities include, but are not limited to: a dock with fueling facilities and boat slips; a boat ramp and courtesy dock; a buoyed swimming area; a mixed day-use area; two Americans with Disabilities Act (ADA)-accessible fishing platforms; and beach areas.

Pinecrest Reservoir is owned by the USFS and is operated by PG&E as part of the Hydro Project. The Hydro Project is composed of the Relief, Strawberry, Spring Gap, and Stanislaus Developments. Pinecrest Reservoir is a component of the Strawberry Development.

Pinecrest Lake is impounded by Strawberry Dam (see **Figure 2, Project Location**), which is 133 feet high, 720 feet long and has a 108-foot-long spillway that is controlled by 6-foot flashboards from May to September and a 6-foot diameter low level outlet with a 30-inch fixed cone valve. Strawberry Dam is located along the northwestern portion of Pinecrest Reservoir. Pinecrest Reservoir has a gross storage capacity of 18,312 AF at lake elevation 5,617.5 feet and a usable storage capacity of 18,266 AF. The existing certification imposes a minimum storage requirement of 500 AF year-round, which cannot be reduced except after approval of the Deputy Director.

The water released from Pinecrest Reservoir at Strawberry Dam⁹ flows to the SFSR (also called the Pinecrest Reach), and is either diverted through the Philadelphia Ditch to the Spring Gap Powerhouse¹⁰ or continues downstream to Lyons Reservoir. Per Condition No. 4 of the certification, PG&E is required to provide minimum instream flows of 5 cubic feet per second (cfs) in the SFSR below Strawberry Dam year-round. PG&E is also required to provide minimum instream flows below Strawberry Dam as outlined in Table 1 below.

Table 1 Pinecrest Reach Minimum Streamflow (cfs) a, b

	Water Year Type						
Month	Dry	Normal-Dry	Normal-Wet	Wet			
October 1-31	10	10	15	15			
November 1-30	10	10	15	15			
December 1-31	10	10	10	15			
January 1- February 9	10	10	10	15			
February 10 - March 9	10	10	10	15			
March 10 - April 9	10	10	10	15			
April 10 – May 9	10	10	15	15			
June 1 – 30	10	10	15	15			
July 1 – 31	10	10	15	15			
August 1 – 31	10	10	15	15			
September 1 – 30	10	10	15	15			

^a The compliance location for the minimum streamflows shall be USGS gauge 11296500 (PG&E gauge S-61) on the SFSR below Herring Creek.

PG&E is under contract with TUD to deliver water to meet TUD's consumptive demand. Per the contract, a base supply of 10,000 AF of water is available at no cost to TUD from Lyons Reservoir, through the Tuolumne Main Canal (Main Canal). Lyons Reservoir is part of PG&E's Phoenix Hydroelectric Project, FERC Project No. 1061, and is located approximately 11 miles southwest of Pinecrest Reservoir. The Main Canal has a maximum capacity of 50 cfs of water, but normally diverts between 36 and 45 cfs. In addition to the base supply, TUD can request a supplemental supply of up to 9,500 AF of water available to PG&E from the SFSR. The supplemental supply primarily comes from Pinecrest Reservoir releases, as they are usually needed towards the end of summer when inflow to the SFSR and Lyons Reservoir from snowmelt has ceased.

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^b Once Pinecrest Lake has reached the specified minimum storage of 500 AF, the minimum required streamflow is the amount indicated, or the inflow to Pinecrest Lake plus accretion flows from Herring Creek, whichever is less.

Water can be released to the SFSR either through an outlet valve below the dam that draws water from below the surface of Pinecrest Lake or down the spillway around the dam if the lake's water surface is high enough.

Water diverted to the Philadelphia Ditch does not return to the SFSR; it is ultimately released into the Middle Fork Stanislaus River.

Table 1 is taken directly from the certification issued under Order WR 2009-0039.

PG&E'S PROPOSED PROJECT NEED AND OBJECTIVES

Domestic water for approximately 44,000 people living in and around the Sonora area is diverted from the SFSR at Lyons Reservoir. In the summer, water is supplied to TUD customers from the storage volume within Lyons Reservoir and is supplemented later in the summer with water from Pinecrest Reservoir. According to PG&E and TUD, the Pinecrest Lake minimum elevation condition in the certification (Condition No. 4) restricts delivery of supplemental water supply prior to Labor Day if doing so causes Pinecrest Lake to drop below 5,608 feet prior to and including Labor Day. Hydrologic records show that Lyons Reservoir received supplemental supply from Pinecrest Reservoir in 11 out of the 36 years between 1974 and 2010 (TUD 2011). These deliveries occurred in critically dry, dry, and normal-dry water years. From 1974 through 2011, the earliest end of spill at Lyons Reservoir occurred in 2007; during that same period, 2007 marked the year that the largest amount of water was delivered to Lyons Reservoir from Pinecrest Reservoir prior to and including Labor Day. Pinecrest Reservoir was at an elevation of approximately 5,604 feet on Labor Day in 2007 (prior to implementation of the new Pinecrest Lake level requirement of 5,608 feet, which became effective in 2009.

PG&E's proposed project objectives are to:

- Provide a reasonable supplemental domestic water supply to existing TUD customers;
- Maintain usability of recreational facilities at Pinecrest Reservoir prior to and including Labor Day.

PG&E'S PROPOSED PROJECT MITIGATION MEASURES

The following mitigation measures were included as part of PG&E's proposed project. The full text of the mitigation measures can be found within PG&E's 2011 request letter at: http://www.waterboards.ca.gov/waterrights/water_issues/programs/water_quality_cert/docs/springgap_stanislaus_ferc2130/mtgtn_prpsl121611.pdf, and are summarized here.

Mitigation Measure 1 – Substrate Improvement

Lowering the lake level exposes rocks, stumps, and mud flats that can impede the quality of shoreline recreation and/or present a hazard to boating. PG&E proposes to remove stumps and rocks at the direction of the USFS. Rocks would be moved to a staging area away from the site and later removed as appropriate. Stumps would either be removed in the same manner as rocks or cut up/ground down as directed by the USFS. Rounded gravel would be used to backfill any holes created by the removals. Mud flats would be similarly excavated and back filled with rounded gravel.

Mitigation Measure 2 – Buoy Line Modification

The area designated as a swim area is currently defined with a fixed stationary buoy line. PG&E proposes to provide a new buoy line that could either permanently encompass a larger area to compensate for lost swimming area as the reservoir level drops, or that could be actively moved to present a constant swim area as the reservoir

level drops. PG&E plans to work with the affected parties to develop the preferred option to maintain the swimming area at lower lake levels.

Mitigation Measure 3 – Increased Public Awareness

As Pinecrest Lake is a major source of contact and non-contact water recreation within Tuolumne County, the public should be made aware of what the conditions will be at the reservoir throughout the summer. PG&E proposes to develop multiple avenues of communication with the public, including website sources of information, physical posting of information about the lake level at the lake and in the surrounding community, and a communication plan to inform the Pinecrest Lake Resort and other affected parties about the planned lake levels for each year.

RECENT PROJECT HISTORY

On May 18, 2012, PG&E requested authority to draw down Pinecrest Lake to an elevation of 5,606 feet by Labor Day 2012. The request was made in accordance with Condition No. 4 of the certification pursuant to a request by TUD. The request was made because TUD indicated it would have difficulty meeting its customers' consumptive needs (including irrigation needs) at a lake level elevation of 5,608 feet. The State Water Board approved the variance on July 10, 2012, with additional restrictions that TUD enter into its highest level of water conservation and that PG&E report the actual water use for the year after Labor Day. The actual Pinecrest Lake elevation on Labor Day 2012 was 5,608 feet.

On January 17, 2014 Governor Brown issued a Drought Emergency Proclamation due to continued drought conditions, which included relatively low precipitation levels starting in 2011 and continuing through the present. TUD began implementing water conservation measures in January 2014. The State Water Board met with PG&E, TUD, and other state and federal agencies in April 2014 to discuss the dry weather conditions and the planned operations at Pinecrest Reservoir for the year. TUD issued a letter in May 2014 requesting that PG&E ask the State Water Board to modify the Labor Day Pinecrest Lake minimum elevation to 5,606 feet, similar to 2012. PG&E made the request for a 5,606 foot minimum elevation to the State Water Board on July 10, 2014, which was approved on the same day. (See footnote 13.) The actual Pinecrest Lake elevation on Labor Day 2012 was at 5,608 feet.

ACTION ON PG&E'S REQUEST

As the public agency responsible for issuing water quality certification for PG&E's proposed project, the State Water Board is the Lead Agency under the California Environmental Quality Act (CEQA) and is responsible for reviewing and certifying the adequacy of the environmental document before taking action on PG&E's request.

This IS/MND has been prepared to evaluate the range of Pinecrest Lake levels included in PG&E's request to the State Water Board, and covers the range of lake levels the State Water Board may consider in taking action on PG&E's request.

PG&E's request along with other documents related to the Hydro Project can be found at: http://www.waterboards.ca.gov/waterrights/water_issues/programs/water_quality_cert/springgap_ferc2130.shtml

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

Aesthetics	Agriculture and Forestry Resources	Air Quality
Biological Resources	Cultural Resources	Geology and Soils
Greenhouse Gas Emissions	Hazards and Hazardous Materials	Hydrology and Water Quality
Land Use and Planning	Mineral Resources	Noise
Population and Housing	Public Services	Recreation
Transportation and Traffic	Utilities and Service Systems	Mandatory Findings of Significance

II. DETERMINATION

On the basis of this initial evaluation:

p1	I find that PG&E's proposed project COULD NOT have a significant effect on the
Image: section of the content of the	environment, and a NEGATIVE DECLARATION will be prepared.
	I find that although PG&E's proposed project could have a significant effect on the
_	environment, there will not be a significant effect in this case because revisions in the
-	project have been made by or agreed to by the project proponent. A MITIGATED
	NEGATIVE DECLARATION has been prepared.
_	I find that PG&E's proposed project MAY have a significant effect on the environment, and
	an ENVIRONMENTAL IMPACT REPORT (EIR) is required.
	I find that PG&E's proposed project MAY have a "potentially significant impact" or
	"potentially significant unless mitigated" impact on the environment, but at least one effect:
	1) has been adequately analyzed in an earlier document pursuant to applicable legal
	standards; and 2) has been addressed by migration measures based on the earlier
	analysis as described on attached sheets. An EIR is required, but it must analyze only the
	effects that remain to be addressed.
	I find that although PG&E's proposed project could have a significant effect on the
	environment, because all potentially significant effects: (a) have been analyzed
	adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable
	standards; and (b) have been avoided or mitigated pursuant to that earlier EIR or
	NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed
	upon PG&E's proposed project, nothing further is required.

Barbara Evoy March 16, 2015

Date

Deputy Director for Water Rights

State Water Resources Control Board

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

Pinecrest Lake is surrounded by forested land and rocky outcroppings. The Sierra Nevada Mountains are east of the project area. Views of the nearby mountain range are primarily available from the publically accessible Pinecrest Recreation Area on the southwestern edge of Pinecrest Lake. The shoreline, beach, and boat docks in the Pinecrest Recreation Area are accessible from Lakeshore Avenue and Lakeshore Drive/ Pinecrest Lake Road.

Findings

a) A scenic vista is defined as a publicly accessible viewpoint that provides expansive views of a highly valued landscape. The Sierra Nevada Mountains to the east of Pinecrest Lake are visible from the Pinecrest Recreation Area, including the marina and beach. PG&E's proposed project would decrease the elevation of the lake water which would result in an additional few feet of exposed shoreline. The exposed shoreline would not interfere with the views of the nearby mountains. Any decrease in mountain viewing access from the lake surface would likely be offset by the slight increases in shoreline viewing access. Given the size of Pinecrest Lake and the small change in elevation (maximum of 8 feet in normal-dry and dry water years), the change to the shoreline that would result due to PG&E's proposed project would generally not be noticeable. Furthermore, Pinecrest Lake levels and the area of exposed shoreline fluctuate seasonally every year, and the changes in the shoreline are part of the scenic vista at the

present time. For all of these reasons, PG&E's proposed project would have a less than significant impact on the scenic vista.

- b) There are no state scenic highways near the project area, and PG&E's proposed project would therefore have no impact on scenic resources within a scenic highway.
- c) As discussed under "a" above, PG&E's proposed project would result in a few additional feet of exposed shoreline. The decrease in elevation of the lake level would result in an additional few feet of barren mud, rocks, and sand exposure around the shoreline (estimated increase of up to approximately 125 feet of exposed shoreline with change in Pinecrest Lake level from 5,608 to 5,600 feet). Given the size of Pinecrest Lake, the small change in elevation, and the fact that the level fluctuates seasonally every year, the additional exposed shoreline would not significantly change the visual character of Pinecrest Lake. For these reasons, PG&E's proposed project would have a less than significant impact on visual character.
- d) PG&E's proposed project does not involve construction of any facilities that would create lighting or glare. PG&E's proposed project would have no impact related to light or glare.

Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
2. AGRICULTURE AND FORESTRY RESOURCES				
Would the project:				
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?				•
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				•
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code [PRC] section 12220(g)), timberland (as defined by PRC section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				•
d) Result in the loss of forest land or conversion of forest land to non-forest use?				•
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				•

PG&E's proposed project is located within the Stanislaus National Forest. While some land within the Stanislaus National Forest is designated for timber production, land in the project area is not designated for agricultural use or timber production.

Findings

- a) There is no impact as the project area only includes Pinecrest Lake, and would not involve the conversion of any project area into Farmland.
- b) PG&E's proposed project would not conflict with an existing Williamson Act contract or conflict with existing land zoned for agriculture use.

- c) The project area is within the Stanislaus National Forest, portions of which are designated for Timber Production. However, PG&E's proposed project is located within an existing area managed for recreation and would not conflict with existing zoning or cause rezoning of forest land or timberland. Additionally, the only physical changes within PG&E's proposed project would occur on existing lake bed, no living trees would be altered nor would there be any rezoning required. There would be no impact under this criterion.
- d) PG&E's proposed project would not have impacts related to loss or conversion of forest lands to non-forest use because the Hydro Project area experiences an annual water elevation fluctuation greater that what is being proposed before Labor Day of each year. PG&E's proposed project would have no impact related to loss of forest lands.
- e) There is no Farmland on or in the immediate vicinity of the project area. For this reason and the reasons discussed under items 2(a), (b) and (d) above, PG&E's proposed project would not involve changes to the existing environment that could cause the conversion of Farmland to non-agricultural use or the conversion of forest land to non-forest use.

Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
3. AIR QUALITY				
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?				•
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?				•
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?				•
e) Create objectionable odors affecting a substantial number of people?				•

PG&E's proposed project is located within an area under the jurisdiction of the Tuolumne County Air Pollution Control District (TCAPCD). TCAPCD is responsible for the protection and management of air quality in Tuolumne County, and has established a set of rules and regulations to evaluate and manage sources of air pollutants.

Air quality in the area is a function of the criteria air pollutants emitted locally, the existing regional ambient air quality, and the meteorological and topographic factors that influence the intrusion of pollutants into the area from sources outside the immediate vicinity.

Findings

a) PG&E's proposed project does not involve any construction activities or any permanent operational sources of air pollutants. The mitigation measures in the Recreation section could involve minimal use of combustion engines (e.g., chain saws) and would likely involve limited

delivery and/or removal of materials by vehicles to aid remediation of boating hazards. Neither PG&E's proposed project nor any mitigation measures would conflict with TCAPCD plans.

- b) As described in 3(a) above, PG&E's proposed project would involve limited activities that could impact air quality, but would not result in a violation of an air quality standard or contribute substantially to an existing or project air quality violation. Therefore, PG&E's proposed project would have no impact related to a violation of an air quality standard.
- c) By its very nature, air pollution is largely a cumulative impact. However, PG&E's proposed project would not produce substantial air quality emissions. Therefore, PG&E's proposed project would not result in a cumulatively considerable net increase of any criteria pollutant. PG&E proposed project would also not cause the project region to be out of attainment with applicable federal or state ambient air quality standards. There would be no impact.
- d) PG&E's proposed project would not generate substantial pollutant concentrations, as outlined in 3(a) above. Therefore, PG&E's proposed project would not expose sensitive receptors to substantial pollutant concentrations and there would be no impact.
- e) PG&E's proposed project would not involve activities that could create permanent sources of odors. Additionally, any temporary odors from use of combustion engines would likely occur when recreation visitors are not present. There would be no impact with regard to this criterion.

Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
4. BIOLOGICAL 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 Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS)?			•	
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS?			•	
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?				•
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 applicable policies protecting biological resources?			•	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other applicable habitat conservation plan?				•

Pinecrest Lake is located on the SFSR in the Stanislaus National Forest. The SFSR feeds Pinecrest Lake from the northeastern edge of the lake and exits via the Strawberry Dam at the northwestern portion of the lake. The SFSR flows into Lyons Reservoir approximately 11 miles southwest of Pinecrest Lake. There are several special-status species that occur in the Hydro

Project area, including mountain yellow-legged frog, foothill yellow-legged frog, California roach, and hardhead (State Water Board 2008). A search of the California Natural Diversity Database (CNDDB) was conducted to identify sensitive biological resources that have been documented in the USGS 7.5-minute Pinecrest quadrangle containing the Pinecrest Lake. In addition to the database search, information was obtained from existing environmental documents for the project area.

The CNDDB search indicated that 13 special-status plant and wildlife species could potentially occur in PG&E's proposed project area. The species are listed in Table 2, Pinecrest Quadrangle CNDDB Results.

Table 2
Pinecrest Quadrangle
CNDDB Results – Special-Status Plant and Wildlife Species

Scientific Name	Common Name	Federal Status	State Status	CNPS*
Wildlife Species				
Accipiter cooperii	Cooper's hawk	None	None	
Accipiter gentilis	northern goshawk	None	None	
Antrozous pallidus	pallid bat	None	None	
Gulo gulo	California wolverine	Candidate	Threatened	
Haliaeetus leucocephalus	bald eagle	Delisted	Endangered	
Lepus americanos tahoensis	Sierra Nevada snowshoe hare	None	None	
Martes pennant	fisher – West Coast Distinct Population Segment	Candidate	None	
Pandion haliaetus	Osprey	None	None	
Vulpes vulpes necator	Sierra Nevada red fox	None	Threatened	
Plant Species				
Allium tribracteatum	three-bracted onion	None	None	1B.2
Carex limosa	mud sedge	None	None	2.2
Potamogeton epihydrus	Nuttall's ribbon leaved pondweed	None	None	2.2
Schoenoplectus subterminalis	Water bulrush	None	None	2.3

Findings

- a) The project area is located in the Stanislaus National Forest, which provides habitat for numerous special-status wildlife and plant species, as indicated in table 2 above. PG&E's proposed project would allow PG&E to release more water downstream into the SFSR, depending on the water year type, which would result in reduction of the Pinecrest Lake elevation prior to Labor Day. PG&E's proposed project would draw down the lake by a few additional feet prior to Labor Day but not lower than pre-Labor Day lake elevations the reservoir experienced before the certification imposed the minimum elevation condition in 2009. In general Pinecrest Lake levels have varied by year and season. Therefore fish and amphibians in the lake would not be impacted. The additional releases to the SFSR would not impact fish or amphibians that may live in the area, as there are already ramping rates restricting the change in flow below Strawberry Dam in the certification and the flows in the last 10 years below Pinecrest included lower Labor Day Pinecrest Lake levels. PG&E's proposed project would therefore have a less than significant impact to special-status wildlife species.
- b) Riparian areas are present around Pinecrest Lake and along the SFSR. Under PG&E's proposed project, the water level in Pinecrest Lake could be lowered earlier in the year than under existing conditions. However, the change in water elevation would be within the range of normal lake level fluctuations throughout the year and would not adversely affect riparian plants and animals. Therefore, the impact would be less than significant.
- c) PG&E's proposed project would not involve any direct removal, filling, hydrological interruption, or other changes to wetland areas. There would be no impact with respect to this criterion.
- d) PG&E's proposed project would affect the water level of the Pinecrest Lake and increase the water flowing into the SFSR. The change in water level would not inhibit fish from using the Stanislaus River as the existing minimum flows and ramping rate conditions would still be in effect for the Hydro Project as a whole. Pinecrest Lake is dammed under existing conditions and prevents migration of fish further upstream. Therefore, PG&E's proposed project would not interfere with the movement of any fish or wildlife species, interfere with established wildlife corridors, or impede use of native wildlife nursery sites. Therefore, there would be no impact.
- e) PG&E's proposed project would be consistent with the Tuolumne County General Plan policy relates to protection and maintenance of native wildlife and vegetation.
 - 4.J.7 Recognize that wildlife, fish and their habitats are important resources, which are valued by the [Tuolumne] County's citizens for recreational nature study, hunting and fishing, scientific research, education, shade, beauty, and open space. These resources enhance property value and attract visitors, a major source of revenue for the local economy. [added to Tuolumne County General Plan under Resolution 41-98 adopted March 24, 1998]

PG&E's proposed project would not conflict with this policy and would have a less than significant effect.

f) There is no adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other applicable habitat conservation plan applicable to the project area. Therefore, there is no impact.

Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
5. CULTURAL RESOURCES				
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the CEQA Guidelines?				•
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines?	t ⁻			•
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	0	0	0	•
d) Disturb any human remains, including those interred outside of formal cemeteries?				•

The Hydro Project area was historically used by Native Americans. Sixteen archaeological resource investigations of various portions of the Hydro Project area were conducted between 1976 and 1999. The investigations were conducted by the USFS and private consultants. Additional archaeological investigations were commissioned by PG&E in association with its Hydro Project license application for unsurveyed areas and to verify locations of previously recorded resources. Studies of the Hydro Project area identified 42 cultural resource sites within the Hydro Project area (PG&E 2002). Of the cultural resources identified, 11 were prehistoric sites, 30 were historic sites, and one site had both prehistoric and historic components.

The 30 historic sites include ditches, flumes, campsites, roadways, prospect pits, and wall or building remains. Of the 30 historic sites, 16 were determined to be potentially eligible for the National Register. Only one of these sites occurs in PG&E's proposed project area, and consists of a quarry site associated with the construction of Pinecrest Dam. The one site with prehistoric and historic components, including lithic scatter, milling features, and historic structure remains, was determined to be eligible for the National Register. The prehistoric sites consist generally of lithic scatter and milling sites. Of the 11 prehistoric sites, nine were determined to be potentially eligible for the National Register. None of the 11 prehistoric sites were located in PG&E's proposed project area.

Findings

- a) As noted above, studies of the Hydro Project area identified 42 cultural resource sites consisting of 30 historic sites and one site with both prehistoric and historic components. PG&E's proposed project would not disturb any known historic sites. Therefore, historical resources as defined in Section 15064.5 of the *State CEQA Guidelines* would not be disturbed by PG&E's proposed project and there would be no impact.
- b) Studies of the Hydro Project area identified 42 cultural resource sites consisting of 11 prehistoric sites and one site with both prehistoric and historic components. PG&E's proposed project would not disturb any existing archaeological sites. Therefore, archaeological resources as defined in Section 15064.5 of the *State CEQA Guidelines* would not be disturbed by PG&E's proposed project. Furthermore, the change in water elevation would be within the range of normal water fluctuations that occur throughout the year. Therefore, to the extent any unknown prehistoric sites are present near the lake edge, they already experience alternating period of inundation and exposure. PG&E's proposed project would not change that condition and there would be no impact.
- c) The area affected by Pinecrest Lake level changes does not contain unique geologic features or paleontological resources. Furthermore, PG&E's proposed project would not result in any activities that may destroy a unique geologic feature or a unique paleontological resource or site. PG&E's proposed project would have no impact.
- d) The Hydro Project area includes locations that are culturally significant and may have human remains. However, PG&E's proposed project would not result in any activities that may disturb potential human remains. Therefore, PG&E's proposed project would have no impact to human remains.

Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
6. GEOLOGY 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.				•
ii) Strong seismic ground shaking?				•
iii) Seismic-related ground failure, including liquefaction?				•
iv) Landslides?				•
b) Result in substantial soil erosion or the loss of topsoil?			•	
c) Be located on a geologic unit 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 (1994), creating substantial risks to life or property?				•
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?				•

There are no fault zones within the project area. In addition, PG&E's proposed project is not located in an Alguist-Priolo fault-rupture hazard zone.

Findings

- a)(i) The project area is not located within an Alquist-Priolo fault zone as defined in the Alquist-Priolo Earthquake Fault Zoning Act, which is designed to prohibit the construction of structures for human occupancy across active faults. In addition, PG&E's proposed project does not include any facilities that may be affected by a fault rupture. There would be no impact related to this criterion.
- a)(ii) The project area is not located near or within an active fault. In addition, PG&E's proposed project does not include any facilities that may be affected by seismic ground shaking. Therefore, there would be no impact associated with risks from seismic ground shaking.
- a)(iii) Liquefaction in soils and sediments occurs during earthquake events, when soil material is transformed from a solid state to a liquid state, generated by an increase in pressure between pore space and soil particles. Earthquake-induced liquefaction typically occurs in low-lying areas with soils or sediments composed of unconsolidated, saturated, clay-free sands and silts, but it can also occur in dry, granular soils or saturated soils with partial clay content. In addition to necessary soil conditions, the ground acceleration and duration of the earthquake must be of sufficient energy to induce liquefaction. However, as stated above, the project area is not near or within a fault zone and PG&E's proposed project does not include construction of any facilities that could be affected by liquefaction or ground failure. There would be no impact related to ground failure or liquefaction hazard in the project area.
- a)(iv) There are hilly and steep sloped areas within the project area. However, as stated above, PG&E's proposed project does not propose any facilities that could be affected by landslides. There would be no impact related to landslides.
- b) Soils along the shoreline of Pinecrest Lake are primarily Gerle and Fiddleton series and rock outcrops. PG&E's proposed project would reduce the water level of Pinecrest Lake prior to Labor Day, which would expose the lake side slopes earlier in the year than under existing conditions. However, this exposure would occur during the dry season even without any change to the Hydro Project operations and therefore the slopes are not expected to experience increased erosion. The impact from soil erosion or loss would be less than significant.
- c) See the discussion under items 6(a)(ii) through (iv) above. There would be no impacts related to unstable soils or geologic units.
- d) Expansive soils contain mixed-layer clay minerals that increase and decrease in volume upon wetting and drying, respectively, and can destabilize building foundations. However, as described above, PG&E's proposed project does not include any facilities that could be affected by expansive soils. There would be no impact from expansive soils.
- e) PG&E's proposed project does not include any septic tanks or alternative wastewater disposal systems that could be affected by unsuitable soil types. Therefore, there would be no impact.

Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
7. GREENHOUSE GAS EMISSIONS				
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			•	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				•

The natural process through which heat is retained in the troposphere ¹³ is called the greenhouse effect. The greenhouse effect traps heat in the troposphere through a threefold process as follows: (1) short-wave radiation in the form of visible light emitted by the Sun is absorbed by the Earth as heat; (2) long-wave radiation is re-emitted by the Earth; and (3) greenhouse gases (GHGs) in the upper atmosphere absorb or trap the long-wave radiation and re-emit it back towards the Earth and into space. This third process is the focus of current climate change actions because increased quantities of GHGs in the Earth's atmosphere result in more of the long-wave radiation being trapped in the atmosphere.

While water vapor and carbon dioxide (CO₂) are the most abundant GHGs, other trace GHGs have a greater ability to absorb and re-radiate long-wave radiation. To gauge the potency of GHGs, scientists have established a Global Warming Potential (GWP) for each GHG based on its ability to absorb and re-emit long-wave radiation over a specific period. The GWP of a gas is determined using CO₂ as the reference gas, which has a GWP of 1 over 100 years (IPCC 1996). For example, a gas with a GWP of 10 is 10 times more potent than CO₂ over 100 years. The use of GWP allows GHG emissions to be reported using CO₂ as a baseline. The sum of each GHG multiplied by its associated GWP is referred to as "carbon dioxide equivalents" (CO₂e). This essentially means that 1 metric ton of a GHG with a GWP of 10 has the same climate change impacts as 10 metric tons of CO₂.

The State of California enacted legislation targeting GHG emissions. Chief among these is the California Global Warming Solutions Act of 2006 (Act or Assembly Bill [AB] 32) (Statutes of 2006, Chapter 488, Nunez). AB 32 represents the first enforceable statewide program to limit GHG emissions from all major industries with penalties for noncompliance. The Act requires the State of California to reduce its emissions to 1990 levels by 2020. The Act establishes key

The troposphere is the bottom layer of the atmosphere, which varies in height from the Earth's surface from 6 to 7 miles.

All GWPs are given as 100-year values.

deadlines for certain actions the State of California must take in order to achieve the reduction target. As required under AB 32, on December 6, 2007, the California Air Resources Board approved the 1990 GHG emissions inventory, thereby establishing the emissions limit for 2020. The 2020 emissions limit was set at 427 million metric tons of CO₂ equivalents (MMTCO₂e).

Findings

a) PG&E's proposed project would allow the release of more water from Pinecrest Reservoir before Labor Day and would allow PG&E more operational flexibility to continue hydroelectric generation at the Spring Gap Powerhouse during the summer (when electricity demand is high), offsetting the need for the same amount of electric generation from other generating sources.

The mitigation measures included in section 15 (Recreation) may involve additional vehicle trips to the area for delivery of gravel to supplement beach substrate; however, the level of vehicle usage to enact the mitigation measures in section 15 would likely fall within the normal fluctuation of vehicle usage needed to maintain Pinecrest Lake and its associated recreation facilities. Therefore, PG&E's proposed project would not generate significant new GHG emissions and there would be a less than significant impact.

b) The primary GHG emissions regulation in California is AB 32, which requires the State to reduce its GHG emissions to 1990 levels by 2020. As outlined in 7(a) above, PG&E's proposed project would not generate significant new GHG emissions. Thus, PG&E's proposed project would not conflict with AB 32 and there would be no impact.

Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
8. HAZARDS AND HAZARDOUS MATERIALS				
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				•
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 0.25 mile of an existing or proposed school?	0			•
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?				•
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 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?				•
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?				•
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				•
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?		•		

According to the California Department of Toxic Substances Control (DTSC) Envirostor database and the United States Environmental Protection Agency (U.S. EPA) EnviroMapper database, the project area is not identified as a hazardous materials site. There is a hazardous materials site at the location of a small logging and disposal company in Cold Springs, approximately four miles to the southwest of the project area (DTSC 2013 and U.S. EPA 2013).

California Department of Forestry and Fire Protection (CAL FIRE) and the Tuolumne County Fire Department (TCFD) provide fire protection services to the recreational residences (cabins) and recreational facilities around Pinecrest Lake. Based on information from the Pinecrest Permittees Association, the cabins can be resided in from mid-May, when cabin service begins, to the Tuesday after Columbus Day in mid-October, when the water and sewer services to the cabins are turned off (personal communication, email from Caitlan Gilleran to Pat Smith, October 21, 2013).

Findings

- a) PG&E's proposed project would not involve routine transport, use, or disposal of hazardous materials. There would be no impacts with regard to the routine transport, use, or disposal of hazardous materials.
- b) PG&E's proposed project would involve the modification of sediment and/or the removal of large rocks and stumps within the shoreline and lake bottom (see Section 15(b), Recreation). As discussed in the Recreation Section below, PG&E's sediment modification would be directed in the field by USFS personnel, as Pinecrest Lake is located within USFS lands. PG&E's proposed project does not include a spill prevention and containment plan. A spill prevention and containment plan would be required to ensure that there is a less than significant impact from hazardous materials.

Mitigation Measure HAZ-1 would be implemented to prevent and contain fuel spills during sediment modification work, including the removal of large rocks and stumps within the shoreline and lake bottom.

Mitigation Measure HAZ-1:

PG&E shall develop and implement a spill prevention and containment plan for any equipment that would be used during the sediment modification work. The USFS shall be consulted with during the development of the spill prevention and containment plan. PG&E shall submit the spill prevention and containment plan to the Deputy Director for review and approval prior to any construction activities.

- c) PG&E's proposed project is not located within 0.25 mile of a school. There would be no impact.
- d) PG&E's proposed project is not included on any lists of hazardous materials sites maintained by local and State agencies. There would be no impact.
- e, f) There are no public airports or private airfields located within two miles of the project site. There would be no impact with regard to these criteria.

- g) The Emergency Operations Plan for Tuolumne County is applicable to the Pinecrest Recreation Area and would provide guidance during an emergency (Tuolumne County 2012). Implementation of PG&E's proposed project would not physically interfere with an adopted emergency response plan or emergency evacuation plan. There would be no impact.
- h) The project area is located in a wildland area which carries a risk of wildland fires. PG&E's proposed project does not include any facilities which could place people or structures at risk from wildland fires. Comments from the public were received by the State Water Board expressing concern that the lowering of Pinecrest Lake elevation earlier in the season could affect the fire safety of the persons residing in or using the cabins and campgrounds that are accessed from the southern shore of Pinecrest Lake. Concerns were expressed that the lowered lake elevation could potentially increase emergency response time in the case of a wildfire and make it difficult for the fire responders to pump water from the lake.

Based on consultation with CAL FIRE, the lowered Pinecrest Lake elevations would not block the ability to pump water from the lake. However, as lake levels drop, longer hose lines would be required to reach a cabin on fire and deployment of longer hose lines would require more personnel and/or more time. In addition, lower lake levels would not allow the fire boat to be docked and tied at the personal docks near the cabins, making it necessary for some fire personnel to remain in the boat (personal communication, email from Caitlan Gilleran to Berry Rudolph, October 2, 2013).

In addition, CAL FIRE expressed a concern that an earlier drop in water surface elevation could potentially affect the provision of fire service to the cabins by shortening the period of time that the cabins would be serviceable via the fire boat. According to CAL FIRE, the fire boat is used to access the cabins from the southern lake shore during fires and emergencies. At the present time, the fire boat remains in the water at the floating dock north of the marina through the summer and is removed from the water before the lake elevation drops below the boat launch ramp unusable level.

According to the Lake Level Study, the lowest water surface elevation that the boat launch ramp can be used at is 5,589 feet, when there is three feet of water above the toe of ramp (PG&E 2013). However larger boats such as the fire boat may require a higher water surface elevation to be safely removed from the water. Ideally, the fire boat would remain in the water until cabin services are turned off in mid-October, but the fire boat must be removed via the boat launch ramp and thus the timing of removal is dependent on how fast Pinecrest Lake is drawn down after Labor Day. CAL FIRE removed the fire boat on October 1 in 2013 (personal communication, email from Caitlan Gilleran to Berry Rudolph, October 21, 2013), when the reservoir water elevation was at approximately 5,595 feet. This left a window of several weeks where cabins were still habitable but were without the protection of the fire boat. As there are no roads connecting to many of the cabins, it is expected that fire services would be provided by air or by foot if the fire boat is not in service.

With PG&E's proposed project, the water surface elevation on Labor Day could be drawn down to a minimum of 5,606 feet in wet water years, 5,604 feet in normal-wet water years, and 5,600 feet in normal-dry and dry water years, with additional drawdown from Pinecrest Lake occurring after that point in time. If water is discharged from Pinecrest Lake in the same manner as it is currently discharged after Labor Day, PG&E's proposed project could reduce water surface elevations in dry years such that the fire boat would need to be removed from the water earlier

than under current operations. This would create a longer period of time between the removal of the fire boat and the end of cabin services.

However, under current operations the water surface elevation on Labor Day does not directly affect the rate at which Pinecrest Lake is drawn down after Labor Day. For example, although the fire boat was removed on October 1, 2013, when the reservoir was at 5,595 feet, the 2013 Labor Day water surface elevation was at 5,610 feet, above the current minimum. The record of water surface elevations between and including the years 2003-2013 confirm that in eight out of 11 years the fire boat was likely removed before October 10, regardless of variable Labor Day water surface elevations. Based on the last 11 years of operation records, PG&E's proposed project could increase the amount of time that Pinecrest is without the CAL FIRE fire boat's services, but will not create an impact that did not already exist under current operations.

Mitigation Measure HAZ-2 would be implemented to increase public awareness and preparation for the reduction of fire protection services and reduce the impact to less than significant.

Mitigation Measure HAZ-2:

In addition to the public notification included in PG&E's proposed project, PG&E shall notify CAL FIRE, USFS - Stanislaus National Forest, Pinecrest Lake Resort, Pinecrest Permittees Association, and the State Water Board when the drawdown curve for Pinecrest Reservoir predicts that the water surface elevation will be less than 5,595 feet prior to the Tuesday following Columbus Day in October. This notice shall provide the anticipated date when the water surface elevation will be less than 5,595 feet and briefly describe the reason why that water surface elevation is important to cabin owners, day use recreationists, and overnight campers in the vicinity. Additionally, PG&E shall post a copy of this notice by Labor Day on any appropriate notice boards in the Pinecrest Lake area.

Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
9. HYDROLOGY AND WATER QUALITY				
Would the project:				
a) Violate any water quality standards or waste discharge requirements?		•		
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?	П		•	
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?				•
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				•
f) Otherwise substantially degrade water quality?				•
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?				•
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				•

Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				•
j) Cause inundation by seiche, tsunami, or mudflow?				•

Pinecrest Lake is located on the SFSR in Tuolumne County. Pinecrest Lake is impounded by Strawberry Dam, located along the northwestern portion of the lake. Pinecrest Reservoir has a gross storage capacity of 18,312 AF at a lake elevation 5,617 feet and a usable storage capacity of 18,266 AF. The existing certification imposes a minimum storage requirement of 500 AF, which cannot be reduced except after Deputy Director approval. (State Water Board Order WR 2009-0039.) The water released from Pinecrest Lake proceeds through Strawberry Dam to the SFSR, and is either diverted through the Philadelphia Ditch to the Stanislaus Powerhouse, or continues downstream to Lyons Reservoir.

Water quality objectives for the region of PG&E's proposed project are defined in the *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins* (Basin Plan), which was adopted by the Central Valley Regional Water Quality Control Board (Regional Water Board, October 2011 Basin Plan revision).

Findings

a) PG&E's proposed project would involve the modification of sediment and/or the removal of large rocks and stumps within the shoreline and lake bottom (see Section 15(b), Recreation). Both of these activities could cause a water quality impact in the form of increased turbidity. Acceptable limits for turbidity increases over background are defined in the Basin Plan issued by the Central Valley Regional Water Board. As discussed in the Recreation Section below, PG&E's sediment modification would be directed in the field by USFS personnel, as Pinecrest Lake is located on USFS lands. PG&E's proposed project does not include a turbidity control plan. Appropriate sediment and erosion control best management practices (BMPs) will be required to ensure that there is a less than significant impact.

Mitigation Measure WQ-1 would be implemented to prevent and/or contain increased turbidity during sediment modification work, including the removal of large rocks and stumps within the shoreline and lake bottom.

Mitigation Measure WQ-1:

PG&E shall implement appropriate erosion and sediment control BMPs for any sediment modification work, including the removal of large rocks and stumps within the shoreline and lake bottom. The erosion and sediment control BMPs must address at a minimum:

- Preservation of existing vegetation, if applicable, to minimize exposed erodible soil and/or reduce the need for soil stabilization:
- Scheduling of sediment modification work in a manner to minimize any potential sediment discharges; and
- Sediment control measures that would reduce sediment discharges from construction activities, including increases in turbidity as defined in the Basin Plan.
- b) Operation of PG&E's proposed project would not require any groundwater or have a detrimental change on the existing groundwater pumping practices. Therefore, PG&E's proposed project would not deplete groundwater supplies or interfere with groundwater recharge activities. There would be no impact.
- c) PG&E's proposed project would not substantially alter the existing drainage patterns of the area. PG&E's proposed project would potentially result in the release of additional water from Pinecrest Lake into the SFSR, prior to Labor Day, which is earlier in the year than under existing conditions, but not earlier compared to historic operations. Also, the release of additional water would not affect the course of the river such that erosion or siltation could result. Pinecrest Lake erodes very little and would provide minimal sediment to the SFSR. In addition, SFSR generally has very low suspended sediment levels, indicating that minimal sedimentation due to erosion occurs (FERC 2005). Furthermore, the release of water to the river would be in accordance with the existing ramping rate conditions outlined in the certification. Therefore, it is unlikely that the increased flow of water earlier in the year would result in significant erosion and sedimentation in the SFSR. The impact would be less than significant.
- d) PG&E's proposed project would not affect the course of a stream or river and, as discussed under item 9(a) above, would not increase the rate or quantity of surface runoff. PG&E's proposed project does not affect the risk of flooding in the project vicinity or downstream of Pinecrest Lake. The potential release of water from Pinecrest Lake as part of PG&E's proposed project would not result in flooding as the release would happen during the dry season when the water levels are low downstream of the lake and the release would be in accordance with existing ramping rate conditions. The impact would be less than significant.
- e) As discussed under item 9(a) above, PG&E's proposed project would not cause an increase in stormwater runoff. There would be no impact.
- f) There are no additional aspects of PG&E's proposed project that have a potential to affect water quality apart from those discussed in item 9(a).
- g, h) The project site is not within the 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map. In addition, housing is not proposed as part of PG&E's proposed project. There would be no impact.
- i) See item 9(d) above regarding downstream flooding. PG&E's proposed project would not 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.
- i) PG&E's proposed project would not result in inundation by a tsunami, seiche, or mudflow.

Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
10. LAND USE AND PLANNING				
Would the project:				
a) Physically divide an established community?				•
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 Long Range Development Plan, 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 community conservation plan?				•

PG&E's proposed project is within the Stanislaus National Forest, and is designated by the USFS as land for Public, Parks and Recreation, or for Timber Production depending on the specific portion of the forest. The Pinecrest Recreation Area, located along the western shore of Pinecrest Lake, is used for recreation. In addition, there are single family dwelling units located on the western edge of Pinecrest Lake.

Findings

- a) PG&E's proposed project does not exceed the range of water elevation change that Pinecrest Lake already experiences on an annual basis. Nothing under PG&E's proposed project would divide the existing cabins on the western edge of the lake. There would be no impact with regard to this criterion.
- b) As discussed under item 2(c) above, some parts of the project area are designated as Forest Land in the Tuolumne County General Plan. PG&E's proposed project would not establish any new land use on the project site. PG&E's proposed project would not conflict with existing zoning for Forest Land, Timberland, or Timberland Production. PG&E's proposed project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project.
- c) There is no adopted habitat conservation plan or natural community conservation plan that includes the project site, and there would be no impact with regard to this criterion.

Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
11. MINERAL 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?				•
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?				•

There are no known mineral resources on the project site.

Findings

a, b) There are no known mineral resources on the project site, and neither the site nor any other location in its vicinity is used for mineral extraction. PG&E's proposed project does not propose construction of any facilities and would not cause a loss of availability of mineral resources.

Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
12. Noise				
Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in any applicable plan or noise ordinance, or applicable standards of other agencies?	0	•		
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?				•
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	0			•
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project (including construction)?		•		
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?				•
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?				•

PG&E's proposed project is located within the Stanislaus National Forest. The Pinecrest Recreation Area experiences a large influx of day-use and overnight visitors during the summer making use of the campground, Lake Resort, and Pinecrest Lake. In addition, there are single family dwelling units located on the western edge of Pinecrest Lake. The sources of noise in the area also include vehicles around Pinecrest Lake and boats on the lake.

Findings

a) Tuolumne County does not have a noise ordinance. PG&E's proposed project does not include any substantial long term noise-generating activities or operations. There would be incidental high decibel noise sources during daytime hours, such as trucks loading or unloading sediment or use of chainsaws involved with stump removal. PG&E's proposed project does not include noise control measures. Noise control measures will be implemented to ensure that there is a less than significant impact from noise during construction activities.

Mitigation Measure Noise-1 would be implemented to reduce impacts from noise.

Mitigation Measure Noise-1:

PG&E will implement appropriate noise control measures for any equipment used during the sediment modification work. The noise control measures would address, at a minimum: the timing of construction activities in relation to the recreation season; and isolation of the construction activity so as to prevent the public from entering areas with high decibel noise sources.

Noise reduction measures also include, but are not limited to, the following:

- Equip construction equipment with manufacturer's specified noise-muffling devices or use newer construction equipment manufactured to reduce noise;
- Place stationary noise-generating equipment as far away as feasible from sensitive noise receptors or in an orientation that minimizes noise impacts (e.g., behind existing barriers, storage piles, unused equipment);
- Turn off all engines when not in use; and
- Maintain low vehicle speeds in and around the construction areas (less than 15 miles per hour).

This mitigation measure falls outside the purview of the State Water Board. However, PG&E has agreed to implement Mitigation Measure Noise-1, as proposed, in an email dated December 29, 2014 (personal communication, email from Richard Doble to Jeffrey Parks, December 29, 2014).

- b) PG&E's proposed project would not produce ground borne vibration or noise. There would be no impact.
- c) PG&E's proposed project would not result in permanent increase in ambient noise levels above levels existing without the project. There would be no impact.
- d) As described in finding 12(a) above, PG&E's proposed project could involve temporary high decibel sources of noise. **Mitigation Measure Noise-1,** located in item 12(a) above, would be implemented to reduce the impact to a less than significant level.
- e, f) There are no public airports or private airstrips in the vicinity of the project site and no airport land use plan is applicable to the project vicinity. There would be no impact with regard to these criteria.

Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
13. POPULATION 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?				•
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				•

Pinecrest Lake is located within the Stanislaus National Forest. There are residential dwellings along the western edge of the lake adjacent to the Pinecrest Recreation Area.

Findings

- a) PG&E's proposed project would not construct any residences that would induce population growth in the project area. PG&E's proposed project would allow PG&E to maintain a lower lake elevation prior to Labor Day during certain water years. The objective of PG&E's proposed project is not to increase the total water supply available to TUD, but rather to create a more reliable supplemental water supply for TUD. It is not expected that PG&E's proposed project would induce substantial population growth as the increased reliability of the existing water supply to TUD would not create new additional water for TUD. The water contract between PG&E and TUD remains the same under PG&E's proposed project. There are many other factors in Tuolumne County that affect population growth that are outside the scope of this analysis. There would be a less than significant impact with regard to this criterion.
- b) PG&E's proposed project would not displace housing. No impact would occur with regard to this criterion.
- c) PG&E's proposed project would not displace people. No impact would occur with regard to this criterion.

Issues	Less Than Potentially Significant Less Than No Significant with Significant Impact Impact Mitigation Impact
	Incorporated

14. PUBLIC SERVICES

Would the project 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:

•	
	•
	•
	•
	•
	•

Environmental Setting

The project area is located in Stanislaus National Forest. Fire protection services for the project area are provided by the CAL FIRE and TCFD. A boat dock to the north of the gas docks and slip is used by CAL FIRE and TCFD to access the fire boat when it is in Pinecrest Lake. Police services are provided by the Tuolumne County Sheriff's Office located in Sonora.

- a) PG&E's proposed project would not construct any facilities that would necessitate fire protection. As discussed in Section 8(h) (Hazards and Hazardous Materials) the fire boat used by CAL FIRE and TCFD could be removed from Pinecrest Lake earlier than under current conditions, increasing the length of time the cabins are without this fire protection resource.

 Mitigation Measure HAZ-2 (located in Section 8(h)) would be implemented to address the impact to fire protection services and reduce the impact to a less than significant level.
- b) PG&E's proposed project would not construct any facilities or add residents to the project area that would necessitate changes to police protection. There would be no impact to police services.

- c) PG&E's proposed project would not include an increase in residents and would therefore not increase school enrollment. There would be no impact on schools.
- d) PG&E's proposed project would not provide housing and there would be no increase in residents. Therefore, no additional parks or recreational facilities would be required. There would be no impact.
- e, f) PG&E's proposed project would not construct any facilities or add residents to the project area that would require other public services or facilities. There would be no impact to other public services.

Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
15. RECREATION				
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?				•
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?		•		

Environmental Setting

Pinecrest Lake is located within the Stanislaus National Forest. The baseline average elevation of Pinecrest Lake on Labor Day was considered 5,610 feet when PG&E initiated the Pinecrest Reservoir Lake Level Study Report (Study Report, PG&E 2011). For PG&E's proposed project the impacts are considered against a baseline lake elevation of 5,608 feet, which is consistent with the requirements in the exiting certification (Order WR 2009-0039). Recreational facilities are located on the southwest shoreline of Pinecrest Lake. These facilities include a gas dock and boat slips, a boat ramp and courtesy dock, a buoyed swimming area, a mixed day-use area, an ADA-accessible fishing platform, and beach areas (PG&E 2011). Located to the west of the recreational facilities are the Pinecrest Campground and Pinecrest Lake Resort.

Findings

- a) PG&E's proposed project would not construct any recreational or other facilities or residences that would result in additional visitors or residents in the project area. Therefore, PG&E's proposed project would not increase the use of exiting neighborhood and regional parks or other recreational facilities. There would be no impact.
- b) PG&E's proposed project does not include construction of any recreational facilities. However, PG&E's proposed project would affect the lake level of Pinecrest Reservoir. As stated above, Pinecrest Lake is used for recreation by the local residents and visitors who camp or stay at the Lake Resort, or who use the day-use facilities. Pinecrest Lake is used for boating, swimming, and fishing. The decrease in lake level elevation could affect the use of the existing recreational areas which may require mitigation measures as discussed below.

The impact of lowering lake elevations on recreation was studied in the Study Report finalized by PG&E in April 2011. The Study Report analyzed the effects of lake elevation changes from 5,610 feet to 5,595 feet on seven different recreational facilities along the southwestern edge of Pinecrest Lake, as shown in Figure 3 (taken from the Study Report). The seven facilities

include boat docks and slips, a boat ramp and courtesy dock, a buoyed swim area, a mixed day-use area, an ADA accessible fishing platform, the overflow area on the south shore, and the overflow area north of the marina.

For purposes of analysis in the Study Report, wading area in the Pinecrest Lake was defined as 0 feet to 4 feet deep and the swimming area was defined as 4 feet deep or greater. Potential hazards to boats were defined as objects located within 2 feet of the water surface. Potential hazards to swimmers were defined as submerged objects such as rocks and stumps from 0 feet to 6 feet deep. The results of the study are summarized below.

Boat Docks and Slips

The docks are located in the northwest section of the Pinecrest Lake recreation area. The dock is composed of 11 fingers, each containing approximately 44 boat slips for private and rental boats to dock, load/unload supplies, and store boats. The first finger has a gas pump available for fueling motorized boats.

The analysis in the Study Report showed that all boat dock fingers would remain usable down to a Pinecrest Lake elevation 5,603 feet and a portion of one finger would no longer be usable below the elevation of 5,602 feet. However, this reduction in use is not considered a significant impact given that the loss of less than one finger represents approximately six percent (6%) of the total dock capacity. The boat access to the gas dock is available at the lowest elevation under PG&E's proposed project (5,600 feet). There is a less than significant impact on boat access to the docks and slips, and PG&E has stated as part of its proposed project (Mitigation Measure 3: Increased Public Awareness) that it will post public notices each year to increase public awareness of the expected Labor Day elevation (Request for Modification, PG&E, 2011.) However **Mitigation Measure REC-1** is a more specific description of mitigation for this impact that would be implemented to notify users of the boat docks what the expected Labor Day water surface elevation will be each year.

Mitigation Measure REC-1:

PG&E shall, within 10 days of the drawdown curve approval by the Deputy Director, notify the USFS - Stanislaus National Forest, Pinecrest Lake Resort, Pinecrest Permittees Association, and the State Water Board when the drawdown curve for Pinecrest Reservoir predicts that the water surface elevation will be less than 5,608 feet on Labor Day of that year. This notice shall briefly describe what the expected Labor Day elevation will be, and how that water surface elevation could impact boaters, cabin owners, day use recreationists, and overnight campers in the vicinity. Additionally, PG&E shall post a copy of this notice on any appropriate notice boards in the Pinecrest Lake area.

Pedestrian access to the boat docks would remain usable at all elevations.

Boat Ramp and Courtesy Dock

The concrete boat ramp and wooden courtesy dock are located to the south of the gas dock and slips, and are usable down to an elevation of 5,589 feet. Use of the boat ramp and courtesy dock would not be impaired by the changes in lake elevation under PG&E's proposed project, and there would be no impact.

Buoyed Swim Area

The buoyed swim area is located southeast of the boat ramp and is comprised of a beach and a swim area delineated with a buoy line. The beach is made up primarily of sand, with rocks and stumps of various sizes. Wading and swimming occur in the swim area. Fishing, although prohibited, also occurs.

The Study Report identified that pedestrian access to the shoreline would be impaired at various lake elevations below the current minimum. PG&E's proposed project includes a mitigation measure (Study Report Mitigation Measure 1: Substrate Improvement) that would remove rocks and/or stumps to establish access corridors to the shoreline at water surface elevations between 5,608 feet and 5,600 feet. Additionally, PG&E would be directed on site by the USFS while moving or removing obstacles. Since the mitigation measure is included in PG&E's proposed project, the impact on shoreline access would be less than significant.

The Study Report also identified that beach quality would be impaired at lake elevations within PG&E's proposed project. PG&E's substrate improvement mitigation measure would replace mud flats exposed under the proposed project elevations with rounded gravel of an appropriate size as directed on site by the USFS. Therefore, the usability of the beach would have a less than significant impact under PG&E's proposed project.

The available swimming area at this site is marked by a floating buoy string, and is reduced as the lake elevation drops. PG&E's proposed project includes a plan to adjust the buoyed markers as the lake level drops to maintain both the wading and swimming usable area. PG&E's proposed project would have a less than significant impact to the buoyed swim area.

Mixed Day-Use Area

The mixed day-use area is located in the southeastern portion of Pinecrest Lake, directly adjacent to the buoyed swim area. This area provides beach and shoreline access but is outside the buoyed swim area and therefore does not provide exclusion from boats or anglers while swimming or wading. Beach activities, wading, swimming, fishing, and boating take place in this area. Pedestrian access to the shoreline in the mixed day-use area would not be impaired at any lake elevation.

Beach quality could be impaired at lake elevations below 5,608 feet, however PG&E's substrate improvements (Study Report Mitigation Measure 1: Substrate Improvement) within the proposed project area would reduce potential impacts to less than significant. The usable beach area increases as the elevation of the lake decreases. Therefore, the usability of the beach would not be impaired by the changes in elevation.

The usability of the wading area would not be impaired at any elevation. The usability of the swimming and boating area would be impaired due to potential underwater hazards. However, these impairments would be addressed with substrate improvements (Study Report Mitigation Measure 1: Substrate Improvement), such as rock/stump removal, rock/stump relocation, and importing sand to create a suitable beach use. Potential impacts to the mixed day-use area would be less than significant.

ADA Accessible Fishing Platform

The ADA accessible fishing platform is located in the southeastern portion of Pinecrest Lake adjacent to the mixed day-use area. The facility is composed of two semicircular platforms connected by a concrete walkway that are accessible to persons with disabilities and allow anglers to cast directly into the water and fish between the elevations of 5,617 to 5,610 feet, assuming that the platforms are usable when water is touching the base of each platform. Shoreline fishing also occurs in the area.

The ADA accessible fishing platform consists of an upper and lower platform. The upper platform is usable between the elevations 5,617 and 5,612 feet, while the lower platform is usable when the water elevation is between 5,612 and 5,610 feet. Because the platforms are already unusable at the current minimum lake level elevation of 5,608 feet, lowering the lake level under PG&E's proposed project would not add any new impacts to the platforms. Therefore, there is no impact to the ADA accessible fishing platforms.

Overflow Area, South Shore

The overflow area, south shore, is located in the eastern portion of Pinecrest Lake and includes a public beach area. Swimming, wading, and general beach, fishing, and boat activities occur in the area. The impacts on the overflow area, south shore, associated with PG&E's proposed project are the same or comparable to those in the mixed day-use area. The Study Report Mitigation Measure 1 (Substrate Improvement) similarly reduces any impacts in this area to a less than significant level.

Overflow Area, North of Marina

The overflow area north of the marina is located in the northern section of the study area and includes a public beach area. The area also provides access to a dock used by the Tuolumne County Fire Department (TCFD). The impacts on the overflow area north of the marina associated with PG&E's proposed project are the same or comparable to those in the mixed day-use area. The Study Report Mitigation Measure 1 (Substrate Improvement) similarly reduces any impacts in this area to a less than significant level, with one exception as described below.

The exception is the TCFD dock that is located in this area. As discussed in Section 8(h) (Hazards and Hazardous Materials), PG&E's proposed project has the possibility to impact the accessibility of the TCFD fire boat located at this dock. However with incorporation of **Mitigation Measure HAZ-2** the impact would be less than significant. **Mitigation Measure REC-1** would also aide CAL FIRE and the TCFD in assessing when access to the dock is available for boating rescue at this area.

Conclusion

PG&E's proposed project could result in a significant impact to recreational areas at Pinecrest Lake. **Mitigation Measure REC-1** and **Mitigation Measure HAZ-2** would reduce any potential impacts to less than significant.

Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
16. TRANSPORTATION/TRAFFIC				
Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?				•
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards 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?	0			•
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				•
e) Result in inadequate emergency access?		•		
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?				

Environmental Setting

California State Route 108 provides access to Pinecrest Road which leads to the Pinecrest Recreation Area, Pinecrest Lake Resort, Pinecrest Campground, and the Pinecrest Reservoir. Lakeshore Avenue and Lakeshore Drive/ Pinecrest Lake Road provide access to the lake shore and beaches.

- a) PG&E's proposed project would not construct any facilities that would result in an increase in traffic to the Pinecrest Reservoir and recreation area. There would be no impact to the performance of the circulation system.
- b) Tuolumne County does not have a congestion management agency and has no adopted congestion management plan. Caltrans has established standards for operation on the State Route 108 corridor, which provides access to the project area from the Bay Area. There would be minimal additional trips generated as a result of enacting the mitigation measures for PG&E's proposed project, but these trips would not create congestion as they would be infrequent, and would occur during low recreation use periods. There would be no impact to PG&E's proposed project area roadways.
- c) PG&E's proposed project would not affect air traffic levels or air traffic patterns. There would be no impact with regard to this criterion.
- d) PG&E's proposed project would not alter the existing roads that provide access to the Pinecrest Reservoir and would not introduce incompatible uses along the roadway. There would be no impact with regard to this criterion.
- e) PG&E's proposed project would not affect local or regional emergency access routes by road or air. Impacts related to access routes by boat over the lake surface are discussed in Section 8(h) (Hazards and Hazardous Materials) above, and show that PG&E's proposed project could have a significant impact on emergency service access to residential cabins on Pinecrest Lake, as the CAL FIRE response boat is located on a dock that is no longer usable at water surface elevations below 5,595 feet. However, implementation of **Mitigation Measure HAZ-2** (located in Section 8(h)) would reduce the impact to less than significant.
- f) There are no adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities that are relevant to PG&E's proposed project. The project site is not served by any public transit system and PG&E's proposed project would have no effect on transit service. Bicyclists and pedestrians may use Pinecrest Road and other roads within the Pinecrest Campground and Recreational Area. However, PG&E's proposed project would not result in any change to the roadways which could interfere with bicycle and pedestrian traffic. There would be no impact with regard to this criterion.

Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
17. UTILITIES AND SERVICE SYSTEMS				
Would the project:				
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 stormwater 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 applicable federal, state, and local statutes and regulations related to solid waste?				•
h) Create other utility and service system impacts?				•

Environmental Setting

PG&E is under a contract with TUD to provide up to 10,000 AF of water to TUD from Lyons Reservoir, the natural flow of the SFSR, the Main Canal, and PG&E's releases to SFSR at Philadelphia Diversion Dam. In addition to the base supply, TUD can request a supplemental

supply of up to 9,500 acre-feet of water available to PG&E from the SFSR. The supplemental water primarily comes from Pinecrest Reservoir releases.

- a) PG&E's proposed project would not exceed wastewater treatment requirements of the Central Valley Regional Water Quality Control Board. There would be no impact.
- b) PG&E's proposed project would not require or result in construction of new water or wastewater facilities, or expansion of existing facilities. There would be no impact.
- c) PG&E's proposed project would not result in any additional stormwater runoff and would not require expansion or construction of new stormwater drainage facilities. There would be no impact.
- d) PG&E's proposed project would not require new or expanded entitlements. PG&E's proposed project requests to maintain a lower lake elevation prior to Labor Day during certain water years. The objective of PG&E's proposed project is not to increase the total water supply available to TUD, but rather create a more reliable water supply for TUD. In addition, both the water supply contract between PG&E and TUD (TUD 2012), and TUD's own Urban Water Management Plan, include water conservation measures that TUD either may or must implement, when appropriate. Therefore, there would be no impact.
- e) PG&E's proposed project would not impact the wastewater treatment provider's ability to provide adequate capacity to serve commitments. In the short-term, during implementation of mitigation measures (e.g., removal of stumps, modification of shoreline sediment, etc.), workers would likely use existing wastewater (i.e., restrooms) and drinking water facilities. Overall this minimal amount of usage is in line with exiting uses and would result in no impact to the demand and capacity of the wastewater system.
- f) PG&E's proposed project could result in the removal of tree stumps and boulders along the shoreline or on exposed portions of the lake bottom. However, the USFS would be directing the removal of these objects, and these objects and other waste would be disposed of properly. The impact would be less than significant.
- g) PG&E's proposed project would not conflict with any solid waste regulations. There would be no impact.
- h) No additional utility and service system impacts would be created by PG&E's proposed project. There would be no impact.

Issues	Less Than Potentially Significant Less Than No Significant with Significant Impact Impact Mitigation Impact
	Incorporated

18. MANDATORY FINDINGS OF SIGNIFICANCE

The lead agency shall find that a project may have a significant effect on the environment and thereby require an EIR to be prepared for the project where there is substantial evidence, in light of the whole record, that any of the following conditions may occur. Where prior to commencement of the environmental analysis a project proponent agrees to mitigation measures or project modifications that would avoid any significant effect on the environment or would mitigate the significant environmental effect, a lead agency need not prepare an EIR solely because without mitigation the environmental effects would have been significant (per Section 15065 of the State CEQA Guidelines):

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		•	
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of past, present and probable future projects)?		•	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			•

- a) As discussed in subsections 4 and 5 (Biological Resources and Cultural Resources, respectively) above, PG&E's proposed project would have less than significant effects on fish and wildlife species, special status plants, and cultural resources.
- b) PG&E's proposed project's potential impacts are discussed in the topic sections above. PG&E's proposed project would have a less than significant impact under all topics with the incorporation of the mitigation measures included in the public services, transportation/traffic,

recreation, hazards, noise, and water quality sections. Furthermore, there are no other past, present and reasonably foreseeable future projects in the vicinity of PG&E's proposed project that would result in impacts that could cumulate with the minimal impacts of PG&E's proposed project. There would be no significant cumulative impact.

c) PG&E's proposed project, located within the Stanislaus National Forest, was evaluated for PG&E's request to lower the Pinecrest Reservoir level between the end of spill and Labor Day from the current minimum elevation of 5,608 feet to a minimum of: 5,606 feet in wet water years; 5,604 feet in normal-wet water years; and 5,600 feet in normal-dry and dry water years. PG&E's proposed project does not include elements that could cause substantial direct or indirect adverse effects on humans.

III. INFORMATION SOURCES

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- California Natural Diversity Database (CNDDB). 2013. CNDDB Element Query Results for Pinecrest Quad. http://www.dfg.ca.gov/biogeodata/cnddb/. August.
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- PG&E. 2011. Request for Modification of State Water Resources Control Board Target Elevation for Pinecrest Lake by Labor Day. December 16.
- PG&E. 2011. Pinecrest Reservoir Lake Level Study Report Final Spring Gap-Stanislaus Hydroelectric Project. April.
- PG&E. 2002. Spring Gap-Stanislaus Hydroelectric Project Final Application for a New License. December.
- Regional Water Board, 2011, Water Quality Plan for the Sacramento River and San Joaquin River Basins. October Revision.
- State Water Board. 2008. Spring Gap-Stanislaus Project, FERC Project No. 2130 Initial Study. August.
- State Water Board. 2009. State Water Board Order WR 2009-0039. June 19.
- Tuolumne Utilities District. 2012. Response from Tuolumne Utilities District to Additional Information Reguest. June 16.
- Tuolumne County. 1996. General Plan Policy Document for Tuolumne County. Tuolumne County Board of Supervisors. December 26. Revisions to General Plan Policy Document up to the date this MND was published are incorporated by reference.
- Tuolumne County. 2012. Emergency Operations Plan for Tuolumne County. June.
- U.S. Environmental Protection Agency (U.S. EPA). 2013. EnviroMapper: Stanislaus National Forest. http://www.epa.gov/emefdata/em4ef.home. August.

Personal Communications

E-mail from Caitlin Gilleran of Impact Sciences, forwarding communication between herself and Barry Rudolph, California Department of Forestry and Fire Protection (CAL FIRE)

Batallion Chief in Pinecrest area on October 2, 2013 regarding fire department impacts from Pinecrest lake elevation changes.

- E-mail from Caitlin Gilleran of Impact Sciences, forwarding communication between herself and Barry Rudolph, CAL FIRE Batallion Chief in Pinecrest area, on October 21, 2013 regarding fire department impacts from Pinecrest lake elevation changes.
- E-mail from Caitlin Gilleran of Impact Sciences, forwarding communication between herself and Pat Smith of the Pinecrest Permittees Association on October 21, 2013 regarding cabin owner impacts from Pinecrest lake elevation changes.
- E-mail from Richard Doble of PG&E, communication between himself and Jeffrey Parks of the State Water Board on December 29, 2014 regarding Pinecrest [proposed project] objective and mitigation measures.

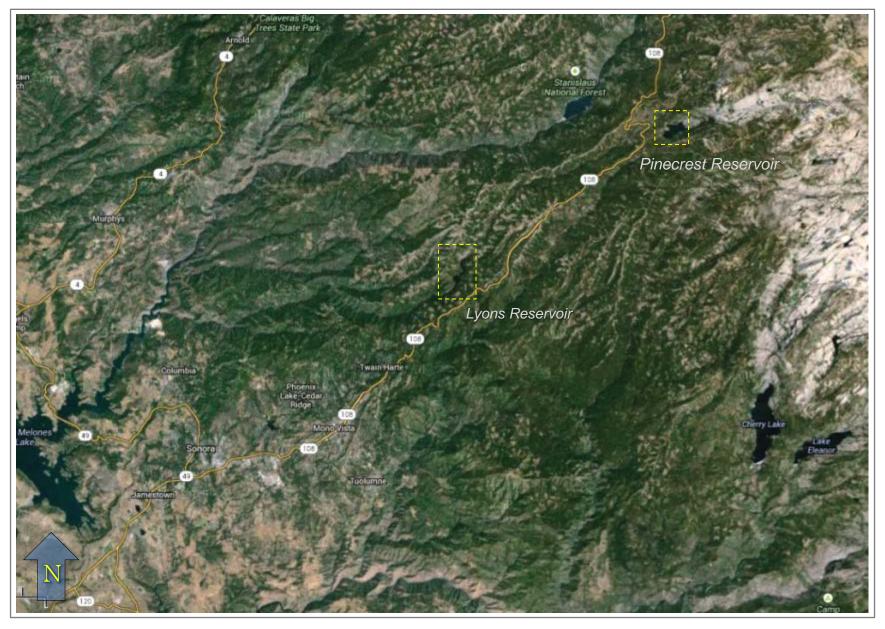


Figure 1 – Regional Location of PG&E's Proposed Project (source: Google Inc. July 2012)



Figure 2 – Project Location (source: Google Inc. July 2012)

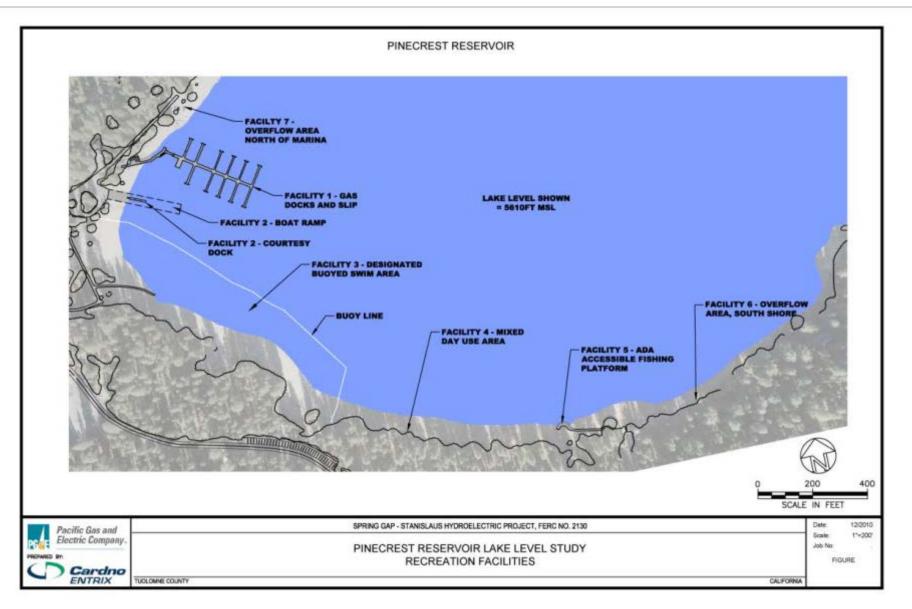


Figure 3 – Pinecrest Reservoir Lake Level Study Recreation Facilities (Source: PG&E Pinecrest Reservoir Lake Level Study Report, 2011)