
State Water Resources Control Board

August 6, 2020

Mr. Neil J. Wong
Supervisor, Hydro Licensing
Pacific Gas and Electric Company
Mail Code N13E
P.O. Box 770000
San Francisco, CA 94177

**Spring Gap-Stanislaus Hydroelectric Project
Federal Energy Regulatory Commission Project No. 2130
Tuolumne County
Middle and South Fork Stanislaus River**

SUBJECT: AMENDMENT TO WATER QUALITY CERTIFICATION

Dear Mr. Wong:

This water quality certification (certification) amendment is issued in response to Pacific Gas and Electric Company's (PG&E or Licensee) request for modifications to the minimum lake level requirement at Pinecrest Lake on Labor Day. The amendment was requested in accordance to Condition 4 of the certification issued by the State Water Board under [Order WR 2009-0039¹](#) for the Spring Gap-Stanislaus Hydroelectric Project (Project), Federal Energy Regulatory Commission (FERC or Commission) Project No. 2130. Pursuant to Condition 4, PG&E is required to maintain a Labor Day lake level elevation) of 5,608 feet in Pinecrest Lake.

Background

The Project is located along the Middle and South Forks of the Stanislaus River in Tuolumne County, California. The Project is owned and operated by PG&E. On September 15, 2008, the State Water Board issued a certification for the Project. On October 14, 2008, Tuolumne Utilities District (TUD²) and PG&E filed petitions for reconsideration of the certification based primarily on the Labor Day minimum lake level of 5,610 feet established for Pinecrest Lake. PG&E has a contractual obligation to

¹ Order WR 2009-0039 may be found online at:
https://www.waterboards.ca.gov/waterrights/board_decisions/adopted_orders/orders/2009/wro2009_0039.pdf

² In 1983, Tuolumne County purchased a water delivery system from PG&E and created TUD. The purchase contract included provisions for PG&E to deliver water to TUD in perpetuity from PG&E's water in Lyons Reservoir and Pinecrest Lake. Ninety-five percent of TUD's water source is based on this contract.

deliver water to TUD from PG&E's Lyons Reservoir (under the Phoenix Hydroelectric Project, FERC Project No. 1061) (Phoenix Project) and Pinecrest Lake (under this Project). State Water Board staff (staff) met with PG&E and TUD to discuss alternatives and agreed on revisions to the certification. On June 16, 2009, the certification was reissued with a lowered minimum Labor Day lake level elevation at Pinecrest Lake, reduced from 5,610 feet to 5,608 feet, to allow PG&E more flexibility to make contracted water deliveries to TUD. The certification also included an opportunity for PG&E to request a lower Labor Day minimum lake level at Pinecrest Lake after PG&E completed a Lake Level Study to analyze various lake levels lower than 5,608 feet and the resulting effects on recreational beneficial uses.

PG&E's Request

PG&E released the Pinecrest Reservoir Lake Level Study Report (Lake Level Study Report) in April 2011. The Lake Level Study Report identified impacts to recreational facilities at lake levels between 5,608 and 5,595 feet. The Lake Level Study Report also identified measures and improvements that would mitigate for those impacts. Pursuant to the certification, PG&E submitted a request to modify the Labor Day lake level requirement at Pinecrest Lake based on water year types, as follows:

- 5,606 feet in wet years;
- 5,604 feet in normal-wet years; and
- 5,600 feet in normal-dry and dry years.

PG&E's request also contained a mitigation plan to address impacts to recreation at lake levels below 5,610 feet.

California Environmental Quality Act Compliance

As the California Environmental Quality Act (CEQA) lead agency, the State Water Board released a draft Pinecrest Lake Level Modification Project Initial Study and Mitigated Negative Declaration (Lake Level IS-MND) for public comment on March 16, 2015. The State Water Board received 124 comment letters.

Table 1 identifies resource areas within the State Water Board's purview for which the Lake Level IS-MND identified potential impacts and associated certification conditions with water quality protection, monitoring, and reporting requirements.

Table 1 – IS/MND Resource Areas, Potential Impacts, and Corresponding Certification Conditions.

Resource Area	Potential Impact	Applicable Certification Condition
Hazards and Hazardous Materials	Fuel spills during sediment modification work, including the removal of large rocks and stumps within the shoreline and lake bottom.	Condition 4.A.1.d.i

Resource Area	Potential Impact	Applicable Certification Condition
Hazards and Hazardous Materials	Increased amount of time when a reduction in fire protection services occurs.	Condition 4.A.3.c
Water Quality	Increased turbidity during sediment modification work, including the removal of large rocks and stumps from the shoreline and lake bottom.	Condition 4.A.1.d.ii
Recreation	Effects to use of existing recreational areas.	Condition 4.A.3.b

The State Water Board will file a Notice of Determination with the Office of Planning and Research within five days of issuance of this certification amendment. (Cal. Code Regs., title 14, § 15075.)

Staff Analysis

Staff took into consideration PG&E's request, the Lake Level Study on which the request was based, the Lake Level IS-MND, public comments, and other available information. Further, staff analyzed the end-of-spill dates for the last 10 years, and performed supply-demand and conservation-sensitivity analyses to fully evaluate the need and appropriate requirements for lower Labor Day lake level elevations.

The Supply-Demand Analysis demonstrated the close correlation between the End of Spill date and the amount of water available through Labor Day in Lyons Reservoir and Pinecrest Lake. Because of this correlation, staff determined that annual Labor Day lake level is most appropriately based on the current year's End of Spill date, as opposed to water year type, as follows:

Table 2 – Minimum Labor Day Lake Level at Pinecrest Lake.

End of Spill Date	Minimum Labor Day Lake Level (feet)
July 15 or later	5,608
July 1 – 14	5,606
June 25 – 30	5,605
June 18 ^a – 24	5,603

^a For End of Spill dates prior to June 18, the Licensee may propose an alternate Labor Day lake level to the Deputy Director for approval.

The required Labor Day lake levels take into consideration TUD's water demand from 2009 to 2013 (years prior to the recent periods of drought in which less stringent conservation efforts were implemented) along with varying levels of hypothetical

conservation applied to TUD's water demand for different End of Spill dates.³ The requirements also account for a two percent growth rate and losses due to evaporation and infiltration. In accordance with this analysis, the State Water Board is amending Conditions 4 and 5 of the certification, which are included as Attachment 1 (clean version) and Attachment 2 (strikethrough/underline version).

Noticing and Comments

On January 28, 2020, the State Water Board circulated a draft certification amendment for comment. The State Water Board considered all comments received in development of this certification amendment.

On May 8, 2020, the State Water Board provided public notice of PG&E's request for an amendment to Condition 4 of the certification, pursuant to California Code of Regulations, title 23, section 3858, by posting information describing the amendment request on the Water Quality Certification Program Public Notices webpage and noticing interested parties via email. The State Water Board received no comments in response to this notice.

State Water Board Approval

The State Water Board finds that with the amendments to Conditions 4 and 5, included as Attachment 1 (clean version) and Attachment 2 (strikethrough/underline version), of the Project will comply with state water quality standards and other appropriate requirements of state law. The State Water Board hereby amends Conditions 4 and 5 of the certification as detailed in Attachment 1. The language in Attachment 1 shall replace the language in the June 16, 2009 certification and [Order WR 2009-0039](#), as reflected in Attachment 2 (underline/strikethrough version). Approval of this Project certification amendment is granted with the following conditions:

1. This certification amendment is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to California Water Code section 13330 and California Code of Regulations, title 23, division 3, chapter 28, article 6 (commencing with section 3867).
2. This certification amendment is not intended and shall not be construed to apply to any activity involving a hydroelectric facility and requiring a FERC license or an amendment to a FERC license unless the pertinent certification application was filed pursuant to California Code of Regulations, title 23, section 3855, subdivision (b) and that application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.

³ An assumed 5% reduction was applied to TUD's water demand for an End of Spill date between July 1 and July 14. An assumed 10% reduction was applied to TUD's water demand for an End of Spill date between June 25 and June 30. An assumed 15% reduction was applied to TUD's water demand for an End of Spill date between June 18 and June 24.

3. This certification amendment is conditioned upon total payment of any fee required under California Code of Regulations, title 23, division 3, chapter 28 and owed by the applicant.

All documents and other information that constitute the public record for this amendment will be maintained by the Division of Water Rights and are available for public review at the following address:

State Water Resources Control Board
Division of Water Rights
1001 I Street, Sacramento, CA 95814

If you have questions regarding this letter, please contact Mr. Allan Laca by email at allan.laca@waterboards.ca.gov or by phone at (916) 322-8469.

Sincerely,



Eileen Sobeck
Executive Director

Enclosures: Attachment 1: Amended Conditions 4 and 5 (Clean Version)
Attachment 2: Amended Conditions 4 and 5 (Strikethrough/Underline Version)
Attachment 3: Notice of Determination (NOD)

cc (w/o NOD): Ms. Kimberly D. Bose
Federal Energy Regulatory
Commission
888 First Street, NE
Washington, D.C. 20426

Mr. Tomas Torres
U.S. Environmental Protection Agency
Region 9, Water Division
75 Hawthorne Street
San Francisco, CA 94105

Mr. Patrick Pulupa
Central Valley Regional Water Quality
Control Board
11020 Sun Center Dr. Suite 200
Rancho Cordova, CA 95670

ecc (w/o NOD): Ms. Beth Martinez
United States Forest Service
Email: bethmartinez@fs.fed.us

Mr. Abimael Leon
California Department of Fish and
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Email: abimael.leon@wildlife.ca.gov

Mr. Ed Pattison
General Manager
Tuolumne Utilities District
Email: epattison@tudwater.com

Mr. John Buckley
Executive Director
Central Sierra Environmental
Resource Center
Email: johnb@cserc.org

Interested Parties List

**Attachment 1 - Spring Gap-Stanislaus Hydroelectric Project
Water Quality Certification Amendment,
Federal Energy Regulatory Commission Project No. 2130**

State Water Resources Control Board (State Water Board) staff proposes the following amendment to the water quality certification (certification) for Pacific Gas and Electric Company's (Licensee) Spring Gap-Stanislaus Hydroelectric Project (Project).

Replace the text on pages 19-21 of Order WR 2009-0039, as follows:

4. The Licensee shall maintain the minimum streamflow schedule for the Pinecrest Reach between Strawberry Dam and the Philadelphia Diversion and in the Philadelphia Reach below the Philadelphia Diversion Dam in the SFSR, as specified in the following tables. In addition, the Licensee shall maintain a year-round minimum streamflow of 5 cfs in SFSR below Strawberry Dam. Each year immediately after the End of Spill has occurred, the Licensee shall draw down Pinecrest Lake- to an elevation of 5,615 feet as early as reasonably feasible, provided the minimum streamflow schedule, Spring Gap Powerhouse Demand, and minimum Labor Day Pinecrest Lake levels- (outlined below) can be met.

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 lake level to exceed elevation 5,617 feet and the outlet valve is used to control water releases from Strawberry Dam.

Spring Gap Powerhouse Demand

During the period from the end of spill at Strawberry Dam until Labor Day, diversion of water to the Philadelphia Canal shall be a maximum flow of 6 cfs (the maximum flow is the mean flow over a continuous 24-hour period; the instantaneous streamflow may, on an infrequent basis, exceed the specified maximum flow by up to 1 cfs), except:

- a. During transmission line outages that require Spring Gap Powerhouse to govern local electric system load, or for Spring Gap Powerhouse maintenance, including start-up testing. Licensee shall use the minimum flow amount necessary to meet local load requirements or start-up testing procedures.
- b. When excess storage is available in Pinecrest Reservoir above that needed to meet the minimum streamflow schedule and maintain a reservoir elevation above the minimum Labor Day Pinecrest Lake levels (outlined below).
- c. When flow is available from Herring Creek above that needed to meet the minimum streamflow schedule.

Attachment 1: Spring Gap-Stanislaus Hydroelectric Project Water Quality Certification Amendment

Minimum streamflow schedule for the Pinecrest Reach (cfs) ^{1, 2}

<i>Month</i>	<i>Dry Water Year</i>	<i>Normal-Dry Water Year</i>	<i>Normal-Wet Water Year</i>	<i>Wet Water Year</i>
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
May 10 – May 31	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

¹ The compliance location for the minimum streamflows shall be USGS gage 11296500 (PG&E gage S-61) on the SF SR below Herring Creek.

² Once Pinecrest Lake has reached the specified minimum storage of 500 acre-feet, the minimum required streamflow is the amount indicated, or the inflow to Pinecrest Lake plus accretion flows from Herring Creek, whichever is less.

Attachment 1: Spring Gap-Stanislaus Hydroelectric Project Water Quality Certification Amendment

Minimum streamflow schedule for the Philadelphia Reach (cfs) ^{1, 2}

<i>Month</i>	<i>Dry Water Year</i>	<i>Normal-Dry Water Year</i>	<i>Normal-Wet Water Year</i>	<i>Wet Water Year</i>
October 1 – 31 ³	10	10	15	15
November 1 – 30 ³	10	10	15	15
December 1 – 31 ³	10	10	10	15
January 1 – February 9	10	10	10	15
January 1 – February 9	10	10	10	15
March 10 – April 9	10	10	10	15
April 10 - May 9	10	10	15	15
May 10 – May 31	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 ³	10	10	15	15

¹ The compliance location for the minimum streamflows shall be USGS gage 11297200 (PG&E gage S-83) below Philadelphia Diversion.

² Once Pinecrest Lake has reached the specified minimum storage of 500 acre-feet, the minimum required streamflow is the amount indicated, or the inflow to Pinecrest Lake plus accretion flows between Strawberry Dam and Philadelphia Diversion, whichever is less.

³ From Labor Day to December 31, regulated streamflows in the Philadelphia Reach shall not be greater than 60 cfs.

The Licensee shall, within one year of license issuance, develop and file a plan for monitoring compliance with the 5 cfs minimum streamflow requirement below Strawberry Dam for approval by the Deputy Director. The specified minimum streamflow schedule in this condition is the mean flow over a continuous 24-hour period. Instantaneous streamflow may, on an infrequent basis, deviate below the specified minimum streamflow by up to 10 percent. However, the Licensee shall make a good faith effort to meet the specified minimum streamflows at all times.

Pinecrest Lake

Pinecrest Lake shall not be drawn down below 500 acre-feet (af), except after approval of the Deputy Director.

Attachment 1: Spring Gap-Stanislaus Hydroelectric Project Water Quality Certification Amendment

No later than April 15 of each year, the Licensee shall submit a Pinecrest Lake drawdown curve to USFS, DFG¹, TUD, State Water Board, and others that request such information. At a minimum, the drawdown curve shall include the following:

- Forecasted End of Spill date;
- Current water year determination (Condition 1);
- Evaporation loss rate assumptions;
- Monthly flow rates forecasted at gages S-61 (USGS gage 11296500), S-9 (USGS gage 11297000), and S-83 (USGS gage 11297200);
- Schedule of any planned transmission line outages that require the Spring Gap Powerhouse to govern local electric system load and the anticipated minimum flow rates and timeframe necessary;
- Schedule of any planned maintenance activities at the Spring Gap Powerhouse that require start-up testing procedures and the anticipated minimum flow rates and timeframe necessary;
- Forecasted Labor Day Pinecrest Lake level; and
- Forecasted Columbus Day Pinecrest Lake level.

Within 15 days of the End of Spill date each year, the Licensee shall submit a revised drawdown curve to USFS, CDFW, TUD, State Water Board, and others that request such information. The revised drawdown curve shall include the following:

- Actual End of Spill date;
- Updated evaporation loss rate assumptions, if applicable;
- Updated monthly flow rates forecasted at gages S-61, S-9, and S-83, as applicable;
- Revised forecasted Labor Day Pinecrest Lake level, if applicable; and
- Revised forecasted Columbus Day Pinecrest Lake level, if applicable.

Within 15 days after Labor Day of each year, the Licensee shall submit the actual Labor Day Pinecrest Lake level and a revised forecasted Columbus Day Pinecrest Lake level, if applicable, to USFS, CDFW, TUD, State Water Board, and others that request such information.

The Licensee shall provide telemetered flow data for gages S-61 (USGS gage 11296500), S-9 (USGS gage 11297000), and S-83 (USGS gage 11297200) via a public website that, at a minimum, displays daily flow data and is updated weekly.

¹ Effective January 1, 2013, DFG was renamed the California Department of Fish and Wildlife (CDFW).

Attachment 1: Spring Gap-Stanislaus Hydroelectric Project Water Quality Certification Amendment

The data shall be provided to the State Water Board upon request of the Deputy Director in a format retrievable and viewable using Microsoft Excel, Microsoft Access, or other software program authorized by the Deputy Director.

Unless approved by the Deputy Director in accordance with Condition 5, the Licensee shall not implement Labor Day Pinecrest Lake levels below 5,608 feet until the Licensee's implementation of the Pinecrest Lake Plan (see Condition 4.A) has been approved by the Deputy Director. Following Deputy Director approval of Pinecrest Lake Plan implementation, the minimum Labor Day Pinecrest Lake levels shall be determined by the End of Spill date outlined in the following table:

Minimum Labor Day Pinecrest Lake Levels

<u>End of Spill Date</u>	<u>Minimum Labor Day Pinecrest Lake Level¹ (feet)</u>
July 15 or later	5,608
July 1 – 14	5,606
June 25 – 30	5,605
June 18 ² – 24	5,603

¹ Minimum lake level includes Labor Day.

² If End of Spill occurs prior to June 18, refer to Condition 5.

4.A Pinecrest Lake Plan

No later than one year following issuance of the FERC license amendment, the Licensee shall submit a Pinecrest Lake Plan to the Deputy Director for review and approval. The Deputy Director may require modifications as part of any approval. The Pinecrest Lake Plan shall be developed in consultation with representatives from USFS, CDFW, Central Sierra Environmental Resource Center, Pinecrest Lake Resort, Pinecrest Permittees Association, and the State Water Board. The Pinecrest Lake Plan shall describe how the Licensee will address substrate improvement, buoy line modification, and public communications. At a minimum, the Pinecrest Lake Plan shall include the following elements related to substrate improvement, buoy line modification, and public communications:

4.A.1. Substrate Improvements

The substrate improvements portion of the plan shall include:

- a. Description of goals and objectives associated with substrate improvement activities;
- b. Description of activities to improve the quality and safety of recreation at Pinecrest Lake due to lower lake levels prior to Labor Day, which shall include but not be limited to:

Attachment 1: Spring Gap-Stanislaus Hydroelectric Project Water Quality Certification Amendment

- i) Rock removal;
 - ii) Stump removal; and
 - iii) Improvements to mud flats;
- c. List of necessary permits;
- d. Proposed measures to protect water quality and beneficial uses during construction and maintenance activities, which shall include, at a minimum:
 - i) A Spill Prevention and Containment Plan for all equipment used during construction and maintenance activities; and
 - ii) An Erosion and Sediment Control Plan that includes:
 - o Scheduling of sediment modification work in a manner to minimize potential sediment discharges; and
 - o Sediment control measures to reduce sediment discharges and increases in turbidity from construction and maintenance activities;
- e. Proposed schedule for construction, maintenance, monitoring, and reporting;
- f. Development of, and monitoring for, substrate improvement success criteria;
- g. An adaptive management framework that requires maintenance or additional improvements based on monitoring results; and
- h. A summary of consultation, including comments received and how the comments were addressed.

4.A.2. Buoy Line Modifications

The buoy line modifications portion of the plan shall include:

- a. Description of goals and objectives;
- b. A proposal and associated support regarding whether the swimming buoy line at the Pinecrest Lake swimming area, located southeast of the boat ramp, will be movable or permanently established for the summer (i.e., from End of Spill through Labor Day);
- c. Proposed location and schedule for the deployment and adjustment of the swimming buoy line, if movable. Description of how the buoy line will be deployed, moved, and maintained; and
- d. A summary of consultation, including comments received and how the comments were addressed.

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4.A.3. Public Communications

The public communications portion of the plan shall include:

- a. Description of goals and objectives;
- b. Notification of the anticipated Labor Day Pinecrest Lake level if an elevation below 5,608 feet is forecasted (Pinecrest Lake drawdown curve, above). With reference to the information in the Pinecrest Lake Level Study Report, the notification shall include a summary of impacts to the following facilities at Pinecrest Lake based on the forecasted Labor Day Pinecrest Lake level: gas dock and boat slips, boat ramp and courtesy dock, buoyed swim area, mixed day-use area, Americans with Disabilities Act-accessible fishing platforms, and overflow areas (south and north shores);
- c. Notification of the anticipated date when the Pinecrest Lake level will reach 5,595 feet if the forecasted lake level (Pinecrest Lake drawdown curve, above) will be below 5,595 feet on Columbus Day. The notification shall include a summary of fire protection services at Pinecrest Lake and a description of impacts to fire protection services based on the anticipated date;
- d. A list of parties that will receive notifications referenced in 4.A.3.b and 4.A.3.c, which shall at a minimum include: USFS, Pinecrest Lake Resort, Pinecrest Permittee Association, TUD, Tuolumne County, local businesses and facilities within the Pinecrest Lake area, California Department of Forestry and Fire Protection, Tuolumne County Fire Department (TCFD), and State Water Board staff;
- e. A summary of communication methods to be used, which at a minimum shall include: website notifications, mail, email, flyers/handouts on notice boards, local businesses, facilities in the Pinecrest Lake area, and one centrally located sign;
- f. Proposed schedule for notifications; and
- g. A summary of consultation, including comments received and how the comments were addressed.

The Licensee shall implement the Pinecrest Lake Plan upon Deputy Director approval and any other required approvals, in accordance to the schedule and requirements specified therein. The Licensee shall provide a report documenting implementation of the Pinecrest Lake Plan to the Deputy Director for review and approval. The Licensee shall file with FERC Deputy Director approval of: (1) the Pinecrest Lake Plan; and (2) implementation report for activities outlined in the Pinecrest Lake Plan.

Attachment 1: Spring Gap-Stanislaus Hydroelectric Project Water Quality Certification Amendment

5. In Critically Dry water-years or in years in which End of Spill occurs prior to June 18, the Licensee may propose modifications to Condition #4 above. Licensee shall consult with the Deputy Director and provide justification for modifications to Condition #4. The Licensee shall maintain the minimum streamflow requirement below Strawberry Dam until modifications are approved by the Deputy Director. In years when Pinecrest Lake cannot be maintained at or above the minimum Labor Day lake levels identified in the Minimum Labor Day Pinecrest Lake Levels table, water releases during the period from the End of Spill through Labor Day shall only be made to meet the minimum streamflow schedule and Spring Gap Powerhouse Demand.

**Attachment 2 - Spring Gap-Stanislaus Hydroelectric Project
Water Quality Certification Amendment,
Federal Energy Regulatory Commission Project No. 2130
(Underline/Strikeout Version)**

State Water Resources Control Board (State Water Board) staff proposes the following amendments to the water quality certification (certification) for Pacific Gas and Electric Company's (Licensee) Spring Gap-Stanislaus Hydroelectric Project (Project). Deletions are shown in ~~strike-out~~. Additions are shown in **bold underlined** text.

Replace text on pages 19-21 of Order WR 2009-0039, as follows:

4. The Licensee shall maintain the minimum streamflow schedule for the Pinecrest Reach between Strawberry Dam and the Philadelphia Diversion and in the Philadelphia Reach below the Philadelphia Diversion Dam in the SFSR, as specified in the following tables. In addition, the Licensee shall maintain a year-round minimum streamflow of 5 cfs in SFSR below Strawberry Dam. ~~In years when Pinecrest Reservoir cannot be maintained above target elevation 5,608 feet, water releases during the period from the End of Spill through Labor Day shall only be made to meet the minimum streamflow schedule and Spring Gap Powerhouse Demand.~~ **Each year immediately after the End of Spill has occurred, the** Licensee shall draw down Pinecrest ~~Lake Reservoir~~ **Lake** Reservoir to reach an target elevation of 5,615 feet as early as reasonably feasible ~~each year after the End of Spill, provided that~~ **the** minimum streamflow schedule, and Spring Gap Powerhouse Demand ~~can be met, and~~ **minimum Labor Day Pinecrest Lake levels (outlined below) can be met.** ~~Reservoir elevation can be maintained above a target elevation of 5,608 feet prior to and including Labor Day.~~

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~~ **lake level** to exceed elevation 5,617 feet and ~~the outlet valve is used by the Licensee to control water releases from Strawberry Dam.~~

Spring Gap Powerhouse Demand

During the period from the end of spill at Strawberry Dam until Labor Day, diversion of water to the Philadelphia Canal shall be a maximum flow of 6 cfs (the maximum flow is the mean flow over a continuous 24-hour period; the instantaneous streamflow may, on an infrequent basis, exceed the specified maximum flow by up to 1 cfs), except:

- a. During transmission line outages that require Spring Gap Powerhouse to govern local electric system load, or for Spring Gap Powerhouse maintenance, including start-up testing. Licensee shall use the minimum flow amount necessary to meet local load requirements or start-up testing procedures.
- b. When excess storage is available in Pinecrest Reservoir above that needed to meet the minimum stream-flow schedule and maintain a reservoir elevation above **the minimum Labor Day Pinecrest Lake levels (outlined below)** ~~target elevation 5,608 feet prior to and including Labor Day.~~
- c. When flow is available from Herring Creek above that needed to meet the minimum streamflow schedule.

Attachment 2: Spring Gap-Stanislaus Hydroelectric Project Water Quality Certification Amendment (Underline/Strikeout Version)

Minimum streamflow schedule for the Pinecrest Reach (cfs) ^{1, 2}

Month	Dry Water Year	Normal-Dry Water Year	Normal-Wet Water Year	Wet Water Year
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
May 10 – May 31	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

¹ The compliance location for the minimum streamflows shall be USGS gage 11296500 (PG&E gage S-61) on the SFSR below Herring Creek.

² Once Pinecrest Lake has reached the specified minimum storage of 500 acre-feet, the minimum required streamflow is the amount indicated, or the inflow to Pinecrest Lake plus accretion flows from Herring Creek, whichever is less.

Attachment 2: Spring Gap-Stanislaus Hydroelectric Project Water Quality Certification Amendment (Underline/Strikeout Version)

Minimum streamflow schedule for the Philadelphia Reach (cfs) ^{1, 2}

Month	Dry Water Year	Normal-Dry Water Year	Normal-Wet Water Year	Wet Water Year
October 1 – 31 ³	10	10	15	15
November 1 – 30 ³	10	10	15	15
December 1 – 31 ³	10	10	10	15
January 1 – February 9	10	10	10	15
January 1 – February 9	40	40	40	45
March 10 – April 9	10	10	10	15
April 10 - May 9	10	10	15	15
May 10 – May 31	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 ³	10	10	15	15

¹ The compliance location for the minimum streamflows shall be USGS gage 11297200 (PG&E gage S-83) below Philadelphia Diversion.

² Once Pinecrest Lake has reached the specified minimum storage of 500 acre-feet, the minimum required streamflow is the amount indicated, or the inflow to Pinecrest Lake plus accretion flows between Strawberry Dam and Philadelphia Diversion, whichever is less.

³ From Labor Day to December 31, regulated streamflows in the Philadelphia Reach shall not be greater than 60 cfs.

The Licensee shall, within one year of license issuance, develop and file a plan for monitoring compliance with the 5 cfs minimum streamflow requirement below Strawberry Dam for approval by the Deputy Director. The specified minimum streamflow schedule in this condition is the mean flow over a continuous 24-hour period. Instantaneous streamflow may, on an infrequent basis, deviate below the specified minimum streamflow by up to 10 percent. However, the Licensee shall make a good faith effort to meet the specified minimum streamflows at all times.

Pinecrest Lake

Pinecrest Reservoir ~~Lake~~ shall not be drawn down below 500 acre-feet (af), except after approval of the Deputy Director. ~~From Labor Day to December 31, regulated streamflows in the Philadelphia Reach shall not be greater than 60 cfs.~~

Attachment 2: Spring Gap-Stanislaus Hydroelectric Project Water Quality Certification Amendment (Underline/Strikeout Version)

No later than April 15 of each year, the Licensee shall ~~develop and~~ submit a Pinecrest Lake drawdown curve to USFS, DFG¹, and ~~Tuolumne Utilities District~~ **TUD, State Water Board**, and others that request such information. **At a minimum, the drawdown curve shall include the following:**

- **Forecasted End of Spill date;**
- **Current water year determination (Condition 1);**
- **Evaporation loss rate assumptions;**
- **Monthly flow rates forecasted at gages S-61 (USGS gage 11296500), S-9 (USGS gage 11297000), and S-83 (USGS gage 11297200);**
- **Schedule of any planned transmission line outages that require the Spring Gap Powerhouse to govern local electric system load and the anticipated minimum flow rates and timeframe necessary;**
- **Schedule of any planned maintenance activities at the Spring Gap Powerhouse that require start-up testing procedures and the anticipated minimum flow rates and timeframe necessary;**
- **Forecasted Labor Day Pinecrest Lake level; and**
- **Forecasted Columbus Day Pinecrest Lake level.**

Within 15 days of the End of Spill date each year, the Licensee shall submit a revised drawdown curve to USFS, CDFW, TUD, State Water Board, and others that request such information. The revised drawdown curve shall include the following:

- **Actual End of Spill date;**
- **Updated evaporation loss rate assumptions, if applicable;**
- **Updated monthly flow rates forecasted at gages S-61, S-9, and S-83, as applicable;**
- **Revised forecasted Labor Day Pinecrest Lake level, if applicable; and**
- **Revised forecasted Columbus Day Pinecrest Lake level, if applicable.**

Within 15 days after Labor Day of each year, the Licensee shall submit the actual Labor Day Pinecrest Lake level and a revised forecasted Columbus Day Pinecrest Lake level, if applicable, to USFS, CDFW, TUD, State Water Board, and others that request such information.

¹ Effective January 1, 2013, DFG was renamed the California Department of Fish and Wildlife (CDFW).

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The Licensee shall provide telemetered flow data for gages S-61 (USGS gage 11296500), S-9 (USGS gage 11297000), and S-83 (USGS gage 11297200) via a public website that, at a minimum, displays daily flow data and is updated weekly. The data shall be provided to the State Water Board upon request of the Deputy Director in a format retrievable and viewable using Microsoft Excel, Microsoft Access, or other software program authorized by the Deputy Director.

Unless approved by the Deputy Director in accordance with Condition 5, the Licensee shall not implement Labor Day Pinecrest Lake levels below 5,608 feet until the Licensee's implementation of the Pinecrest Lake Plan (see Condition 4.A) has been approved by the Deputy Director. Following Deputy Director approval of Pinecrest Lake Plan implementation, the minimum Labor Day Pinecrest Lake levels shall be determined by the End of Spill date outlined in the following table:

Minimum Labor Day Pinecrest Lake Levels

<u>End of Spill Date</u>	<u>Minimum Labor Day Pinecrest Lake Level¹ (feet)</u>
<u>July 15 or later</u>	<u>5,608</u>
<u>July 1 – 14</u>	<u>5,606</u>
<u>June 25 – 30</u>	<u>5,605</u>
<u>June 18² – 24</u>	<u>5,603</u>

¹ Minimum lake level includes Labor Day.

² If End of Spill occurs prior to June 18, refer to Condition 5.

~~Within nine months of license issuance the Licensee shall submit a Pinecrest Reservoir minimum lake level study plan (Lake level Study), developed in consultation with the USFS, DFG, State Water Board staff, and TUD, to the Deputy Director for modification and approval that will determine the minimum Pinecrest Reservoir elevation between End of Spill through Labor Day that protects recreational uses (specifically, Day Use Area beaches, the marina to just east of the handicap fishing access, and other areas as directed by the State Water Board). Licensee shall complete the Lake level Study as approved by the Deputy Director by the end of the first full calendar year after license issuance. The completed study shall be provided to the USFS, DFG, State Water Board staff, and TUD for review and comment. By March 1 of the year following completion of the Lake level Study, the Licensee shall submit to the Deputy Director for approval the completed study, including any comments received.~~

~~Within six months of approval of the Lake level Study by the Deputy Director, Licensee may request the State Water Board modify the target elevation of 5,608~~

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~~feet based on the results of the Lake-level Study, after the State Water Board provides notice to affected parties.~~

4.A. Pincrest Lake Plan

No later than one year following issuance of the FERC license amendment, the Licensee shall submit a Pincrest Lake Plan to the Deputy Director for review and approval. The Deputy Director may require modifications as part of any approval. The Pincrest Lake Plan shall be developed in consultation with representatives from USFS, CDFW, Central Sierra Environmental Resource Center, Pincrest Lake Resort, Pincrest Permittees Association, and the State Water Board. The Pincrest Lake Plan shall describe how the Licensee will address substrate improvement, buoy line modification, and public communications. At a minimum, the Pincrest Lake Plan shall include the following elements related to substrate improvement, buoy line modification, and public communications:

4.A.1. Substrate Improvements

The substrate improvements portion of the plan shall include:

- a. Description of goals and objectives associated with substrate improvement activities;
- b. Description of activities to improve the quality and safety of recreation at Pincrest Lake due to lower lake levels prior to Labor Day, which shall include but not be limited to:
 - i) Rock removal;
 - ii) Stump removal; and
 - iii) Improvements to mud flats;
- c. List of necessary permits;
- d. Proposed measures to protect water quality and beneficial uses during construction and maintenance activities, which shall include, at a minimum:
 - i) A Spill Prevention and Containment Plan for all equipment used during construction and maintenance activities; and
 - ii) An Erosion and Sediment Control Plan that includes:
 - o Scheduling of sediment modification work in a manner to minimize potential sediment discharges; and

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- Sediment control measures to reduce sediment discharges and increases in turbidity from construction and maintenance activities;
- e. Proposed schedule for construction, maintenance, monitoring, and reporting;
- f. Development of, and monitoring for, substrate improvement success criteria;
- g. An adaptive management framework that requires maintenance or additional improvements based on monitoring results; and
- h. A summary of consultation, including comments received and how the comments were addressed.

4.A.2. Buoy Line Modifications

The buoy line modifications portion of the plan shall include:

- a. Description of goals and objectives;
- b. A proposal and associated support regarding whether the swimming buoy line at the Pinecrest Lake swimming area, located southeast of the boat ramp, will be movable or permanently established for the summer (i.e., from End of Spill through Labor Day);
- c. Proposed location and schedule for the deployment and adjustment of the swimming buoy line, if movable. Description of how the buoy line will be deployed, moved, and maintained; and
- d. A summary of consultation, including comments received and how the comments were addressed.

4.A.3. Public Communications

The public communications portion of the plan shall include:

- a. Description of goals and objectives;
- b. Notification of the anticipated Labor Day Pinecrest Lake level if an elevation below 5,608 feet is forecasted (Pinecrest Lake drawdown curve, above). With reference to the information in the Pinecrest Lake Level Study Report, the notification shall include a summary of impacts to the following facilities at Pinecrest Lake based on the forecasted Labor Day Pinecrest Lake level: gas dock and boat slips, boat ramp and courtesy dock, buoyed swim area, mixed day-use area, Americans with

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Disabilities Act-accessible fishing platforms, and overflow areas (south and north shores);

- c. Notification of the anticipated date when the Pinecrest Lake level will reach 5,595 feet if the forecasted lake level (Pinecrest Lake drawdown curve, above) will be below 5,595 feet on Columbus Day. The notification shall include a summary of fire protection services at Pinecrest Lake and a description of impacts to fire protection services based on the anticipated date;
- d. A list of parties that will receive notifications referenced in 4.A.3.b and 4.A.3.c, which shall at a minimum include: USFS, Pinecrest Lake Resort, Pinecrest Permittee Association, TUD, Tuolumne County, local businesses and facilities within the Pinecrest Lake area, California Department of Forestry and Fire Protection, Tuolumne County Fire Department (TCFD), and State Water Board staff;
- e. A summary of communication methods to be used, which at a minimum shall include: website notifications, mail, email, flyers/handouts on notice boards, local businesses, facilities in the Pinecrest Lake area, and one centrally located sign;
- f. Proposed schedule for notifications; and
- g. A summary of consultation, including comments received and how the comments were addressed.

The Licensee shall implement the Pinecrest Lake Plan upon Deputy Director approval and any other required approvals, in accordance to the schedule and requirements specified therein. The Licensee shall provide a report documenting implementation of the Pinecrest Lake Plan to the Deputy Director for review and approval. The Licensee shall file with FERC Deputy Director approval of: (1) the Pinecrest Lake Plan; and (2) implementation report for activities outlined in the Pinecrest Lake Plan.

- 5. In Critically Dry water-years or in years in which End of Spill occurs prior to June 18, the Licensee may propose modifications to Condition #4 above. Licensee shall consult with the Deputy Director and provide justification for modifications to Condition #4. The Licensee shall maintain the minimum streamflow requirement below Strawberry Dam ~~dry-year-flows~~ until modifications are approved by the Deputy Director. In years when Pinecrest Lake cannot be maintained at or above the minimum Labor Day lake levels identified in the Minimum Labor Day Pinecrest Lake Levels table, water releases during the period from the End of Spill through Labor Day shall only be made to meet the minimum streamflow schedule and Spring Gap Powerhouse Demand.

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~~In addition, until the State Water Board issues a decision modifying the target elevation, the Licensee may propose modifications to Condition #4. Licensee shall consult with the Deputy Director and provide justification for modifications to Condition #4.~~