June 8, 2010

Via Electronic Submittal (E-file)

The Honorable Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE. Room I-A
Washington, D.C.  20426

RE: Spring Gap-Stanislaus Hydroelectric Project; FERC Project No. 2130
Pinecrest Lake-level Study Plan

Dear Secretary Bose:

On April 24, 2009, the Federal Energy Regulatory Commission (Commission) issued to Pacific Gas and Electric Company (PG&E) a new license for the Spring Gap-Stanislaus Hydroelectric Project, FERC Project No. 2130 (Project). The State Water Resources Control Board’s (State Water Board) Water Quality Certification, pursuant to Section 401 of the Clean Water Act (401 Certification), was attached as Appendix A to the license. A revised certification was issued by the State Water Board and included in a FERC Order Clarifying Prior Orders issued on January 13, 2010 (130 FERC § 62,036). The Revised Certification superseded the previous version. Among other things, the Revised Certification requires preparation of a study plan (Plan) to determine the minimum operating lake level elevation for Pinecrest Reservoir that protects certain specific recreational uses for the period ranging from the end of spill through Labor Day. This Plan is not identified in Project License Article 401(a); therefore Commission approval is not required.

State Water Board Condition No. 4 requires PG&E to develop the Plan, in consultation with the US Department of Agriculture-Forest Service (USDA-FS), State Water Board, California Department of Fish and Game (CDFG) and Tuolumne Utility District (TUD). The draft Plan was developed and provided to the resource agencies for review, comment and consultation on October 13, 2009. Consultation with the resource agencies took place and the Plan was modified to respond to resource agencies’ comments. It was the consensus of the agencies that the Plan was satisfactory and it was submitted to the State Water Board for approval. The Plan was approved by the State Water Board on May 6, 2010. PG&E hereby notifies the Commission of the approved Plan, including consultation documentation (Attachment A) and the State Water Board Plan approval letter (Attachment B).
If you have any questions, please call me at (415) 973-5747.

Sincerely,

Ross C. Jackson, Senior License Coordinator
Hydro Licensing

Attachments:
- Attachment A– Pinecrest Reservoir Lake Level Study Plan (including Consultation Record)
- Attachment B– State Water Board Approval Letter for the Pinecrest Reservoir Lake Level Study Plan

cc (attachments via compact disk):

State Water Resources Control Board
Division of Water Rights
Attn: Ms. Victoria Whitney
1001 I Street, 14th Floor
Sacramento, CA 95812-2000

USDA Forest Service
Stanislaus National Forest
Summit Ranger District
Attn: Ms. Karen Caldwell
1 Pinecrest Lake Road
Pinecrest, CA 95364

State Water Resources Control Board
Division of Water Rights
Attn: Mr. Russ Kanz
Environmental Specialist III
1001 I Street, 14th Floor
Sacramento, CA 95812-2000

California Department of Fish and Game
Attn: Ms. Julie Means
Environmental Specialist III
1234 East Shaw Avenue
Fresno, CA 93719

USDA Forest Service
Stanislaus NF, Summit Ranger District
Attn: Ms. Kathy Burnett
#1 Pinecrest Lake Road
Pinecrest, CA 95364

U.S. Fish and Wildlife Service
Attn: Ms. Deborah Giglio
2800 Cottage Way, Room W-2605
Sacramento, CA 95825

California Department of Fish and Game
Attn: Dr. Jeffrey Single
Region 4, Regional Manager
1234 East Shaw Avenue
Fresno, CA 93719
ATTACHMENT A

PINECREST RESERVOIR LAKE LEVEL STUDY PLAN
(INCLUDING CONSULTATION RECORD)
PINECREST RESERVOIR LAKE LEVEL STUDY PLAN

Spring Gap-Stanislaus Project
(FERC Project No. 2130)

Prepared By:

Pacific Gas and Electric Company

May 2010

(April 2010 version approved by State Water Board, with additional agency consultation records from May 2010)
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>1.1</td>
<td>License Requirement</td>
<td>1</td>
</tr>
<tr>
<td>1.2</td>
<td>Consultation</td>
<td>1</td>
</tr>
<tr>
<td>2.0</td>
<td>Goals and Objectives</td>
<td>2</td>
</tr>
<tr>
<td>3.0</td>
<td>Study Area</td>
<td>2</td>
</tr>
<tr>
<td>4.0</td>
<td>Methods</td>
<td>3</td>
</tr>
<tr>
<td>4.1</td>
<td>Task 1 – Obtain and Review Existing Information</td>
<td>5</td>
</tr>
<tr>
<td>4.2</td>
<td>Task 2 – Collect Recreation Data and Conduct Photo Survey</td>
<td>6</td>
</tr>
<tr>
<td>4.3</td>
<td>Task 3 – Public Meeting</td>
<td>7</td>
</tr>
<tr>
<td>4.4</td>
<td>Task 4 – Tabulate Data and Develop Lake Level Graphics</td>
<td>8</td>
</tr>
<tr>
<td>4.5</td>
<td>Task 5 – Analyze Potential Recreation Impacts to the Seven Recreational Features</td>
<td>8</td>
</tr>
<tr>
<td>4.6</td>
<td>Task 6 – For Identified Impacts, Identify Potential Mitigation Measures and Preliminary Concept Descriptions</td>
<td>9</td>
</tr>
<tr>
<td>5.0</td>
<td>Schedule</td>
<td>9</td>
</tr>
<tr>
<td>6.0</td>
<td>Analysis</td>
<td>10</td>
</tr>
<tr>
<td>7.0</td>
<td>Consistency With Generally Accepted Practice</td>
<td>10</td>
</tr>
<tr>
<td>8.0</td>
<td>Products</td>
<td>10</td>
</tr>
<tr>
<td>8.1</td>
<td>Draft Lake Level Study Report</td>
<td>10</td>
</tr>
<tr>
<td>8.2</td>
<td>Final Lake Level Study Report</td>
<td>11</td>
</tr>
<tr>
<td>9.0</td>
<td>References</td>
<td>11</td>
</tr>
</tbody>
</table>
APPENDICES

Appendix A  Consultation
1.0 INTRODUCTION

On June 16, 2009, the State Water Resources Control Board (State Water Board) issued a revised Section 401 Water Quality Certification (Revised Certification) for the Spring Gap-Stanislaus Hydroelectric Project (Federal Energy Regulatory Commission [FERC] Project No. 2130) (Project). The Revised Certification was then included in a FERC Order Clarifying Prior Orders issued on January 13, 2010 (130 FERC § 62,036). The Revised Certification, among other things, requires preparation of a study plan (Plan) to determine the minimum operating lake level elevation for Pinecrest Reservoir that protects certain specific recreational uses for the period ranging from the end of spill through Labor Day. This study plan was prepared to comply with the Lake Level Study requirements in the Revised Certification.

1.1 LICENSE REQUIREMENT

Revised Certification Condition No. 4 reads as follows:

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

1.2 CONSULTATION

Revised Certification Condition 4 requires that this Plan be developed in consultation with the USDA-Forest Service (Forest Service), California Department of Fish and Game (CDFG), State
Water Resources Control Board (State Water Board), and Tuolumne Utilities District (TUD). A draft plan was developed by Pacific Gas and Electric Company (PG&E) and provided to the agencies on October 9, 2009. Comments were received from the State Water Board, Forest Service, and TUD. On December 9, 2009, a consultation meeting was held with the commenting agencies to discuss the Plan and responses to comments. The comments and responses to those comments are provided in Appendix A, as are the meeting notes from the December 9 consultation meeting. Comments on the draft Plan are addressed in revisions incorporated in the current version.

2.0 GOALS AND OBJECTIVES

The purpose of the Pinecrest Reservoir Lake Level Study is 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 to just east of the handicap fishing access, and other areas as directed by the State Water Board)” for the recreational uses identified in the Revised Certification.

3.0 STUDY AREA

Pinecrest Reservoir is located off of Highway 108, about 25 miles north-east of Sonora. Pinecrest Reservoir is on the South Fork of the Stanislaus River. The study area for this Plan consists of the identified recreational features on the southwest side of Pinecrest Reservoir, and will focus on Day Use Area beaches, handicap fishing access, the marina, and the associated boat ramp. Based on consultation with the State Water board, Forest Service, and TUD, a total of seven (7) recreation features will be evaluated under this Study as follows:

1. Gas Dock and Slips
2. Boat Ramp and Courtesy Dock
3. Designated/Buoyed Swim Area
4. Mixed Day Use Area (adjacent to the Swim Area)

5. Americans with Disabilities Act (ADA) Accessible Fishing Platform

6. Overflow Area, South Shore

7. Overflow Area, North of Marina

Figure 1 presents a map identifying the seven recreational features under consideration in this Study.

4.0 METHODS

This section discusses our methodology for completing the study, upon approval of this Plan. The study consists of six primary tasks: 1) obtain and review existing information; 2) collect recreation data and conduct photo survey; 3) tabulate data and develop lake level graphics; 4) analyze data for potential impacts to recreation; and 5) analyze potential recreation impacts to the seven recreational features identified in Study Area. Once the drawdown effects are identified, mitigation measures, focused on maintaining the usability of the specific recreation features at a wider range of reservoir elevations, will be identified and preliminary descriptions developed. Detailed plans and an implementation schedule will be developed for those measures selected for implementation; however, the plans and schedule are not included as part of this study.

Focusing on the seven recreation features shown in Figure 1, this study will identify recreation activities and usability characteristics from a lake level elevation of 5,617 ft msl to 5,610 ft msl to use as a baseline. This baseline will be compared to use characteristics at those seven locations at lake level elevations between 5,608 ft msl and 5,595 ft msl. Effects on recreational usability and uses will be assessed incrementally using a combination of three-dimensional (3D)
Figure 1. Pinecrest Reservoir Lake Level Study Recreational Features Included in the Analysis.
surface modeling and recreation usability data. Between 5,617 ft msl and 5,610 ft msl lake level elevation data and topography in relation to recreational features for recreational usability will be assessed at one-foot increments, while recreation use will be assessed at two-foot intervals. Specifically, baseline recreational usability data will be assessed at 5,617; 5,615; 5,613; 5,611; and 5,610 ft msl. From 5,608 ft msl to 5,595 ft msl, both elevation data in relation to the seven recreation features and recreation usability data will be assessed at one-foot intervals.

The Plan will be implemented through the following tasks:

Task 1 - obtain and review existing information;
Task 2 - collect recreation data and conduct photo survey;
Task 3 - public meeting;
Task 4 - tabulate data and develop lake level graphics;
Task 5 - analyze potential recreation impacts to the seven recreational features; and
Task 6 - for identified impacts, identify potential mitigation measures and preliminary concept descriptions.

These tasks are discussed in detail below.

4.1 TASK 1 – OBTAIN AND REVIEW EXISTING INFORMATION

Task 1 consists of the following:

- Compilation and review of background information, such as historical operations and recreational use, including any data previously collected by the Forest Service and PG&E.

- Preparation of a base map showing the seven specific recreational features in relation to lake topography. The base map will be at a 40 foot scale with one foot contour intervals showing the seven recreation features shown in Figure 1. The source of this map will be the 2009 aerial orthophoto and digital terrain data provided by TUD. This will be used to evaluate usability of the seven features.
• Establish photographic survey points to contribute to the evaluation of recreational usability and use. PG&E will meet with representatives from the State Water Board, CDFG, Forest Service, and TUD in the field to select and agree upon specific locations for data collection.

• PG&E in consultation with the agencies will identify and agree upon recreational uses and usability criteria for the seven recreational features and impact criteria against which all potential lake level elevation impacts will be measured.

4.2 TASK 2 – COLLECT RECREATION DATA AND CONDUCT PHOTO SURVEY

Task 2 consists of collecting data to evaluate the effect of reservoir drawdown on the seven identified recreation features at Pinecrest Lake. Data will be collected at lake level elevations below 5,617 ft msl during the summer and fall of 2010.

Field staff will collect data important to better understanding the usable range (lake levels) of the recreation features. Data will be collected in conjunction with the photo surveys so that the observations and measurements will occur incrementally as the reservoir level decreases. A field data sheet will be developed and will include but not be limited to the following metrics:

• Distance from recreation facility to the water, and depth of water
• Soil characteristics (e.g. is the area passable without going through mud flats)
• Slope (e.g. is the slope too steep as to diminish access)
• The amount of recreation use occurring (if any) at the recreation feature
• Distance from shade, trees

Field staff also will note the time of day, weather (rain, clear, etc.) air temperature, and presence of wind, which will be important since a low use day may be attributed to rain and not just to low reservoir levels. In addition to the quantitative measures, qualitative observations will be made regarding facility and area usability. Field staff will be instructed to note and photo document potential barriers to access or factors limiting usability that may emerge as the lake
level decreases. Other items to be considered include if and when the boat ramp is no longer functional, if and when the buoyed swim area loses functionality, if and when the boaters are no longer able to fuel at the docks, and whether previously inundated areas remain usable and the extent of usability.

Along with the recreation data, photographic surveys will be conducted at each of the seven recreational features at the full range of lake level elevations. The photo-points will be documented using a Trimble resource grade global positioning system with external antenna (GPS). These photo-points will be used to monitor the characteristics and usability of the selected recreational features, pursuant to the criteria established in Task 1 at each incremental lake level elevation. The photo-point surveys will be initiated after cessation of spill at an elevation of approximately 5,617 ft msl, and conducted at 2 ft interval down to a lake level elevation of 5,610 ft msl, and one foot intervals from 5,608 ft msl down to 5,595 ft msl, as described in Section 4.0, above. Lake levels below 5,608 ft msl can occur after Labor Day depending on water year type, when recreational use is expected to decrease. To avoid the bias of relying on recreational use that has a significant seasonal component, usability of the seven recreational features will be emphasized in the analysis of lake levels from 5,608 to 5,595 over the actual amount of use observed.

Topographic surveys will be made in selected areas associated with the seven recreation features. These surveys will be conducted to verify elevations and to obtain additional data to supplement the topography derived from TUD's orthophotography and digital terrain information.

4.3  TASK 3 – PUBLIC MEETING

PG&E will hold a facilitated public meeting at the direction of the State Water Board. The meeting will be held in Sonora in April or May of 2010. The objective of this meeting is to obtain feedback on recreational uses as noted in Task 1.
4.4 TASK 4 – TABULATE DATA AND DEVELOP LAKE LEVEL GRAPHICS

All recreation data collected will be tabulated. Photo-point locations and profiles will be mapped. Photographs taken at each photo-point will be summarized to illustrate changes to the selected recreational features resulting from lake level elevations being assessed.

Using the 2009 aerial topography and digital orthophoto provided by TUD, a digital terrain model of the lake bottom will be prepared along with 3D graphics to depict and visualize different lake elevations relative to each of the seven recreation features. The digital terrain model will be used to generate lake level graphics including plan view figures and transect profiles perpendicular to the shoreline. At each incremental lake level elevation studied, at least one plan view figure and one profile will be developed at each of the recreation features to illustrate functionality with respect to that lake level.

4.5 TASK 5 – ANALYZE POTENTIAL RECREATION IMPACTS TO THE SEVEN RECREATIONAL FEATURES

Potential impacts to the recreational usability of the seven recreational features will be assessed for lake levels from 5,608 ft msl to 5,595 ft msl compared to the baseline (recreational usability within the range 5,617 to 5,610 ft msl). Baseline data for recreational usability will be collected and analyzed at two foot intervals as follows: 5,617; 5,615; 5,613; 5,611; and also at 5,610 ft msl. Baseline elevation data will be analyzed at one foot intervals between 5,617 and 5,610 ft msl. One foot intervals will be analyzed from 5,608 to 5,595 ft msl. Recreation usability will be evaluated for agreed upon recreational uses as determined in Task 1. The results of the field data collection and photographic surveys will be compared with the lake level digital elevation model and graphics to assess the potential impact of reservoir drawdown at the seven identified recreation features. Lake elevations where functionality of recreation features are diminished, or access is reduced will be identified. Critical reservoir levels (such as when the boat ramp may no longer be accessible) also will be identified.

Data analysis is discussed in detail in Section 6.0.
4.6 Task 6 – For Identified Impacts, Identify Potential Mitigation Measures and Preliminary Concept Descriptions.

Once the drawdown effects are identified, mitigation measures will be identified and preliminary descriptions will be developed. Mitigation measures will focus on the seven specific recreation features to increase usability at a wider range of reservoir elevations.

Detailed mitigation plans and an implementation schedule will be developed for those measures selected for implementation; however, without knowing the scope of potential mitigation, the plans and schedule are not included as part of this study.

5.0 Schedule

This section summarizes our planned schedule for implementation of the study and preparation and submittal of the Pinecrest Lake Level Study Report (Study Report), pending approval of this Plan.

<table>
<thead>
<tr>
<th>Date</th>
<th>Deliverable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring 2010</td>
<td>Hold facilitated meeting public meeting at the direction of the State Water Board. The objective of the meeting is to obtain further feedback on recreational uses as noted in Task 1.</td>
</tr>
<tr>
<td>Spring/Summer 2010</td>
<td>Photo-point consultation and location selection meeting in the field with resource agencies. Begin photo-point survey after end-of-spill at a lake level elevation of approximately 5,617 ft msl.</td>
</tr>
<tr>
<td>Summer-Fall 2010</td>
<td>Conduct photo-point surveys at 2 ft intervals from 5,617 (ft) msl to 5,610 ft msl, and at one ft intervals from 5,610 ft msl to 5,595 (ft) msl. Supplementary surveying for recreation features.</td>
</tr>
<tr>
<td>Fall 2010</td>
<td>Conduct additional ground survey (data collection) from 5,617 ft msl to 5,595 (ft) msl.</td>
</tr>
<tr>
<td>December 2010</td>
<td>Plan for, and schedule meeting with resource agencies in advance of preparation of final Study Report.</td>
</tr>
<tr>
<td>January 14, 2011</td>
<td>Draft Study Report submitted to the State Water Board, CDFG, Forest Service, and TUD for review and comment</td>
</tr>
<tr>
<td>February 14, 2011</td>
<td>Agency comments of draft Study Report due to PG&amp;E.</td>
</tr>
<tr>
<td>March 1, 2011</td>
<td>Submit final Study Report, after comments from agencies are addressed, revised Study Report submitted to State Water Board Deputy Director for review and approval.</td>
</tr>
</tbody>
</table>
6.0 ANALYSIS

For each of the recreational features analyzed, the study will describe the relevant recreational elements (i.e., available beach area, bottom of boat ramp, accessibility of fishing platform, etc.) relative to lake level elevations of the Study. Profile figures developed during the analysis will graphically depict the features and incremental lake level elevations.

The analysis will include an evaluation of the observed relationship between lake level elevation and recreation usability for the seven recreational features and assessed using the impact criteria established in Task 1.

The photo-points will be used to monitor the recreational features at lake level elevations below 5,617 ft msl. The photo-point survey will provide pictures of each recreational feature in conjunction with all incremental lake level elevations as described above. Photos will be provided as an appendix in the Lake Level Study. The recreational features and, the potential impacts will be presented in a tabular format.

7.0 CONSISTENCY WITH GENERALLY ACCEPTED PRACTICE

The Lake Level Study will be performed according to accepted technical and data collection practices. A high precision GPS will be used to measure location and supplemented with standard survey equipment as needed. All photo-points will be shot from a tripod-mounted digital camera at multiple focal lengths (to be determined on site) and high depth of field to provide clear views of relevant features.

8.0 PRODUCTS

8.1 DRAFT LAKE LEVEL STUDY REPORT

A draft Study Report will be prepared and submitted to the State Water Board, Forest Service, CDFG, and TUD for review and comment. This draft Study Report will:
• Document recreational features at lake level elevations below 5,617 ft msl to 5,595 ft msl. Data collected from 5,617 ft msl to 5,610 ft msl will be considered baseline condition.

• Evaluate, in accordance with the criteria established in Task 1 and Section 6.0, the potential impacts to recreational features at elevations between 5,608 ft msl and 5,595 ft msl.

• Identify possible mitigation measures for potential impacts to recreational usability below a lake level of 5,608 ft msl, pursuant to criteria established in Task 1 and Section 6.0.

• The recreational features, the potential impacts, and measures to mitigate potential impacts, will be presented in a tabular format.

The agencies will be provided with a 30-day review and comment period. Comments will be due to PG&E at the conclusion of the 30-day agency review and comment period.

8.2 **FINAL LAKE LEVEL STUDY REPORT**

Comments received from the participating agencies will be addressed and a final Study Report prepared. The activities in this task include:

• Review and address comments.

• Incorporate appropriate revisions into a final Study Report.

• PG&E will meet with commenting agencies prior to submission of final Report. Send final Study Report to the Deputy Director of the State Water Board for approval by March 1, 2011.

9.0 **REFERENCES**

APPENDIX A

CONSULTATION
RESPONSE TO COMMENTS TABLE
## PINECREST RESERVOIR LAKE LEVEL STUDY PLAN
### RESPONSE TO COMMENTS

<table>
<thead>
<tr>
<th>Page #</th>
<th>Section, Topic or Issue</th>
<th>Paragraph or Bullet</th>
<th>Comment Number:</th>
<th>Comments</th>
<th>Response to Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>2.0 Goals and Objectives</td>
<td>State Water Board Comment #1</td>
<td>As stated, the goal of the study is to determine the minimum reservoir elevation(s) necessary to protect recreational users. Condition #4 specifically lists day-use beaches and other areas as directed by the State Water Board. State Water Board staff has determined there are other facilities/structures that are sensitive to reservoir surface elevation. Water surface elevations can impact usability of the boat ramp, gas/boat docks, and expose rocks that are obstacles to boating. These facilities/structures must be included in the Plan.</td>
<td>Adopted. Based on consultation with the State Water board, Forest Service, and TUD on 12-9-09, a total of seven (?) recreation features will be evaluated under this Study. See response to Comment #55.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>3.0 Study Area</td>
<td>State Water Board Comment #2</td>
<td>The study area needs to be expanded to include the area northeast of the marina. The U.S. Forest Service recently banned dogs from the main beach and day-use area. Dog owners are now using the beach northeast of the marina and east of the handicap fishing access. The area northeast of the marina is also used for mooring boats. As stated above, the study area also needs to include certain areas of the lake where boulders become exposed and cause a navigation hazard. The boulders impact both sail boats and motor boats. The exact area of study should be defined through consultation with long-term recreational users of the lake. Collection of elevation data on those boulders identified through consultation will be important for identification of minimum water surface elevation.</td>
<td>Adopted. See response to Comment #1.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>4.0 Methods</td>
<td>State Water Board Comment #3</td>
<td>The Plan proposes to assess three water surface elevations between 5,608 and 5,604 feet. This range of elevations and two-foot stage changes between elevations will not yield information with adequate resolution for decision-making. The objective of the study is to determine the reservoir elevation(s) at which user satisfaction diminishes or recreational use is impacted. The study should start at full reservoir pool and measure at a minimum of one foot elevation steps down to a level of 5,600 feet or lower. The lowest elevation for study may be determined after consultation with recreational users and reviewing existing information.</td>
<td>Adopted. Based on consultation with the State Water board, Forest Service, and TUD on 12-9-09, the Study will assess recreation use from a lake level of 5,617 ft msl to 5,595 ft msl. See response to Comment #51.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>4.0 Methods</td>
<td>State Water Board Comment #4</td>
<td>Five transects may not provide adequate information on the relationship between beach use and changes in recreational opportunities at various water surface elevation. A more robust tool such as a land based survey (under the supervision of a licensed surveyor) or photogrammetry may be required.</td>
<td>Adopted. Using the 2009 aerial topography and digital orthophoto provided by TUD, a digital terrain model of the lake bottom will be prepared along with 3D graphics to depict and visualize different lake elevations relative to each of the seven recreation features.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>4.0 Methods</td>
<td>State Water Board Comment #5</td>
<td>The Plan includes development of up to 10 photographic survey points at the three proposed water surface elevations. Photographic surveys should be collected at one foot elevation steps as described above. The elevation at which the boat ramp and gas/boat docks become unusable, and the elevation at which rocks are exposed, should be discrete points that are also measured and photographed.</td>
<td>Adopted with Modification. The photo-point surveys will be initiated after cessation of spill at an elevation of approximately 5,617 ft msl, and conducted at 2 ft intervals down to a lake level elevation of 5,610 ft msl, and one foot intervals down to 5,595 ft msl.</td>
<td></td>
</tr>
<tr>
<td>Page</td>
<td>Section, Topic or Issue</td>
<td>Paragraph or Bullet</td>
<td>Comment Number:</td>
<td>Comments</td>
<td>Response to Comments</td>
</tr>
<tr>
<td>------</td>
<td>------------------------</td>
<td>---------------------</td>
<td>-----------------</td>
<td>----------</td>
<td>---------------------</td>
</tr>
<tr>
<td>2</td>
<td>4.0 Methods</td>
<td>State Water Board</td>
<td>Comment #6</td>
<td>Recreational surveys conducted during the relicensing, and information submitted by the Friends of Pinecrest show that there are many long-time users of the lake. Completion of the Plan will require surveys of cabin owners, campers, day users, and organizational campers. Historic knowledge of recreational lake users is critical to establishing the water surface elevations that support each of the recreational uses. Information from long-time users is necessary to identify hazard rocks, and determine conditions that make beaches unusable for each recreational use. The Plan should describe how surveys of long-time users will be incorporated. PG&amp;E should hold a public meeting to gather additional information. Stakeholders that should be invited to the meeting include the Pinecrest Lake Resort, Friends of Pinecrest, and the Central Sierra Environmental Resource Center.</td>
<td>Adopted with Modification. Based on consultation with the State Water board, Forest Service, and TUD on 12-9-09, user surveys are not required. Instead, a combination of quantitative and qualitative data will be collected to track the effect of reservoir drawdown on usability of the recreation features. However, a public outreach meeting to discuss the Plan to be convened by the State Water Board is now included in the Plan. See response to Comment #64.</td>
</tr>
<tr>
<td>2</td>
<td>4.0 Methods</td>
<td>State Water Board</td>
<td>Comment #7</td>
<td>Existing information should be collected and used in the development of the final Plan. Tuolumne Utilities District conducted a limited survey of the reservoir that could be useful in developing the final Plan. The U.S. Forest Service may also have additional information on recreational use and reservoir elevation.</td>
<td>Adopted. Task 1 consists of compilation and review of background information, such as historical operations and recreational use, including any data previously collected by the Forest Service and Licensee. Also see response to Comment #4.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>State Water Board</td>
<td>Comment #8</td>
<td>In addition to identifying the minimum reservoir elevation(s) that supports recreational uses, the final report should include recommendations for improvements that can protect recreational uses at lower reservoir elevations. When conducting the study the consultants should, if possible, identify the specific impact to recreational use below the identified minimum reservoir elevation. Consultation with recreational users will be an important part of developing recommendations for improvements. When possible, the reservoir minimum reservoir elevation that can be achieved with improvements should be identified.</td>
<td>Not Adopted. See response to Comment #6.</td>
</tr>
</tbody>
</table>

**Written Comments Received from the Tuolumne Utilities District (TUD) on November 5, 2009**

**TUD Comment #9**

PG&E's first draft only studied reservoir elevation to 5,604, whereas the 401 Certification required PG&E to "determine the minimum Pinecrest Reservoir elevation between End of Spill and Labor Day that protects recreational uses." Thus, using a minimum elevation of 5,604 inappropriately predetermines the outcome of the study. However we do recognize the need for a floor, otherwise the study could go on forever, so we chose 5,595, which is slightly lower than reservoir elevation during the 1976 drought. Due to the increased instream flows required in the 401 Certification, evaluation to the slightly lower elevation is justified. …

Adopted. See response to Comment #3.

**TUD Comment #10**

Added a requirement that mitigation measures will be identified that will allow the reservoir elevation to be dropped further, and still preserve recreational uses, than what would be possible without those mitigation measures. This change is consistent with discussions and agreements reached during preparation of the final 401 Certification conditions.

Adopted with Modification. Section 4.0 states that "once the drawdown effects are identified, mitigation measures will be identified and preliminary descriptions will be developed."
<table>
<thead>
<tr>
<th>Page #</th>
<th>Section, Topic or Issue</th>
<th>Paragraph or Bullet</th>
<th>Comment Number</th>
<th>Comments</th>
<th>Response to Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>TUD</td>
<td>Comment #11</td>
<td></td>
<td></td>
<td>Expanded the generation and resolution of data to include the production of a base map with a 40-foot scale and single foot contours and a digital terrain model. The map and model will help establish the recreational facilities impacted by each single foot drop in elevation and will be of adequate resolution to provide for knowledge based decision making.</td>
<td>Adopted. See response to Comment #4.</td>
</tr>
</tbody>
</table>

**REVISIONS MADE IN THE PLAN BY TUD**

<table>
<thead>
<tr>
<th>Page</th>
<th>Section, Topic or Issue</th>
<th>Paragraph or Bullet</th>
<th>Comment Number</th>
<th>Comments</th>
<th>Response to Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>3.0 Study Area</td>
<td>1st Paragraph</td>
<td>TUD Comment #12</td>
<td>A <strong>total minimum</strong> of five (5) facilities/recreational areas will be evaluated under this study.</td>
<td>Adopted with Modification. See response to Comment #1.</td>
</tr>
<tr>
<td>2</td>
<td>3.0 Study Area</td>
<td>2nd Paragraph</td>
<td>TUD Comment #13</td>
<td>Figure 1 presents a map identifying the <strong>initial five (5)</strong> recreational facilities and uses under consideration in this study plan.</td>
<td>Adopted with Modification. See response to Comment #1.</td>
</tr>
<tr>
<td>2</td>
<td>4.0 Methods</td>
<td>TUD Comment #14</td>
<td></td>
<td>The Lake Level Study consists of <strong>five primary four</strong> tasks: . . .</td>
<td>Adopted with Modification. See response to Comment #1.</td>
</tr>
<tr>
<td>2</td>
<td>4.0 Methods</td>
<td>TUD Comment #15</td>
<td></td>
<td>. . . and 4) analyze the information, and 5) identify measures to be implemented to mitigate any potential impacts to specified recreation uses, the implementation of which would allow the reservoir surface elevation to be further lowered.</td>
<td>Adopted with Modification. See response to Comment #10.</td>
</tr>
<tr>
<td>3</td>
<td>4.0 Methods</td>
<td>TUD Comment #16</td>
<td></td>
<td>This study plan will <strong>evaluate the incremental effect of lowering the minimum reservoir water surface elevation below 5,617</strong> in the range of 5,608 to 5,604 feet (ft) mean sea level (MSL). <strong>For each foot below 5,617</strong> (ft), the plan will describe the effect on the selected recreational facilities and uses if any, and will identify measures that will mitigate that effect, according to established criteria, to an acceptable level, if necessary. The plan will continue to reduce the examined elevation until elevation 5,595 (ft) MSL.</td>
<td>Adopted. See response to Comment #3.</td>
</tr>
<tr>
<td>4</td>
<td>4.0 Methods</td>
<td>2nd Bullet</td>
<td>TUD Comment #17</td>
<td>Task 1 - Obtain/Review Existing Information Task 1 consists of the following: . . .</td>
<td>Adopted.</td>
</tr>
</tbody>
</table>

---

1 Lake elevation values used in this study and report reference the Pinecrest lake elevations that are used in PG&E lake level measurements and reference the spillway crest as 5611.5 feet.
<table>
<thead>
<tr>
<th>Page #</th>
<th>Section, Topic or Issue</th>
<th>Paragraph or Bullet</th>
<th>Comment Number: TUD Comment #18</th>
<th>Comments</th>
<th>Response to Comments</th>
</tr>
</thead>
</table>
| 5      | 4.0 Methods 1st Paragraph | The base map shall Include:  
Task 2 consists of collecting elevation data at five locations among the recreational areas listed above. Data will be collected at three reservoir water surface elevations between 5,604 and 5,608 ft MSL. 
Data collection activities in this task include:  
- Plan and coordinate a 40 foot scale one foot contour interval map.  
- Meet with representatives from the State Water Board, California Department of Fish and Game (CDFG), US Department of Agriculture-Forest Service (USDA-FS), and Tuolumne Utilities District (TUD) to: a) establish agreement on recreational facilities to be surveyed; b) establish agreement on photographic survey points; c) establish recreation usability and impact criteria against which all potential water surface elevation impacts will be measured; and d) identify data gaps (if any) and confirm photo point locations to assess recreational facilities and uses. |
|        |                        |                     | Adopted. Section 4.1 states "Licensee will meet with representatives from the State Water Board, CDFG, Forest Service, and TUD in the field to select specific locations for data collection," and "Licensee in consultation with the agencies will identify recreational uses and usability criteria of the recreational features and impact criteria against which all potential lake level elevation impacts will be measured." Also see response to Comments #1 related to number of recreation features to be included in this study. |
| 5      | 4.0 Methods 1st and 2nd Paragraph | Task 2 – Data Collection/Survey  
Task 2 consists of collecting elevation data at the agreed upon recreational facilities and uses identified in Task 1. Data will be collected at all reservoir water surface elevations below 5,617 ft MSL, that are accessible during winter of 2009 and fall of 2010. (removed bullet formatting from paragraph)  
Data collection activities in this task include:  
- Collect data at the selected recreational facilities and locations (Figure 2). The digital terrain model will be used to generate transect profiles perpendicular to the shoreline for agreed upon recreational features. Profiles will be developed at minimum, for the Day Use Area beach (2 profiles), the marina, boat ramp, and the handicap fishing access. The agreed upon recreational facilities and uses/features will be identified and measured as illustrated in Figure 2. |
<p>|        |                        |                     | Adopted with Modification. See response to Comments #1 and #4. |</p>
<table>
<thead>
<tr>
<th>Page #</th>
<th>Section, Topic or Issue</th>
<th>Paragraph or Bullet</th>
<th>Comment Number</th>
<th>Comments</th>
<th>Response to Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>4.0 Methods</td>
<td>1st Paragraph</td>
<td>TUD Comment #20</td>
<td>The data collection and color aerial ortho-photo ground survey will be performed between in the winter of 2009/10 and fall (October 2010) in a key time for this survey because the water surface elevation in the lake is low and will allow direct measurement of elevations. The base map field crews can measure attributes along the transects that may affect recreational use that are otherwise submerged during the recreation season. Also, there is a relatively low risk of weather delays at this time, compared to be 40 foot scale, one foot Contour Interval mapping, later in the year. Each transect profile will be measured beginning above the maximum operational elevation of the reservoir. Each transect will be measured with an overall color aerial ortho-photo of the Pinecrest lake shore study area. The extent of limited resource-grade Global Positioning System (GPS) unit. Each transect will be profiled from the upslope endpoint down to the water's edge. GPS data will permit mapping will include the area just northeast the profile locations relative to the recreation areas of the boat dock/marina, to just east of the handicapped fishing access. Prominent boulders and stumps in these recreational areas will be field located horizontally and vertically, using a geographic information system (GIS) will be prepared to manage the field data that is collected. The 40 foot scale one foot Contour Mapping and color ortho photo. Each profile will include measurement of the water surface elevation, which will be used as a base map in the GIS. Transect and other data that is collected as part to link transect measurements to reservoir operations. Water surface elevations, as measured by PG&amp;E, for the days and times of the survey this study will be incorporated in the GIS to assist in analysis.</td>
<td>Adopted with Modification. See response to Comments #1, #4 and #5.</td>
</tr>
<tr>
<td>8</td>
<td>4.0 Methods</td>
<td>2nd Paragraph</td>
<td>TUD Comment #21</td>
<td>Develop a photographic survey of select recreational features at the full range of lake elevations. The being considered. Up to 40 photo-points will be selected in Task 1 consultation with the resource agencies and will be measured by GPS. These photo-points will be used to monitor the characteristics and usability of the selected recreational features, pursuant to the criteria established in Task 1 at the different water surface elevations. The photo-point survey will be initiated after cessation of spill at an elevation of about 5,617 ft MSL and at each (one) foot elevation drop below 5,617 ft MSL.</td>
<td>Adopted with Modification. See response to Comments #5.</td>
</tr>
</tbody>
</table>
| 9      | 4.0 Methods             | 1st Bullet          | TUD Comment #22 | Task 3 - Tabulate Field Data and Map  
- Photo-point locations and profiles will be mapped. The data will be entered into a GIS platform to plot the profile locations in plan view and in profile. A digital terrain model of the lake bottom will be prepared along with 3D graphics to depict and visualize different lake elevations relative to dry use beach area, handicapped fishing access and boat dock marina facility. One site map and five (5) profiles from these data will be developed during the analysis. | Adopted. See response to Comment #4. |
## Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Deliverable</th>
<th>Comments</th>
<th>Response to Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring/Summer 2010</td>
<td>Photo-point consultation and location selection meeting in the field with resource agencies. Begin photo-point survey after end-of-spill at a water surface elevation of approximately 5,617 ft MSL.</td>
<td>Adopted with Modification. Modification made to increment only. See response to Comments #3 and #5.</td>
<td></td>
</tr>
<tr>
<td>Summer-Fall 2010</td>
<td>Conduct photo-point surveys at single-foot increments below additional elevations of 5,608 and 5,617 ft MSL to 5,604 ft MSL.</td>
<td>Adopted.</td>
<td>---------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Winter 2010 - Fall 2010</td>
<td>Conduct ground survey (data collection) between following at an elevation 5,617 to 5,595 ft MSL.</td>
<td>Adopted.</td>
<td>---------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>December 2010</td>
<td>Plan for and schedule meeting with resource agencies in advance of preparation of final Draft Lake Level Study.</td>
<td>Adopted.</td>
<td>---------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>

### Analysis

**1st Paragraph**

For each of the recreational facilities characterized by profiles as discussed above, the study will describe the elevation of relevant recreational elements (i.e., available beach area, boat ramp accessibility, etc.) relative to water surface elevations of the reservoir within the range under study. Profile figures developed during the analysis will graphically depict the surveyed cross-sections within the range of water surface elevations.

**Adopted.** See response to Comment #1.

**2nd Paragraph**

The analysis will include an evaluation discussion of the observed relationship between the agreed upon recreational facilities and uses, the reservoir water surface elevation, water surface elevations will also be identified and evaluated as they pertain to: when the boat ramp becomes unusable; when docks become perched or unusable; when beach access/recreation usability becomes hampered or unusable; when water access becomes difficult; or when access for handicapped persons becomes difficult or impossible.

**Adopted with Modification.** Section 6.0 now states “The analysis will include an evaluation of the observed relationship between the agreed upon recreational feature, the lake level elevation recreation usability, and any additional impact criteria established in Task 1.”

**3rd Paragraph**

Additional issues of particular interest will be noted in the analysis of each of the profiles, including: the lowest usable safe elevations for relevant facilities, such as the bottom of the boat ramp; whether fishing is possible from platforms that are perched; or if the marina docks become perched; the slope of the land or changes in substrate (i.e., sand to rocks) and impact criteria established in Task 1; when public access and/or pedestrian traffic might become a safety concern.

**Adopted with Modification.** See response to Comment #25.

**4th Paragraph**

The photo-points will be used to monitor the recreational facilities and uses at reservoir water surface elevations of 5,604, 5,606 and 5,608 feet MSL in single-foot increments. The photo-point survey will provide pictures of each recreational facility in conjunction with all the three water surface elevations. Photos will be provided as an appendix in the Lake Level Study.

**Adopted.** See response to Comment #3.
<table>
<thead>
<tr>
<th>Page #</th>
<th>Section, Topic or Issue</th>
<th>Paragraph or Bullet</th>
<th>Comment Number</th>
<th>Comments</th>
<th>Response to Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>6.0 Analysis</td>
<td>1st Paragraph TUD</td>
<td>Comment #28</td>
<td>If adverse impacts to selected recreational facilities and uses are identified, the study will describe measures to be implemented to mitigate the identified impacts. Potential alternative measures to be considered include, but are not limited to: • modification of the existing boat dock configuration to increase usability and accessibility at a wider range of reservoir elevations • removal or implementation of public safety measures to reduce boating hazards at a wider range of reservoir elevations • enhancement of day use area beaches to increase user acceptability at a wider range of reservoir elevations • enhancement of handicap fishing access to increase user acceptability at a wider range of reservoir elevations. The recreational facilities and uses, the potential impacts, and the measures to mitigate potential impacts will be presented in a tabular format.</td>
<td>Adopted with Modification. Section 4.6 has been edited to state: “Once the drawdown effects are identified, mitigation measures will be identified and preliminary descriptions will be developed. Mitigation measures will be focused on the seven specific recreation features to increase usability at a wider range of reservoir elevations. Detailed mitigation plans and an implementation schedule will be developed for those measures selected for implementation; however, the plans and schedule are not included as part of this study.” Also, the last bullet in Section 8.1 states “The recreational features, the potential impacts, and measures to mitigate potential impacts, will be presented in a tabular format.”</td>
</tr>
<tr>
<td>11</td>
<td>7.0 Consistency With Generally Accepted Practice</td>
<td>1st Paragraph TUD</td>
<td>Comment #29</td>
<td>. . . A high precision GPS will be used to measure location and supplemented with standard survey equipment as needed. The aerial topography shall be performed by a qualified photogrammist, used to measure transect profiles. . . .</td>
<td>Adopted. See response to Comment #4.</td>
</tr>
<tr>
<td>12</td>
<td>8.1 Draft Lake Level Study</td>
<td>1st Bullet TUD</td>
<td>Comment #30</td>
<td>Document recreational facilities/uses at reservoir water surface elevations below of 5,608, 5,606, and 5,604 ft MSL to 5,617 MSL.</td>
<td>Adopted. See response to Comment #3.</td>
</tr>
<tr>
<td>12</td>
<td>8.1 Draft Lake Level Study</td>
<td>2nd Bullet TUD</td>
<td>Comment #31</td>
<td>Evaluate, in accordance with the criteria established in Task 1 and Section 6.0, the potential impacts to recreational facilities and uses caused by lowering the surface relationship between water elevation of the reservoir.</td>
<td>Adopted. Second bullet in Section 8.1 now states “Evaluate, in accordance with the criteria established in Task 1 and Section 6.0, the potential impacts to recreational features caused by lowering the lake level elevation from 5,608 ft msl to 5,595 ft msl.”</td>
</tr>
<tr>
<td>12</td>
<td>8.1 Draft Lake Level Study</td>
<td>3rd Bullet TUD</td>
<td>Comment #32</td>
<td>Evaluate all possible mitigation measures that will allow a lower minimum lake level and recreational use. The reservoir water surface elevations at which protects the recreational facilities and uses pursuant to criteria established in Task 1 and Section 6.0.</td>
<td>Adopted with Modification. Fourth bullet in Section 8.1 has been modified to state: “Identify possible mitigation measures for the new lower minimum lake level below 5,608 ft msl, pursuant to criteria established in Task 1 and Section 6.0.”</td>
</tr>
<tr>
<td>12</td>
<td>8.1 Draft Lake Level Study</td>
<td>4th Bullet TUD</td>
<td>Comment #33</td>
<td>• Based upon the impacts and mitigation measures identified, recommend a new minimum water surface elevation. The recreational facilities and uses, the potential impacts, the measures to mitigate potential impacts, the corresponding estimated planning, design and construction costs, and the new minimum water surface elevation will be presented in a tabular format.</td>
<td>Adopted with Modification. Fifth bullet in Section 8.1 now states: “The recreational features, the potential impacts, and measures to mitigate potential impacts, will be presented in a tabular format.”</td>
</tr>
<tr>
<td>13</td>
<td>8.2 Final Lake Level Study</td>
<td>1st Bullet TUD</td>
<td>Comment #34</td>
<td>PG&amp;E will meet with commenting agencies prior to submission of final draft; send Final Lake Level Study Report to the Deputy Director of the State Water Board for approval by March 1, 2011.</td>
<td>Adopted with Modification. Third bullet in Section 8.2 now states: “Licensee will meet with commenting agencies prior to submission of Final Report. Final Study Report will be sent to the Deputy Director of the State Water Board for approval by March 1, 2011.”</td>
</tr>
</tbody>
</table>
# PINECREST RESERVOIR LAKE LEVEL STUDY PLAN
## RESPONSE TO COMMENTS

<table>
<thead>
<tr>
<th>Page #</th>
<th>Section, Topic or Issue</th>
<th>Paragraph or Bullet</th>
<th>Comment Number:</th>
<th>Comments</th>
<th>Response to Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Written Comments Received from the Forest Service on November 19, 2009</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Overview</td>
<td>Forest Service Comment #35</td>
<td></td>
<td>This Plan provides a framework for the refinement of the minimum summer lake level that will meet goals of the recreation beneficial use of water and water supply, power and ecological objectives of streamflow in the South Fork Stanislaus River. The Forest Service remains committed to the intent of our 4(e) Conditions. These objectives should be coordinated as best as possible to provide the optimum use of water each year, recognizing annual flow variability.</td>
<td>Clarification. PG&amp;E appreciates the Forest Service's recognition of considerations that are related to lake operations.</td>
</tr>
<tr>
<td>2</td>
<td>4.0 Methods</td>
<td>1st Paragraph</td>
<td>Forest Service Comment #36</td>
<td>1. Lake Level Elevations—the elevations should cover a broader range than 5,608 to 5,604 feet to reflect interests of recreational and water supply objectives. The Forest Service 4(e) condition specifies a “target level” of 5,610 feet. There is uncertainty about the lower levels at which recreation facilities (beaches, marina, boat ramp, etc.) remain functional and/or desirable, or could be adjusted to by improvements to those facilities. For example, during relicensing proceedings it was anecdotally believed that the minimum functional level for the marina was 5,606 feet. Observation of the marina on September 23, 2009 revealed it was functional at 5,603 feet. As such, the minimum level in the Plan should be at least 5,600 or a similar elevation. In summary, it is essential that a broader range of elevations is evaluated to fully inform study analysis of the interests of recreation and water supply objectives.</td>
<td>Adopted. See response to Comment #3.</td>
</tr>
<tr>
<td>4</td>
<td>4.0 Methods</td>
<td>1st Bullet</td>
<td>Forest Service Comment #37</td>
<td>2. Task 1—the Forest Service has background information on recreational lake levels and related facilities that should be included in the study. It is available upon request.</td>
<td>Adopted. First bullet in Section 4.1 now states “Compilation and review of background information, such as historical operations and recreational use, including any data previously collected by the Forest Service and Licensee.”</td>
</tr>
<tr>
<td>4</td>
<td>4.0 Methods</td>
<td>2nd Paragraph</td>
<td>Forest Service Comment #38</td>
<td>3a. Ground survey—the proposed time period (October 2010) provides insufficient time to gather data on recreation use for the study. The time period should be extended to begin with the summer recreation use period and end when the water level reaches the agreed to lower level (i.e. 5,600 feet). From the Forest Service’s perspective this is essential to understand recreation use patterns (including water-based and land-based recreation use patterns) from high water through decreasing levels as the season proceeds. Without this information it is not possible to know the effects on recreation at varying water levels.</td>
<td>Clarification. See response to Comment #6.</td>
</tr>
<tr>
<td>6</td>
<td>4.0 Methods</td>
<td>1st Bullet</td>
<td>Forest Service Comment #39</td>
<td>3b. Photo record—the proposed time period should be expanded to capture water level-recreation use relationships during the summer-to-fall recreation season.</td>
<td>Adopted. See response to Comments #3 and #5.</td>
</tr>
<tr>
<td></td>
<td>4.0 Methods</td>
<td>2nd Bullet</td>
<td>Forest Service Comment #40</td>
<td>3c. Hydrologic data—hydrologic data should be collected in relation to various water levels during the study period to provide relationships between recreation and water supply concerns. This data is already available and needs to be incorporated in the study for analysis purposes to inform the effects of various water levels on recreation use and vice versa. This is an important missing component of the Plan.</td>
<td>Not Adopted. Evaluation of consumptive use and minimum flows in relation to lake level elevation is beyond the scope of this study.</td>
</tr>
</tbody>
</table>

Pinecrest Reservoir Lake Level Study Plan

Spring Gap-Stanislaus Project, FERC Project No. 2130
© 2010, Pacific Gas and Electric Company

A-9  May 2010
<table>
<thead>
<tr>
<th>Page #</th>
<th>Section, Topic or Issue</th>
<th>Paragraph or Bullet</th>
<th>Comment Number:</th>
<th>Comments</th>
<th>Response to Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.0</td>
<td>Methods</td>
<td>Task 2 Data</td>
<td>Collection</td>
<td>3d. Facility improvements—potential improvements to recreational facilities should be included in the Plan to understand how they may affect water supply and recreation. For example, will the beach improvements required of PG&amp;E provide favorable access to lower water levels, and can the marina and boat ramp be retrofitted to allow access to lower water levels? Again, this component of data is missing from the Plan.</td>
<td>Adopted with Modification. See response to Comment #28.</td>
</tr>
<tr>
<td>4.0</td>
<td>Methods</td>
<td></td>
<td></td>
<td>3e. Task 3—Include results of hydrologic data and facility improvement information.</td>
<td>See response to Comments # 40 and #41.</td>
</tr>
<tr>
<td>4.0</td>
<td>Methods</td>
<td></td>
<td></td>
<td>3f. Add Task: Literature review—include a literature review summarizing lake level impacts to recreation user satisfaction and use levels. Results should provide a basis for predicting long term use patterns and potential need for addressing future facility needs.</td>
<td>Adopted with Modification. See response to Comment #37. Where appropriate, relevant literature will be cited.</td>
</tr>
<tr>
<td>5.0</td>
<td>Schedule</td>
<td></td>
<td></td>
<td>1. The deliverable for the Summer-Fall 2010 period should be revised per comments made above (e.g., the ground survey should start in the summer and continue periodically until lake water level declines to an agreed upon lower level such as 5,600 feet). Delete the next row that starts with “Fall 2010.”</td>
<td>Adopted with Modification. Aerial topography was completed by TUD in November 2009. All other surveys will be conducted throughout the Summer and Fall 2010 as the lake level elevation drops. Also see response to Comment #3.</td>
</tr>
<tr>
<td>6.0</td>
<td>Analysis</td>
<td></td>
<td></td>
<td>1. Recreation Implementation Plan—integrate the applicable effects of the requirements of the Recreation Implementation Plan (Forest Service 4(e) Condition 29) with the components of this Plan since the beach plan may affect recreation use patterns at lower water elevations. For example, required rock removal may attract recreationists to lower water levels if it improves the beach surface, and/or beach sand improvements may keep recreationists at relatively higher levels.</td>
<td>Adopted with Modification. Specific elements of the recreation plan may be considered, if relevant. Based on consultation with the State Water board, Forest Service, and TUD on 12-9-09, mitigation measures will be identified, but an implementation plan will not be addressed in this plan.</td>
</tr>
<tr>
<td>6.0</td>
<td>Analysis</td>
<td></td>
<td></td>
<td>2. Hydrologic data—include analysis of the effects of various lake levels on water supply and recreation across the broader range of study elevations described above.</td>
<td>Not Adopted. See response to Comment #40.</td>
</tr>
<tr>
<td>6.0</td>
<td>Analysis</td>
<td></td>
<td></td>
<td>3. Facility Improvements—include analysis of effects of facility improvements on recreation and water supply</td>
<td>Not Adopted. See response to Comment #45.</td>
</tr>
<tr>
<td>6.0</td>
<td>Analysis</td>
<td></td>
<td></td>
<td>4. Minimum Lake Level—consideration in the analysis should be given to prescribed annual flexibility in the minimum level based on such factors as a finer-scale look at water year types, end of spill dates, etc. This approach may be a viable alternative to previous approaches such as annual consultation or a fixed level except in extremely dry years.</td>
<td>Adopted with Modification. See response to Comment #3.</td>
</tr>
<tr>
<td>Page #</td>
<td>Section, Topic or Issue</td>
<td>Paragraph or Bullet</td>
<td>Comment Number:</td>
<td>Comments</td>
<td>Response to Comments</td>
</tr>
<tr>
<td>-------</td>
<td>-------------------------</td>
<td>---------------------</td>
<td>----------------</td>
<td>----------</td>
<td>----------------------</td>
</tr>
<tr>
<td></td>
<td>Summary</td>
<td>Forest Service</td>
<td>Comment #49</td>
<td>This Plan does not include a suitable elevation range to inform decisions on the minimum lake level for Pinecrest Reservoir. In its present form this Plan provides little more information than is presently known; that is, the Forest Service already has beach area data and a photo record at various elevations from 5,617 feet (high water) down to 5,608 feet, and some photos of lower levels. It is also silent on effects of potential changes to facilities such as the boat ramp, marina, and beach improvements required of PG&amp;E in the FERC license. But most of all, the Plan does not account for recreation use patterns during the summer in the study area. It is essential for all concerned parties to be adequately informed on this factor in making a decision on minimum lake level. Recreation use on the beaches, marina and boat ramp areas is present and easily observed and recorded during the summer season. The Plan should be revised to account for the factors described in these comments.</td>
<td>Adopted with Modification. See response to Comment #3. Also see response to Comment #5. Recreation feature usability data will be collected during summer and fall months.</td>
</tr>
<tr>
<td></td>
<td>Verbal Comments Received at the Consultation Meeting on December 9, 2009</td>
<td>01a. Study Requirements - Minimum Elevation</td>
<td>Comment #50</td>
<td>The study's elevation range end at 5,600 ft msl or lower, rather than 5,604 ft msl. TUD proposed the study's minimum elevation range be 5,595 ft msl based on historical operations information. State Water Board recommended it be at least 5,600 ft msl.</td>
<td>Adopted. The minimum elevation for the study will be 5,595 ft msl.</td>
</tr>
<tr>
<td></td>
<td>01b. Study Requirements - Maximum Elevation</td>
<td>Comment #51</td>
<td>The study's elevation range begin at the full reservoir pool. 401 Certification requires a minimum reservoir elevation of 5,608 ft msl between the time spill ends and Labor Day. Baseline recreation data is needed above that elevation to understand and compare potential effects of drawdown below 5,608 ft.</td>
<td>Adopted. The maximum elevation for the study will be 5,617 ft msl. Baseline data will be developed for elevations between 5,617 and 5,610 ft msl. Elevations between 5,608 and 5,595 ft msl are identified as the target range for evaluation of potential effects of lowered lake levels. Only effects identified within this lower range are subject to mitigation.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>01c. Study Requirements - Measurement Increments</td>
<td>Comment #52</td>
<td>Data collected at a minimum of one foot contours. This topic is tied to 5b. Study Requirements – Scope – photographic Survey. TUD’s preference, from an engineering perspective, is to use a digital terrain model (DTM), which can provide more data and be used as a visual tool for the public. The benefit is that a topographic map and cross-sections can be easily developed for any lake level. To that end, TUD has contracted the services of a photogrammetrist to develop a DTM, contour map with one-foot interval, and an orthophoto of the study area. This data would be available in 2 to 3 weeks.</td>
<td>Adopted. TUD will provide the DTM data to PG&amp;E for use in this study. PG&amp;E will evaluate the data when it is available, and barring any conflicts or issues with the data, will modify the Plan to reflect this new development. FOLLOW-UP: Tom Scesa, TUD, provided PG&amp;E and ENTRIX (Mike Rudd) with the digital terrain model data and aerial imagery on December 21, 2009.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>01d. Study Requirements - Measurement Reference</td>
<td>Comment #53</td>
<td>Lake elevation values reference PG&amp;E existing lake level measurements and the spillway crest as 5,611.5 ft msl.  TUD requested clarification/relationship of elevations taken from PG&amp;E datum (5,611.5 ft msl) to USGS datum. After a quick investigation, Scott Fee stated that the USGS datum and PG&amp;E datum are equal at Pinecrest.</td>
<td>Adopted. Plan now incorporates a clarification that the data used is taken from PG&amp;E datum, which is equal to the USGS datum.</td>
<td></td>
</tr>
<tr>
<td>Page #</td>
<td>Section, Topic or Issue</td>
<td>Paragraph or Bullet</td>
<td>Comment Number:</td>
<td>Comments</td>
<td>Response to Comments</td>
</tr>
<tr>
<td>-------</td>
<td>------------------------</td>
<td>---------------------</td>
<td>----------------</td>
<td>----------</td>
<td>----------------------</td>
</tr>
<tr>
<td>01c.</td>
<td>Study Requirements - Scope and Range</td>
<td></td>
<td>Comment #54</td>
<td>Further define study scope and elevation range.</td>
<td>Adopted. See response to Comments #50 and #51.</td>
</tr>
<tr>
<td>02a.</td>
<td>Study Requirements - Additional Facilities</td>
<td></td>
<td>Comment #55</td>
<td>Additional facilities beyond those stated in the plan need to be included in the study. Additional recreation facilities potentially impacted by the lowered lake level need to be included in the Plan. A map was drawn on the white board and photo taken for the record (see Attachment).</td>
<td>Adopted. The Plan will include seven recreation facilities/areas: 1) gas docks and slips, 2) boat ramp and courtesy dock, 3) designated/buoyed swim area, 4) mixed day use area (SE of #3), 5) ADA accessible fishing access, 6) south shore overflow (near private parking), and 7) overflow area north of marina (both mixed use areas). ACTION ITEM: Karen Caldwell to identify parameters of south shore overflow area (#6) and forward information to Ross Jackson and/or Matt Fransz.</td>
</tr>
<tr>
<td>02b.</td>
<td>Study Requirements - Additional Facilities - Areas Included</td>
<td></td>
<td>Comment #56</td>
<td>The study area should include the area northeast of the marina.</td>
<td>Clarification. See response to Comment #55.</td>
</tr>
<tr>
<td>03.</td>
<td>Study Requirements - Additional Research</td>
<td></td>
<td>Comment #57</td>
<td>The plan should include identification and analysis of existing information, such as recent surveys</td>
<td>ACTION ITEM: ENTRIX will include in the Plan a task to work with PG&amp;E and the Forest Service to obtain relevant existing recreation user information.</td>
</tr>
<tr>
<td>04.</td>
<td>Study Requirements / Timeframe</td>
<td></td>
<td>Comment #58</td>
<td>The survey timeframe should be expanded to get a thorough understanding of recreational use patterns. Lower lake levels of interest cannot occur under the existing license until after Labor Day, when uses and users may change. Collection of use data would not be equivalent before and after Labor Day. Recreational usability of the seven recreation features rather than use would be a better measure of effect.</td>
<td>Clarification. See response to Comment #64.</td>
</tr>
<tr>
<td>05a.</td>
<td>Study Requirements - Survey Method</td>
<td></td>
<td>Comment #59</td>
<td>Survey should use more detailed and use more advanced techniques.</td>
<td>Clarification. See response to Comment #60.</td>
</tr>
<tr>
<td>05b.</td>
<td>Study Requirements - Scope - Photographic Survey</td>
<td></td>
<td>Comment #60</td>
<td>Photographic surveys should be at all lake elevations and follow changes made in Task 1. Proposed methodology to be used needs to capture water elevations and provide an image of the recreation feature at the agreed upon elevations.</td>
<td>Adopted. Lake level elevations will be analyzed at one-foot increments from 5,617 to 5,595 ft msl using a DTM and orthophoto. See response to Comments #51 and #52.</td>
</tr>
<tr>
<td>05c.</td>
<td>Study Requirements - Scope - Rocks and Obstructions</td>
<td></td>
<td>Comment #61</td>
<td>Underwater rocks and other obstructions should be included in the analysis to determine minimum elevation, due to potential impacts to boats.</td>
<td>Adopted. It is not possible to map-out all rocks in the lake; however, maps will be created in this study showing specific lake elevations and exposed rocks within the range levels being studied based on ortho-photography.</td>
</tr>
<tr>
<td>05d.</td>
<td>Study Requirements - Scope - Lake Terrain</td>
<td></td>
<td>Comment #62</td>
<td>A digital terrain model of the lake bottom should be prepared.</td>
<td>Adopted. See response to Comments #52 and #60.</td>
</tr>
<tr>
<td>Page #</td>
<td>Section, Topic or Issue</td>
<td>Paragraph or Bullet</td>
<td>Comment Number:</td>
<td>Comments</td>
<td>Response to Comments</td>
</tr>
<tr>
<td>-------</td>
<td>------------------------</td>
<td>---------------------</td>
<td>----------------</td>
<td>----------</td>
<td>---------------------</td>
</tr>
<tr>
<td>06a. Study Requirements - Scope - User Satisfaction</td>
<td>Comment #63</td>
<td>The plan should include a literature review summarizing lake level impacts.</td>
<td>Clarification. See response to Comment #60. Literature will be used as appropriate.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>06b. Study Requirements - Scope - Summer Recreational Use</td>
<td>Comment #64</td>
<td>Define recreational use patterns during summer. Discussion on what type of user surveys would be needed to capture public response to the different lake levels and determine how recreation is impacted. Suggested using baseline data to define recreation use and usability, and photographic data along with modeled topographic characteristics to evaluate effects of lowered lake levels on the usability of the seven recreation features.</td>
<td>Adopted. Plan will not include user surveys, a public outreach meeting to be convened by the State Water Board is now included in the Plan. PG&amp;E to include proposed process to evaluate usability in the Plan.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>07. Study Requirements - Scope</td>
<td>Comment #65</td>
<td>Further define study scope</td>
<td>Adopted. See response to Comments #51, #55, and #64.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>08. Study Requirements - Scope - 4(e) Conditions</td>
<td>Comment #66</td>
<td>The Plan should coordinate with improvements outlined in the Recreation Implementation Plan, required in the Forest Service's 4(e) Condition 29.</td>
<td>Adopted with Modification. See response to Comment #45.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>09. Study Requirements - Hydrologic Data</td>
<td>Comment #67</td>
<td>Hydrologic data based on various water levels should be included in the study</td>
<td>Not Adopted. See response to Comments #50, #51, and #60.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10a. Impact Criteria</td>
<td>Comment #68</td>
<td>Minimum reservoir elevations should be based on improvements to recreational facilities.</td>
<td>Adopted. The Plan will cover specific recreation areas and how they will be affected by the lake levels. See response to Comments #50, #51, and #60.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10b. Impact Criteria - Flexibility</td>
<td>Comment #69</td>
<td>The commenter suggests that a floating minimum level based on several criteria should be used rather than a single fixed point.</td>
<td>Not Adopted. See response to Comment #50.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Mitigation Measures</td>
<td>Comment #70</td>
<td>The final report should include recommendations for improvements that can protect recreational uses at lower reservoir elevations.</td>
<td>Adopted. Intent of the study plan is to determine impacts to recreation features at lake levels between 5,608 ft msl and 5,595 ft msl. This information can then be used to formulate appropriate mitigation measures and enhancements.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12a. Consultation - Public</td>
<td>Comment #71</td>
<td>Public consultation through meetings and surveys should be done to establish water surface elevations that support each of the recreational uses.</td>
<td>Adopted with Modification. See response to Comments #51, #55, and #64.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12b. Consultation - Final Meeting</td>
<td>Comment #72</td>
<td>A final meeting with agencies should be planned prior to submittal of the plan's final draft. Review of steps to finalize plan and schedule meetings as needed.</td>
<td>Adopted. Include statement in plan that consultation will be continued after submittal. Resubmit plan on January 22, 2010, and if there are additional agency comments incorporate afterwards. The incorporation of these comments will be noted in the plan. FOLLOW-UP: A revised draft of Plan will be provided by PG&amp;E on January 22, 2010. PG&amp;E and the agencies will meet and review plan sometime after February 17, 2010.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Page #</td>
<td>Section, Topic or Issue</td>
<td>Paragraph or Bullet</td>
<td>Comment Number</td>
<td>Comments</td>
<td>Response to Comments</td>
</tr>
<tr>
<td>-------</td>
<td>-------------------------</td>
<td>---------------------</td>
<td>----------------</td>
<td>----------</td>
<td>----------------------</td>
</tr>
<tr>
<td>5</td>
<td>4.0 Methods</td>
<td>Paragraph 1</td>
<td>State Water Board Comment No. 1</td>
<td>Focusing on the seven recreation features shown in Figure 1, this study will identify recreation activities and use characteristics from a lake level elevation of 5,617 ft msl to 5,610 ft msl to use as a baseline. This baseline will be compared with the effect of lowering the lake level elevation between 5,608 ft msl and 5,595 ft msl prior to Labor Day.</td>
<td>Adopted with Modification: This study is intended to compare usability at different lake levels with the baseline. The language is modified as follows: This baseline will be compared to use characteristics at those seven locations at the effect of lowering the lake level elevation between 5,608 ft msl and 5,595 ft msl prior to Labor Day.</td>
</tr>
<tr>
<td>7</td>
<td>4.2 Task 2 – Collect Recreation Data and Conduct Photo Survey</td>
<td>Middle of Paragraph 2</td>
<td>State Water Board Comment No. 2</td>
<td>The photo-point surveys will be initiated after cessation of spill at an elevation of approximately 5,617 ft msl, and conducted at 2 ft interval down to a lake level elevation of 5,610 ft msl, and one foot intervals down to 5,595 ft msl. Lake levels from below 5,608 ft msl to 5,595 ft msl can occur after Labor Day depending on water year type; when recreational use is expected to decrease.</td>
<td>Adopted.</td>
</tr>
<tr>
<td>8</td>
<td>4.3 Task 3 – Public Meeting</td>
<td>Paragraph 1</td>
<td>State Water Board Comment No. 3</td>
<td>PG&amp;E will hold a facilitated public meeting at the direction of the State Water Board. The location, timing, and invitees to this meeting also will be at the direction of the State Water Board and meeting with be held in Sonora in April or May 2010.</td>
<td>Adopted with Modification: PG&amp;E will hold a facilitated public meeting at the direction of the State Water Board. The location, timing, and invitees to this meeting also will be at the direction of the State Water Board and meeting will be held in Sonora in April or May 2010. The objective of the meeting is to obtain further feedback on recreational uses and gather usability criteria from lake users.</td>
</tr>
<tr>
<td>8</td>
<td>4.5 Task 5 – Analyze Potential Recreation Impacts to the Seven Recreational Features</td>
<td>Paragraph 1</td>
<td>State Water Board Comment No. 4</td>
<td>Potential impacts to the recreational usability of the seven recreational features will be assessed for lake levels from 5,608 ft msl to 5,610 msl. Usability data will be collected at one foot intervals. This means you need to start collecting data at 5,610, otherwise there is a data gap between 5,610 and 5,608. This is consistent with Methods above.] 5,595 ft msl compared to the baseline (recreational usability within the range 5,617 to 5,610 ft msl).</td>
<td>Clarification Needed. According to the notes from the 12/09 meeting at the State Water Board, “Baseline Data will be developed for elevations between 5,617 ft msl and 5,610 ft msl. Elevations between 5,608 ft msl and 5,595 ft msl are identified as the target range for evaluation of potential effects of lowered lake levels.”</td>
</tr>
<tr>
<td>11</td>
<td>8.1 Draft Lake Level Study Report</td>
<td>Bullet 2</td>
<td>State Water Board Comment No. 5</td>
<td>Evaluate, in accordance with the criteria established in Task 1 and Section 6.0, the potential impacts to recreational features caused by lowering the lake level elevations from between 5,608 ft msl to 5,595 ft msl.</td>
<td>Adopted.</td>
</tr>
<tr>
<td>3</td>
<td>4.0 Methods</td>
<td>Middle of Paragraph 1</td>
<td>TUD Comment No. 1</td>
<td>Once the drawdown effects are identified, mitigation measures, implementation of which will increase the usability of the specific recreation features at a wider range of reservoir elevations, will be identified and preliminary descriptions will be developed.</td>
<td>Adopted with Modifications: Language modified as follows: Once the drawdown effects are identified, mitigation measures focused on maintaining the usability of the specific recreation features at a wider range of reservoir elevations will be identified and preliminary descriptions will be developed.</td>
</tr>
<tr>
<td>6</td>
<td>Task 4.1 Obtain and Review Existing Information</td>
<td>Bullet 3</td>
<td>TUD Comment No. 2</td>
<td>Establish photographic survey points to contribute to the evaluation of recreational usability and use. PG&amp;E will meet with representatives from the State Water Board, CDFG, Forest Service, and TUD in the field to select and agree upon specific locations for data collection.</td>
<td>Adopted.</td>
</tr>
<tr>
<td>Page #</td>
<td>Section, Topic or Issue</td>
<td>Paragraph or Bullet</td>
<td>Comment Number:</td>
<td>Comments</td>
<td>Response to Comments</td>
</tr>
<tr>
<td>-------</td>
<td>------------------------</td>
<td>---------------------</td>
<td>-----------------</td>
<td>----------</td>
<td>---------------------</td>
</tr>
<tr>
<td>6</td>
<td>Task 4.1 Obtain and Review Existing Information</td>
<td>Bullet 4</td>
<td>TUD Comment No. 3</td>
<td>• PG&amp;E in consultation with the agencies will identify and agree upon recreational uses and usability criteria for the seven recreational features and impact criteria against which all potential lake level elevation impacts will be measured.</td>
<td>Adopted.</td>
</tr>
<tr>
<td>7</td>
<td>Task 2 – Collect Recreation Data and Conduct Photo Survey</td>
<td>Paragraph 2</td>
<td>TUD Comment No. 4</td>
<td>The photo-point surveys will be initiated after cessation of spill at an elevation of approximately 5,617 ft msl, and conducted at 2 ft interval down to a lake level elevation of 5,610 ft msl, and one foot intervals down to 5,595 ft msl. Lake levels from 5,608 ft msl to 5,595 ft msl will be studied after Labor Day, when recreational use is expected to decrease.</td>
<td>Adopted with modifications: See Response to State Water Board Comment No. 2 above. State Water Board language adopted.</td>
</tr>
<tr>
<td>7</td>
<td>Task 2 – Collect Recreation Data and Conduct Photo Survey</td>
<td>End of Paragraph 2</td>
<td>TUD Comment No. 5</td>
<td>To avoid the bias of relying on recreational use that has a significant seasonal component, usability of the seven recreational features will be emphasized in the analysis of lake levels from 5,608 to 5,595 over the actual amount of use observed.</td>
<td>Adopted.</td>
</tr>
<tr>
<td>8</td>
<td>Task 5 – Analyze Potential Recreation Impacts to the Seven Recreational Features</td>
<td>Paragraph 1</td>
<td>TUD Comment No. 6</td>
<td>Potential impacts to the recreational usability of the seven recreational features will be assessed for lake levels from 5,608 ft msl to 5,595 ft msl compared to the baseline (recreational usability within the range 5,617 to 5,610 ft msl). Recreation usability will be evaluated for all baseline recreation activities as determined in Task 1.</td>
<td>Adopted with Modification: To be consistent with Task 1, the text has been modified as follows: Recreation usability will be evaluated for all baseline agreed upon recreational activities used in Task 1.</td>
</tr>
<tr>
<td>9</td>
<td>Task 6 – For Identified Impacts, Identify Potential Mitigation Measures and Preliminary Concept Descriptions.</td>
<td>Paragraph 1</td>
<td>TUD Comment No. 7</td>
<td>Once the drawdown effects are identified, mitigation measures will be identified and preliminary descriptions will be developed. Mitigation measures will focus on the seven specific recreation features to increase usability at a wider range of reservoir elevations and allow the Revised Certification to be amended to reflect a new minimum lake elevation between 5608 and 5595.</td>
<td>Not Adopted: See Response to TUD Comment No. 1 above. Any action pertaining to the modification of the 401 Certification or the use of the results of this study to modify the Certification are beyond the scope of this work.</td>
</tr>
<tr>
<td>11</td>
<td>Draft Lake Level Study Report</td>
<td>Bullet 3</td>
<td>TUD Comment No. 8</td>
<td>• Based upon the impacts identified, recommend a new minimum lake level elevation.</td>
<td>Adopted. Recommendation of specific new minimum lake levels is beyond the scope of this study.</td>
</tr>
<tr>
<td>11</td>
<td>Draft Lake Level Study Report</td>
<td>Bullet 4</td>
<td>TUD Comment No. 9</td>
<td>• Identify possible mitigation measures for potential impacts to recreational usability below a then minimum lake level of below 5,608 ft msl pursuant to criteria established in Task 1 and Section 6.0.</td>
<td>Adopted.</td>
</tr>
<tr>
<td>11</td>
<td>Draft Lake Level Study Report</td>
<td>Bullet 5</td>
<td>TUD Comment No. 10</td>
<td>• Based upon the impacts identified and incorporation of the mitigation measures, if any, recommend a new minimum lake level elevation. The recreational features, the potential impacts, and measures to mitigate potential impacts, will be presented in a tabular format.</td>
<td>Not Adopted: The focus of this study is to assess impacts on recreation usability and to identify potential mitigation measures for those impacts. Further analysis or recommendation is beyond the scope of this study.</td>
</tr>
<tr>
<td></td>
<td>Appendix A Consultation Documentation</td>
<td>TUD Comment No. 11</td>
<td>Delete entire Appendix A Consultation Documentation section</td>
<td>Not adopted: Consultation documentation is required.</td>
<td></td>
</tr>
</tbody>
</table>
CONSULTATION DOCUMENTATION
Summary Table of Consultation for the Spring Gap-Stanislaus Hydroelectric Project (FERC Project No. 2130) Pinecrest Reservoir Lake Level Study Plan

<table>
<thead>
<tr>
<th>CONTACT</th>
<th>DATE</th>
<th>TOPIC OF CONSULTATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Correspondence</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| To: R. Jackson (PG&E)  
From: R. Kanz (State Water Board) | 11-3-09 | State Water Board’s comments on the draft Pinecrest Lake Level Study Plan |
| To: R. Jackson (PG&E)  
From: J. Barton (Gallery & Barton, APLC) | 11-5-09 | Tuolumne Utilities District’s (TUD) proposed changes to the draft plan. |
| To: R. Jackson (PG&E)  
From: S. Skalski (Forest Service) | 12-1-09 | Forest Service comments on the draft Pinecrest Lake Level Study Plan |
| To: M. Fransz (PG&E), W. Lifton (ENTRIX), R. Kanz (State Water Board)  
From: TUD | 12-21-09 | TUD distribution of Pinecrest Lake Level AutoCAD, topographic contours and aerial imagery data layers. |
| To: V. Whitney (State Water Board)  
From: R. Jackson (PG&E) | 1-22-10 | Request for Final Approval of the Pinecrest Reservoir Minimum Lake-Level Study Plan |
| To: V. Whitney (State Water Board)  
Cc: R. Kanz (State Water Board), K. Caldwell (Forest Service), J. Means (CDFG), P. Kampa (TUD)  
From: R. Jackson (PG&E) | 4-16-10 | Request for Approval of the Pinecrest Reservoir Minimum Lake-Level Study Plan |
| To: R. Jackson (PG&E)  
Cc: K. Caldwell (Forest Service), P. Kampa (TUD), J. Means (CDFG), D. Giglio (USFWS)  
From: V. Whitney (State Water Board) | 5-6-10 | State Water Board’s approval of the Pinecrest Reservoir Minimum Lake-Level Study Plan |
### Summary Table of Consultation for the Spring Gap-Stanislaus Hydroelectric Project (FERC Project No. 2130) Pinecrest Reservoir Lake Level Study Plan

<table>
<thead>
<tr>
<th>CONTACT</th>
<th>DATE</th>
<th>TOPIC OF CONSULTATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emails</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To: P. Kampa (TUD) From: S. Peirano (PG&amp;E)</td>
<td>8-11-09</td>
<td>Email regarding the start of consultation with TUD and others on the draft study plan.</td>
</tr>
<tr>
<td>To: S. Peirano (PG&amp;E) From: P. Kampa (TUD)</td>
<td>8-11-09</td>
<td>Email discussing the importance to TUD that the scope of work for the development of the study be very clear and specific.</td>
</tr>
<tr>
<td>To: P. Kampa (TUD) From: S. Peirano (PG&amp;E)</td>
<td>9-23-09</td>
<td>Email regarding a delay in the start of consultation with TUD on the Pinecrest Lake Level Study Plan.</td>
</tr>
<tr>
<td>To: P. Kampa (TUD), R. Kanz (State Water Board), K. Burnett (Forest Service), J. Frazier (Forest Service), J. Means (CDFG) From: R. Jackson (PG&amp;E)</td>
<td>10-13-09</td>
<td>Email containing electronic copies of the cover letter and draft plan for their records.</td>
</tr>
<tr>
<td>To: R. Jackson (PG&amp;E) From: P. Kampa (TUD)</td>
<td>10-13-09</td>
<td>Email notifying PG&amp;E that TUD will have their comments to PG&amp;E by October 30. Also contains a request for a meeting to discuss TUD’s comments to the plan along with proposed dates for the meeting.</td>
</tr>
<tr>
<td>To: R. Jackson (PG&amp;E) From: V. Smith (Forest Service)</td>
<td>10-26-09</td>
<td>Email with an attachment containing a map of the Pinecrest Beach Area</td>
</tr>
<tr>
<td>To: K. Burnett (Forest Service), J. Frazier (Forest Service), R. Kanz (State Water Board), J. Means (CDFG) From: R. Jackson (PG&amp;E)</td>
<td>11-10-09</td>
<td>Email requesting that the agency representatives “save the date” for a Stakeholder meeting to discuss the draft Pinecrest Lake Level Study Plan. The proposed date is December 9, 2009.</td>
</tr>
<tr>
<td>To: J. Means (CDFG), J. Frazier (Forest Service), K. Burnett (Forest Service), R. Jackson (PG&amp;E) From: R. Kanz (State Water Board)</td>
<td>11-16-09</td>
<td>Email letting those attending the stakeholder meeting that a room has been reserved at the Cal EPA Building in Sacramento for 12/9 at 9:00 am.</td>
</tr>
<tr>
<td>CONTACT</td>
<td>DATE</td>
<td>TOPIC OF CONSULTATION</td>
</tr>
<tr>
<td>---------</td>
<td>--------</td>
<td>---------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>To: R. Jackson (PG&amp;E), From: Ana Barrales-Santillo (Forest Service)</td>
<td>11-19-09</td>
<td>Email containing the draft comment letter from Kathy Burnett</td>
</tr>
<tr>
<td>To: Ana Barrales-Santillo (Forest Service)</td>
<td>11-19-09</td>
<td>Email notifying Ana that the wrong letter was sent</td>
</tr>
<tr>
<td>To: R. Jackson (PG&amp;E), K. Burnett (Forest Service) From: Ana Barrales-Santillo (Forest Service)</td>
<td>11-19-09</td>
<td>Email containing the correct draft comment letter from Kathy Burnett</td>
</tr>
<tr>
<td>To: J. Means (CDFG), K. Burnett (Forest Service), K. Caldwell (Forest Service), R. Kanz (State Water Board), P. Kampa (TUD), D. Giglio (USFWS), J. Frazier (Forest Service), S. Peirano (PG&amp;E), M. Fransz (PG&amp;E), W. Lifton (ENTRIX), T. Moore (PG&amp;E), S. Fee PG&amp;E, G. Nunnelley (TUD), T. Scesa (TUD) From: R. Jackson (PG&amp;E)</td>
<td>12-2-09</td>
<td>Email confirmation and agenda for the Pinecrest Lake-level Study Plan meeting to be held December 9th, 2009 starting at 9 AM. The meeting will be held at the Cal EPA Building 1001 I Street Sacramento.</td>
</tr>
<tr>
<td>To: K. Caldwell (Forest Service) From: R. Jackson (PG&amp;E)</td>
<td>12-10-09</td>
<td>Emailed reminder for K. Caldwell to ask Julie where the boundary of the study should be for the South Shore Overflow beach area.</td>
</tr>
<tr>
<td>To: R. Jackson (PG&amp;E) From: K. Caldwell (Forest Service)</td>
<td>12-11-09</td>
<td>Emailed answer to the above information request - the answer is that the south shore overflow seems to peter out around Lot 355,356.</td>
</tr>
</tbody>
</table>
### Summary Table of Consultation for the Spring Gap-Stanislaus Hydroelectric Project (FERC Project No. 2130) Pinecrest Reservoir Lake Level Study Plan

<table>
<thead>
<tr>
<th>CONTACT</th>
<th>DATE</th>
<th>TOPIC OF CONSULTATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>To: W. Lifton (ENTRIX), M. Fransz (PG&amp;E) From: G. Nunnelley (TUD)</td>
<td>1-6-10</td>
<td>Email regarding Pinecrest mapping data.</td>
</tr>
<tr>
<td>To: G. Nunnelley (TUD) From: M. Fransz (PG&amp;E)</td>
<td>1-6-10</td>
<td>Email regarding Pinecrest mapping data.</td>
</tr>
<tr>
<td>To: R. Kanz (State Water Board) From: S. Peirano (PG&amp;E)</td>
<td>1-19-10</td>
<td>Email providing a status update on the Pinecrest Lake-level Study Plan.</td>
</tr>
<tr>
<td>To: R. Kanz (State Water Board) From: M. Fransz (PG&amp;E)</td>
<td>1-19-10</td>
<td>Email containing a draft copy of the Pinecrest Lake Level Study Plan for review.</td>
</tr>
<tr>
<td>To: V. Whitney (State Water Board), R. Kanz (State Water Board), K. Caldwell (Forest Service), K. Burnett (Forest Service), P. Kampa (TUD), J. Means (CDFG) From: M. Fransz (PG&amp;E)</td>
<td>1-22-10</td>
<td>Email submitting for approval the revised draft Spring Gap-Stanislaus Project (FERC No. 2130) Pinecrest Reservoir Minimum Lake-level Study Plan.</td>
</tr>
<tr>
<td>To: P. Kampa (TUD) From: M. Fransz (PG&amp;E)</td>
<td>1-23-10</td>
<td>Email explaining that due to problems with TUD receiving large files PG&amp;E will be sending a CD of the plan and its cover letter via Fed-X.</td>
</tr>
<tr>
<td>To: M. Fransz (PG&amp;E) From: R. Kanz (State Water Board)</td>
<td>1-27-10</td>
<td>Email requesting a Microsoft Word version of the Pinecrest Reservoir Minimum Lake-level Study Plan.</td>
</tr>
<tr>
<td>To: R. Kanz (State Water Board) From: M. Fransz (PG&amp;E)</td>
<td>1-27-10</td>
<td>Email replying to the request for a Microsoft Word version of the Pinecrest Reservoir Minimum Lake-level Study Plan.</td>
</tr>
<tr>
<td>To: M. Fransz (PG&amp;E) From: R. Kanz (State Water Board)</td>
<td>1-28-10</td>
<td>Email containing State Water Board’s comments to the Pinecrest Reservoir Minimum Lake-level Study Plan.</td>
</tr>
</tbody>
</table>
### Summary Table of Consultation for the Spring Gap-Stanislaus Hydroelectric Project (FERC Project No. 2130) Pinecrest Reservoir Lake Level Study Plan

<table>
<thead>
<tr>
<th>CONTACT</th>
<th>DATE</th>
<th>TOPIC OF CONSULTATION</th>
</tr>
</thead>
</table>
| To: R. Kanz (State Water Board)  
From: S. Peirano (PG&E)                           | 2-2-10 | Email acknowledging State Water Board’s comments.                                      |
| To: R. Kanz (State Water Board)  
From: S. Peirano (PG&E)                           | 2-3-10 | Email containing a correction to the date mentioned in the above email.                |
| To: R. Jackson (PG&E)  
From: P. Kampa (TUD)                              | 2-8-10 | Email containing TUD’s comments to the Pinecrest Reservoir Minimum Lake-level Study Plan. |
| To: R. Kanz (State Water Board)  
From: M. Fransz (PG&E)                            | 2-10-10| Email clarifying comments to the Spring Gap-Stanislaus Pinecrest Lake Level and Spill Channel Management plans. |
| To: P. Kampa (TUD), R. Kanz (State Water Board), K. Caldwell (Forest Service), J. Means (CDFG)  
From: R. Jackson (PG&E)                          | 3-16-10| Email supplying dates for a meeting to discuss the Pinecrest Reservoir Minimum Lake-level Study Plan comments/concerns. |
| To: J. Means (CDFG), K. Caldwell (Forest Service), R. Jackson (PG&E), P. Kampa (TUD)  
Cc: K. Burnett (Forest Service), S. Fee (PG&E), M. Fransz (PG&E), S. Peirano (PG&E), T. Moore (PG&E)  
From: R. Kanz (State Water Board)                 | 3-16-10| Email noting a preference of either April 1st or 8th for a meeting.                   |
| To: R. Jackson (PG&E)  
From: K. Caldwell (Forest Service)                 | 3-18-10| Email stating that the Forest Service does not need/want to participate in a meeting at this time. |
| To: W. Lifton (ENTRIX), M. Fransz (PG&E), R. Jackson (PG&E), P. Kampa (TUD), T. Scesa (TUD)  
From: R. Kanz (State Water Board)                 | 4-7-10 | Email requesting that the Pinecrest Reservoir Minimum Lake-level Study Plan Public Meeting be held on May 28, 2010. |
<table>
<thead>
<tr>
<th>CONTACT</th>
<th>DATE</th>
<th>TOPIC OF CONSULTATION</th>
</tr>
</thead>
</table>
| To: R. Kanz (State Water Board), W. Lifton (ENTRIX), M. Fransz (PG&E), R. Jackson (PG&E), S. Peirano (PG&E), T. Scesa (TUD)  
Cc: T. Scesa (TUD), C. Prunchak (TUD)  
From: P. Kampa (TUD) | 4-7-10 | Email stating that TUD will likely have representation by Board members and Tom Scesa at the public meeting. |
| To: V. Whitney (State Water Board)  
Cc: R. Jackson (PG&E), S. Peirano (PG&E), R. Kanz (State Water Board), K. Caldwell (Forest Service), K. Burnett (Forest Service), P. Kampa (TUD), J. Means (CDFG)  
From: M. Fransz (PG&E) | 4-16-10 | Email submitting for approval the revised draft Spring Gap-Stanislaus Project (FERC No. 2130) Pinecrest Reservoir Minimum Lake-level Study Plan. |
| To: R. Kanz (State Water Board), K. Caldwell (Forest Service), K. Burnett (Forest Service), P. Kampa (TUD), J. Means (CDFG)  
Cc: R. Jackson (PG&E), S. Peirano (PG&E)  
From: M. Fransz (PG&E) | 4-16-10 | Email submitting the revised draft Spring Gap-Stanislaus Project (FERC No. 2130) Pinecrest Reservoir Minimum Lake-level Study Plan for review. |
| To: M. Fransz (PG&E), R. Kanz (State Water Board), K. Caldwell (Forest Service), K. Burnett (Forest Service), J. Means (CDFG)  
Cc: R. Jackson (PG&E), S. Peirano (PG&E)  
From: P. Kampa (TUD) | 4-20-10 | Email requesting that changes that were made to the March version of the Pinecrest Reservoir Minimum Lake-level Study Plan be highlighted. |
### Summary Table of Consultation for the Spring Gap-Stanislaus Hydroelectric Project (FERC Project No. 2130) Pinecrest Reservoir Lake Level Study Plan

<table>
<thead>
<tr>
<th>CONTACT</th>
<th>DATE</th>
<th>TOPIC OF CONSULTATION</th>
</tr>
</thead>
</table>
| To: P. Kampa (TUD)  
Cc: R. Jackson (PG&E), S. Peirano (PG&E), R. Kanz (State Water Board), K. Caldwell (Forest Service), K. Burnett (Forest Service), J. Means (CDFG), W. Lifton (ENTRIX), C. Lawson (ENTRIX)  
From: M. Fransz (PG&E) | 4-20-10 | Email containing a copy of the Pinecrest Reservoir Minimum Lake-level Study Plan showing all edits between the April 16 and the previous version (January 22 distribution). |
| To: M. Fransz (PG&E)  
From: P. Kampa (TUD) | 4-20-10 | Email acknowledging receipt of the Pinecrest Reservoir Minimum Lake-level Study Plan showing all edits. |

**Telephone/Meeting Log**

| Coordinator: S. Peirano (PG&E) | 12-9-09 | Meeting notes from the December 9, 2009 Pinecrest Lake Level Study Plan Consultation Meeting |
| Coordinator: S. Peirano (PG&E) | 4-1-10 | Meeting notes from the April 1, 2010 Pinecrest Lake Level Study Plan Consultation Meeting |
CORRESPONDENCE
NOV 03 2009
Ross Jackson
Pacific Gas and Electric Company
P.O. Box 770000, Mail Code N11C
San Francisco, CA 94177

PINECREST RESERVOIR LAKE LEVEL STUDY PLAN COMMENTS, SPRING GAP-STANISLAUS HYDROELECTRIC PROJECT, FERC #2130

Dear Mr. Jackson:

The Federal Energy Regulatory Commission (Commission) issued a new license for the Spring Gap-Stanislaus Hydroelectric Project (Commission # 2130) on April 24, 2009. Condition #4 of the water quality certification for the Spring Gap-Stanislaus Hydroelectric Project (Project) requires Pacific Gas and Electric Company (PG&E) to develop a Pinecrest Reservoir minimum lake level study plan (Plan) in consultation with the State Water Resources Control Board (State Water Board), U.S. Forest Service, Department of Fish and Game, and Tuolumne Utilities District. State Water Board staff has reviewed the Plan and provides the following comments.

Goals and Objectives
As stated, the goal of the study is to determine the minimum reservoir elevation(s) necessary to protect recreational users. Condition #4 specifically lists day-use beaches and other areas as directed by the State Water Board. State Water Board staff has determined there are other facilities/structures that are sensitive to reservoir surface elevation. Water surface elevations can impact usability of the boat ramp, gas/boat docks, and expose rocks that are obstacles to boating. These facilities/structures must be included in the Plan.

Study Area
The study area needs to be expanded to include the area northeast of the marina. The U.S. Forest Service recently banned dogs from the main beach and day-use area. Dog owners are now using the beach northeast of the marina and east of the handicap fishing access. The area northeast of the marina is also used for mooring boats. As stated above, the study area also needs to include certain areas of the lake where boulders become exposed and cause a navigation hazard. The boulders impact both sail boats and motor boats. The exact area of study should be defined through consultation with long-term recreational users of the lake. Collection of elevation data on those boulders identified through consultation will be important for identification of minimum water surface elevation.

Methods
The Plan proposes to assess three water surface elevations between 5,608 and 5,604 feet. This range of elevations and two-foot stage changes between elevations will not yield information with adequate resolution for decision-making. The objective of the study is to determine the reservoir elevation(s) at which user satisfaction diminishes or recreational use is impacted. The study should start at full reservoir pool and measure at a minimum of one foot elevation steps down to a level of 5,600 feet or lower. The lowest elevation for study may be determined after consultation with recreational users and reviewing existing information. Five transects may not provide adequate information on the relationship between beach use...
and changes in recreational opportunities at various water surface elevation. A more robust tool such as a land based survey (under the supervision of a licensed surveyor) or photogrammetry may be required. The Plan includes development of up to 10 photographic survey points at the three proposed water surface elevations. Photographic surveys should be collected at one foot elevation steps as described above. The elevation at which the boat ramp and gas/boat docks become unusable, and the elevation at which rocks are exposed, should be discrete points that are also measured and photographed.

Recreational surveys conducted during the relicensing, and information submitted by the Friends of Pinecrest show that there are many long-time users of the lake. Completion of the Plan will require surveys of cabin owners, campers, day users, and organizational campers. Historic knowledge of recreational lake users is critical to establishing the water surface elevations that support each of the recreational uses. Information from long-time users is necessary to identify hazard rocks, and determine conditions that make beaches unusable for each recreational use. The Plan should describe how surveys of long-time users will be incorporated. PG&E should hold a public meeting to gather additional information. Stakeholders that should be invited to the meeting include the Pinecrest Lake Resort, Friends of Pinecrest, and the Central Sierra Environmental Resource Center.

Existing information should be collected and used in the development of the final Plan. Tuolumne Utilities District conducted a limited survey of the reservoir that could be useful in developing the final Plan. The U.S. Forest Service may also have additional information on recreational use and reservoir elevation.

Conclusion
In addition to identifying the minimum reservoir elevation(s) that supports recreational uses, the final report should include recommendations for improvements that can protect recreational uses at lower reservoir elevations. When conducting the study the consultants should, if possible, identify the specific impact to recreational use below the identified minimum reservoir elevation. Consultation with recreational users will be an important part of developing recommendations for improvements. When possible, the reservoir minimum reservoir elevation that can be achieved with improvements should be identified.

State Water Board staff looks forward to working with PG&E, its consultants, and stakeholders on this study. If you have any questions about these comments or would like to discuss any issues please contact me at (916) 341-5341.

Sincerely,

Russ J. Kanz
Staff Environmental Scientist

cc: Pete Kampa
Tuolumne Utilities District
18886 Nugget Boulevard
Sonora, CA 95370

Continued on next page.
Continued from previous page.

Kathy Burnett
USDA Forest Service
Stanislaus National Forest
Summit Ranger District
1 Pinecrest Lake Road
Pinecrest, CA 95364

Julie Means
California Department of Fish and Game
1234 East Shaw Avenue
Fresno, CA 93719
November 5, 2009

Ross Jackson
Pacific Gas and Electric Company
P.O. Box 770000, Mail Code N11C
San Francisco, CA 94177

RE: Pinecrest Reservoir Lake Level Study Plan Comments, Spring Gap-Stanislaus Hydroelectric Project, FERC 2130

Dear Mr. Jackson:

Thank you for giving us the opportunity to comment on PG&E’s draft lake level study plan. Please find enclosed Tuolumne Utilities District’s (TUD) proposed changes to the draft study plan, presented in track changes.

While the comments may appear extensive, we believe these changes are necessary to make the study consistent with the 401 Water Quality Certification for the Spring Gap-Stanislaus Project (FERC 2130). For example, we made the following changes:

1. PG&E’s first draft only studied reservoir elevation to 5,604, whereas the 401 Certification required PG&E to “determine the minimum Pinecrest Reservoir elevation between End of Spill and Labor Day that protects recreational uses.” Thus, using a minimum elevation of 5,604 inappropriately predetermines the outcome of the study. However we do recognize the need for a floor, otherwise the study could go on forever, so we chose 5,595, which is slightly lower than reservoir elevation during the 1976 drought. Due to the increased instream flows required in the 401 Certification, evaluation to the slightly lower elevation is justified.

2. Added a requirement that mitigation measures will be identified that will allow the reservoir elevation to be dropped further, and still preserve recreational uses, than what would be possible without those mitigation measures. This change is consistent with discussions and agreements reached during preparation of the final 401 Certification conditions.

3. Expanded the generation and resolution of data to include the production of a base map with a 40-foot scale and single foot contours and a digital terrain model. The map and model will help establish the recreational facilities impacted by each single foot drop in elevation and will be of adequate resolution to provide for knowledge based decision making.

The Tuolumne Utilities District looks forward to working with PG&E, its consultants, and stakeholders in the preparation of this important study. If you have any questions of comments, do not hesitate to contact me at (916) 444-2880.
Very truly yours,

[Signature]

Jesse W. Barton

CC: TUD Board of Directors
Russ J. Kanz, SWRCB Staff Environmental Scientist
Kathy Burnett, USDA Forest Service
Julie Means, CDFG
PINECREST RESERVOIR LAKE LEVEL STUDY PLAN

Spring Gap-Stanislaus Project (FERC Project No. 2130)

Draft

Prepared By:
Pacific Gas and Electric Company™

October 2009
TABLE OF CONTENTS

Page

1.0 Introduction .......................................................... 1
1.1 License Requirement ................................................. 1
2.0 Goals and Objectives .................................................. 2
3.0 Study Area ............................................................. 2
4.0 Methods ............................................................... 2
5.0 Schedule ............................................................... 9
6.0 Analysis ................................................................. 10
7.0 Consistency With Generally Accepted Practice .................. 11
8.0 Products ............................................................... 11
  8.1 Draft Lake Level Study ............................................. 11
  8.2 Final Lake Level Study ............................................. 12
9.0 References ............................................................ 13
1.0 INTRODUCTION

On June 16, 2009, the State Water Resources Control Board (State Water Board) issued a revised Section 401 Water Quality Certification (Revised Certification) for the Spring Gap-Stanislaus Hydroelectric Project (Federal Energy Regulatory Commission [FERC] Project No. 2130) (Project). The Revised Certification, among other things, requires preparation of a study plan (Plan) to determine the minimum operating water surface elevation for Pinecrest Reservoir that protects certain specific recreational uses for the period ranging from the end of spill through Labor Day. This Plan was prepared to comply with the Lake Level Study requirements in the Revised Certification.

1.1 LICENSE REQUIREMENT

Revised Certification Condition No. 4 reads as follows:

"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 3,608 feet based on the results of the Lake-level Study, after the State Water Board provides notice to affected parties."

1 Note that FERC has not yet formally incorporated the Revised Certification into the new Project license, issued on April 24, 2009.
2.0 GOALS AND OBJECTIVES

The purpose of the Lake Level Study is to "determine the minimum Pinecrest Reservoir elevation between April 5 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)" for the recreational uses identified in the Revised Certification.

3.0 STUDY AREA

Pinecrest Reservoir is located off of Highway 108, about 25 miles north-east of Sonora. Pinecrest Reservoir is on the South Fork of the Stanislaus River. The study area for this Plan consists of the identified recreational facilities on the southwest side of Pinecrest Reservoir. The study will focus on Day Use Area beaches, handicap fishing access, the marina, and the associated boat ramp. A minimum total of five (5) facilities/recreational areas will be evaluated under this study.

Figure 1 presents a map identifying the initial five (5) recreational facilities and uses under consideration in this study plan.

4.0 METHODS

This section discusses our methodology for completing the Lake Level Study, upon approval of this plan. The Lake Level Study consists of five primary four tasks: 1) obtain and review existing information, 2) collect field data, and 3) tabulate the field data and map locations and profiles, and 4) analyze the information and 5) identify measures to be implemented to mitigate any potential impacts to specified recreation uses, the implementation of which would allow the reservoir surface elevation to be further lowered. Information. This study plan will evaluate the incremental effect of
Lowering the minimum reservoir water surface elevation below 5,617 feet in the range of 5,608 to 5,604 feet (开店) mean sea level (MSL). For each foot below 5,617 (开店), the plan will describe the effect on the selected recreational facilities and uses, if any, and will identify measures that will mitigate that effect, according to established criteria, to an acceptable level, if necessary. The plan will continue to reduce the examined elevation until elevation 5595 (开店) MSL, as shown.

Lake elevation values used in this study and report reference the Pinecrest lake elevations that are used in PG&E lake level measurements and reference the spillway crest at 5611.5 feet.

Pinecrest Reservoir Lake Level Study Plan

Spring Gap-Stanislaus Project, FERC Project No. 2130
© 2010, Pacific Gas and Electric Company

October 2009

Pinecrest Reservoir Lake Level Study Plan

A-34

May 2010

Spring Gap-Stanislaus Project, FERC Project No. 2130
© 2010, Pacific Gas and Electric Company
Task 1 - Obtain/Review Existing Information

Task 1 consists of the following:

- Compilation and review of background information, such as recent historical operations and recreational use.
- Identification of data gaps (if any).
- Preparation of a base map showing specific recreational facilities and use information to be used in planning and field surveys.

The base map shall

Task 2 - Data Collection/Survey

Task 2 consists of collecting elevation data at five locations among the recreational areas listed above. Data will be collected at three reservoir water surface elevations between 5,604 and 5,608 ft MSL.

Data collection activities in this task include:

- Plan and coordinate a 40 foot scale one foot contour interval map.
- Meet with representatives from the State Water Board, California Department of Fish and Game (CDFG), US Department of Agriculture-Forest Service (USDA-FS), and Tuolumne Utilities District (TUD) to: a) Establish agreement on recreational facilities to be surveyed; b) Establish agreement on photographic survey points; c) Establish recreation usability and impact criteria against which all potential water surface elevation impacts will be measured; and d) Identify data gaps (if any), confirm photo-point locations to assess recreational facilities and uses.

Task 2 - Data Collection/Survey

Task 2 consists of collecting elevation data at the agreed upon recreational facilities and uses identified in Task 1. Data will be collected at all reservoir water surface elevations below 5,617 ft MSL that are accessible during the winter of 2009 and fall of 2010.

Data collection activities in this task include:
Collect data at the five selected recreational facilities and locations (Figure 2). The digital terrain model survey will be used to generate five (5) transect profiles perpendicular to the shoreline for agreed upon recreational features. Profiles will be developed, at minimum, for the Day Use Area, beach (2 profiles), the marina, boat ramp, and the handicap fishing access. The agreed upon relevant recreational facilities and uses/features will be identified and measured as illustrated in Figure 2.

The data collection and color aerial ortho-photogrammetric survey will be performed between the winter of 2009/10 and fall (October 2010). Fall and winter is a key time for this survey because the water surface elevation in the lake is low and will allow direct measurement of elevations to the lowest elevation to be considered, 5,604 ft MSL. By conducting the survey when the lake is at a lower elevation,
Figure 2. Example of Elevation Profile to be Measured at Boat Ramp.
The base map field crews can measure attributes along the transects that may affect recreational use that are otherwise submerged during the recreation season. Also, there is a relatively low rate of weather delays at this time, compared to the 40 foot scale, one foot contour interval mapping later in the year. Each transect profile will be measured beginning above the maximum operational elevation of the reservoir. Each transect will be measured with an overall color aerial ortho-photo of the Pinecrest lake shore study area. The extent of Trimble®-resources grade Global Positioning System (GPS) units. Each transect will be profiled from the upslope end-point down to the water’s edge. GPS data will permit mapping will include the area just northeast of the profile locations relative to the recreation areas of the boat dock/marina, to just east of the handicap fishing access. Prominent boulders and stumps in these recreational areas will be field located horizontally and vertically. Reservoir using a geographic information system (GIS) will be developed to manage the field data that is collected. The 40 foot scale one foot contour mapping and color ortho photo. Each profile will include measurement of the water surface elevation, which will be used as a base map in the GIS. Transect and other data that is collected as part to link transect measurements to reservoir operations. Water surface elevations, as measured by PG&E, for the days and times of this study the survey will be incorporated into the GIS to assist in analysis.

- Develop a photographic survey of select recreational features at the full range of lake elevations. These being considered. Up to 40 photo points will be selected in Task 1 consultation with the resource agencies and will be measured by GPS. These photo points will be used to monitor the characteristics and usability of the selected recreational features, pursuant to the criteria established in Task 1 at the different water surface elevations. The photo-point survey will be initiated after cessation of spill at an elevation of about 5,617 ft MSL at the locations selected in consultation with the resource agencies. This will be followed by photo-point surveys at reservoir water surface elevations at each (one) foot elevation drop below 5,617 ft MSL and at 5,604 ft MSL.
Task 3 - Tabulate Field Data and Map

- Photo-point locations and profiles will be mapped. The data will be entered into a GIS platform to plot the profile locations in plan view and in profile. A digital terrain model of the lake bottom will be prepared along with 3D graphics to depict and visualize different lake elevations relative to day use beach area, handicapped fishing access and boat dock marina facility. One-site map and five (5) profiles from these data will be developed during the analysis.

- Photographs for each photo-point will be summarized to illustrate changes to the selected recreational facilities resulting from lake water surface elevations being assessed.

Task 4 - Data Analysis

Data analysis is discussed in detail in Section 6.0.

5.0 SCHEDULE

This section summarizes our planned schedule for implementation of the study and preparation and submittal of the Lake Level Study report.

<table>
<thead>
<tr>
<th>Date</th>
<th>Deliverable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring/Summer 2010</td>
<td>Photo-point consultation and location selection meeting in the field with resource agencies. Begin photo-point survey after end-of-ski at a water surface elevation of approximately 5,515.7 feet MSL.</td>
</tr>
<tr>
<td>Summer-Fall 2010</td>
<td>Conduct photo-point surveys at single 10' increments below additional elevations of 5,512.0 (5,612 to 5,604) MSL to 5,505.0 (5,505 to 5,500) MSL.</td>
</tr>
<tr>
<td>Winter 2010 - Fall 2010</td>
<td>Conduct ground survey (data collection) between following at an elevation 5,612 to 5,505 (5,604 to 5,500) MSL.</td>
</tr>
<tr>
<td>December 2010</td>
<td>Plan for and schedule meeting with resource agencies in advance of preparation of final Draft Lake Level Study.</td>
</tr>
<tr>
<td>January 14, 2011</td>
<td>Draft Lake Level Study submitted to the State Water Board, CDFG, USDA-FS, and TUD for review and comment</td>
</tr>
<tr>
<td>February 14, 2011 (or)</td>
<td>Agency comments of Draft Lake Level Study due to PG&amp;E</td>
</tr>
</tbody>
</table>

Pinecrest Reservoir Lake Level Study Plan 9  October 2019

Spring Gap-Stanislaus Project, FERC Project No. 2130 © 2010, Pacific Gas and Electric Company
6.0 ANALYSIS

For each of the recreational (5) facilities characterized by profiles as discussed above, the study will describe the elevation of relevant recreational elements (i.e., available beach area, boat ramp accessibility, etc.) relative to water surface elevations of the reservoir within the range under study. Profile figures developed during the analysis will graphically depict the surveyed cross-sections within the range of water surface elevations.

The analysis will include an evaluation-discussion of the observed relationship between the agreed upon recreational facilities and uses, the reservoir water surface elevation. Reservoir water surface elevations will also be identified and evaluated as they pertain to: when the boat ramp becomes unusable; when docks become perchéd or unusable; when beach access/recreation usability becomes hampered or unusable; when water access becomes difficult; or when access for handicapped persons becomes difficult or impossible.

Additional issues of particular interest will be noted in the analysis of each of the profiles, including: the lowest usable safe elevations for relevant facilities; such as the bottom of the boat ramp; whether fishing is possible from platforms that are perched; or if the marina docks become perchéd; the slope of the land or changes in substrate (i.e., sand to rock) and impact criteria established in Task 1; when public access and/or pedestrian traffic might become a safety concern.

The photo-points will be used to monitor the recreational facilities and use/features at reservoir water surface elevations below 5,617, 5,604, 5,600, and 5,608 feet MSL in single-foot increments. The photo-point survey will provide pictures of each recreational feature.
facility in conjunction with all three water surface elevations. Photos will be provided as an appendix in the Lake Level Study.

If adverse impacts to selected recreational facilities and uses are identified, the study will describe measures to be implemented to mitigate the identified impacts. Potential alternative measures to be considered include, but are not limited to:

- modification of the existing boat dock configuration to increase usability and accessibility at a wider range of reservoir elevations
- removal or implementation of public safety measures to reduce boating hazards at a wider range of reservoir elevations
- enhancement of day use area benches to increase user acceptability at a wider range of reservoir elevations
- enhancement of handicap fishing access to increase user acceptability at a wider range of reservoir elevations

The recreational facilities and uses, the potential impacts, and the measures to mitigate potential impacts will be presented in a tabular format.

7.0 CONSISTENCY WITH GENERALLY ACCEPTED PRACTICE

The Lake Level Study will be performed according to accepted technical and data collection practices. A high precision GPS will be used to measure location and supplemented with standard survey equipment as needed. The aerial topography shall be performed by a qualified photogrammetry used to measure transect profiles. All photo-points will be shot from a tripod-mounted digital camera at multiple focal lengths or high depth of field to provide clear views of relevant features.

8.0 PRODUCTS

8.1 DRAFT LAKE LEVEL STUDY

A draft report will be prepared and submitted to the State Water Board, USDA-FS, CDFG, and TUD for review and comment. This report will:
- Document recreational facilities/uses at reservoir water surface elevations below 5,617, 6,08, 5,606, and 5,604 ft MSL to 5,395 MSL.
- Evaluate, in accordance with the criteria established in Task 1 and Section 6.0, the potential impacts to recreational facilities and uses caused by lowering the surface relationship between water elevation of the reservoir.
- Evaluate all possible mitigation measures that will allow a lower minimum lake level and maintain recreational uses. The reservoir water surface elevations at which protects the recreational facilities and uses pursuant to criteria established in Task 1 and Section 6.0.
- Based upon the impacts and mitigation measures identified, recommend a new minimum water surface elevation. The recreational facilities and uses, the potential impacts, the measures to mitigate potential impacts, the corresponding estimated planning, design, and construction costs, and the new minimum water surface elevation will be presented in a tabular format, which reduces use and becomes assessable, as the focus of this study.

The agencies will be provided with a 30-day review and comment period. Comments will be due to PG&E at the conclusion of the 30-day agency review and comment period.

8.2 Final Lake Level Study

Comments received from the participating agencies will be addressed and a final report prepared. The activities in this task include:

- Review and address comments.
- Incorporate appropriate revisions into a Final Lake Level Study Report.
- PG&E will need with commenting agencies prior to submission of final draft.

Send Final Lake Level Study Report to the Deputy Director of the State Water Board for approval by March 1, 2011.
9.0 REFERENCES

Ross Jackson  
Senior License Coordinator  
Pacific Gas and Electric Company  
245 Market Street  
San Francisco, CA 94105-1702  

Re: Pinecrest Reservoir Lake Level Study Plan Comments, Spring Gap-Stanislaus Hydroelectric Project, FERC #2130  

Dear Mr. Jackson:  

Condition #4 of the State Resources Control Board (Water Board) water quality certification for the Spring Gap-Stanislaus Hydroelectric Project requires Pacific Gas and Electric Company (PG&E) to develop a Pinecrest Reservoir minimum lake level study plan (Plan) in consultation with the State Water Resources Control Board, U.S. Forest Service (Forest Service), Department of Fish and Game and Tuolumne Utilities District. Forest Service staffs have reviewed the Plan and provide the following comments:  

Overview  

This Plan provides a framework for the refinement of the minimum summer lake level that will meet goals of the recreation beneficial use of water and water supply, power and ecological objectives of streamflow in the South Fork Stanislaus River. The Forest Service remains committed to the intent of our 4(c) Conditions. These objectives should be coordinated as best as possible to provide the optimum use of water each year, recognizing annual flow variability.  

Comments by Study Plan Section  

4.0 Methods  

1. Lake Level Elevations—the elevations should cover a broader range than 5,608 to 5,604 feet to reflect interests of recreational and water supply objectives. The Forest Service 4(c) condition specifies a “target level” of 5,610 feet. There is uncertainty about the lower levels at which recreation facilities (beaches, marina, boat ramp, etc.) remain functional and/or desirable, or could be adjusted to by improvements to those facilities. For example, during relicensing proceedings it was anecdotally believed that the minimum functional level for the marina was 5,606 feet. Observation of the marina on September 23, 2009 revealed it was functional at 5,603 feet. As such, the minimum level in the Plan should be at least 5,600 or a similar elevation. In summary, it is essential that a broader range of elevations is evaluated to fully inform study analysis of the interests of recreation and water supply objectives.  

2. Task 1—the Forest Service has background information on recreational lake levels and related facilities that should be included in the study. It is available upon request.
3. Task 2—Data Collection
   a. Ground survey—the proposed time period (October 2010) provides insufficient time to
gather data on recreation use for the study. The time period should be extended to begin
with the summer recreation use period and end when the water level reaches the agreed to
lower level (i.e., 5,600 feet). From the Forest Service’s perspective this is essential to
understand recreation use patterns (including water-based and land-based recreation use
patterns) from high water through decreasing levels as the season proceeds. Without this
information it is not possible to know the effects on recreation at varying water levels.
   b. Photo record—the proposed time period should be expanded to capture water level-
recreation use relationships during the summer-to-fall recreation season.
   c. Hydrologic data—hydrologic data should be collected in relation to various water levels
during the study period to provide relationships between recreation and water supply
concerns. This data is already available and needs to be incorporated in the study for
analysis purposes to inform the effects of various water levels on recreation use and vice
versa. This is an important missing component of the Plan.
   d. Facility improvements—potential improvements to recreational facilities should be
included in the Plan to understand how they may affect water supply and recreation. For
example, will the beach improvements required of PG&E provide favorable access to
lower water levels, and can the marina and boat ramp be retrofitted to allow access to
lower water levels? Again, this component of data is missing from the Plan.
   e. Task 3—Include results of hydrologic data and facility improvement information.
   f. Add Task: Literature review—include a literature review summarizing lake level impacts
to recreation user satisfaction and use levels. Results should provide a basis for predicting
long term use patterns and potential need for addressing future facility needs.

5.0 Schedule
1. The deliverable for the Summer-Fall 2010 period should be revised per comments made
   above (e.g., the ground survey should start in the summer and continue periodically until lake
   water level declines to an agreed upon lower level such as 5,600 feet). Delete the next row
   that starts with “Fall 2010.”

6.0 Analysis
1. Recreation Implementation Plan—integrate the applicable effects of the requirements of the
Recreation Implementation Plan (Forest Service 4(c) Condition 29) with the components of
this Plan since the beach plan may affect recreation use patterns at lower water elevations.
For example, required rock removal may attract recreationists to lower water levels if it
improves the beach surface, and/or beach sand improvements may keep recreationists at
relatively higher levels.
2. Hydrologic data—include analysis of the effects of various lake levels on water supply and
recreation across the broader range of study elevations described above.
3. Facility Improvements—include analysis of effects of facility improvements on recreation
   and water supply.
4. Minimum Lake Level—consideration in the analysis should be given to prescribed annual flexibility in the minimum level based on such factors as a finer-scale look at water year types, end of spill dates, etc. This approach may be a viable alternative to previous approaches such as annual consultation or a fixed level except in extremely dry years.

Summary

This Plan does not include a suitable elevation range to inform decisions on the minimum lake level for Pinecrest Reservoir. In its present form this Plan provides little more information than is presently known; that is, the Forest Service already has beach area data and a photo record at various elevations from 5,617 feet (high water) down to 5,608 feet, and some photos of lower levels. It is also silent on effects of potential changes to facilities such as the boat ramp, marina, and beach improvements required of PG&E in the FERC license. But most of all, the Plan does not account for recreation use patterns during the summer in the study area. It is essential for all concerned parties to be adequately informed on this factor in making a decision on minimum lake level. Recreation use on the beaches, marina and boat ramp areas is present and easily observed and recorded during the summer season. The Plan should be revised to account for the factors described in these comments.

If you have any questions about these comments please contact Jim Frazier at 209.532.3671 x205.

Sincerely,

For: 

CHRISTINE M. WELCH

SUSAN SKALSKI

Forest Supervisor
TUOLUMNE UTILITIES DISTRICT  
18885 Nugget Blvd.  •  Sonora, CA  95370  
(209) 532-6536  •  FAX  (209) 536-6485

To: Matt Franz, Technical and Scientific Support  
Pacific Gas and Electric Company  
3401 Crow Canyon Road  
San Ramon, CA 94583

Date: 12/21/2009

Re: Pinecrest Reservoir Level Study

ENCLOSED ARE THE FOLLOWING ITEMS:

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Change Order</td>
<td>Copy of Letter</td>
<td>Drawing</td>
</tr>
<tr>
<td>Samples</td>
<td>Specifications</td>
<td>CD with Autocad drawing, contours and aerial image</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COPIES</th>
<th>DATE</th>
<th>NO.</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>11/17/09</td>
<td></td>
<td>CD with Autocad drawing, contours and aerial image</td>
</tr>
<tr>
<td>1</td>
<td>11/17/09</td>
<td></td>
<td>Hard copy print of Pinecrest Reservoir study areas</td>
</tr>
</tbody>
</table>

THESE ARE TRANSMITTED as checked below:

- [ ] Approved as Noted
- [ ] Approved as Submitted
- [ ] As Requested
- [ ] For Approval
- [ ] For Your Use
- [ ] For Bids Due
- [ ] For Review and Comment
- [ ] Re-submit ___ Copies for Approval
- [ ] Return ___ Corrected Prints
- [ ] Sign and Return
- [ ] Sign / Date and Return
- [ ] Submit ___ Copies for Distribution
- [ ] Returned for Corrections

REMARKS: CD sent to Wayne Lifton  
Hard copy drawing sent to Russ Kanz  
Drawing in separate box

SIGNED: ________________________________

If enclosures are not as noted, notify us at once.

G-069 Revised 10/8/09
State Water Resources Control Board  
Division of Water Rights  
Attn: Ms. Victoria Whitney, Deputy Director  
1001 I Street, 14th Floor  
Sacramento, CA 95812-2000

Re: Compliance Item; Immediate Attention Requested
Spring Gap/Stanislaus River Project - FERC No. 2130 -CA
Requesting Final Approval of the Pinecrest Reservoir Minimum Lake-Level Study

Dear Ms. Whitney:


On June 16, 2009, the State Water Resources Control Board (SWRCB) issued a revised 401 Certification (Cert) for FERC No. 2130.

Condition 4 of the Cert states in part:

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 handiicap 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.

Enclosed, for your review, modification and approval, is the final draft of the Pinecrest Reservoir Minimum Lake-level Study Plan with record of consultation.

If you have any questions, please give me a call at (415) 973-5747.

Sincerely,

Ross C. Jackson, Senior License Coordinator  
Hydro Licensing

Enclosure

cc: Attached List
Ms. Victoria Whitney  
January 22, 2010  
Page 2

cc:  (via e-mail)
Mr. Russ J. Kanz  
State Water Resources Control Board  
Division of Water Rights  
P.O. Box 2000  
Sacramento, CA  95812-2000

Ms. Karen Caldwell  
USDA, Forest Service  
Stanislaus National Forest  
#1 Pinecrest Lake Road  
Pinecrest, CA  95364

Ms. Kathy Burnett, I/E Program Area Leader  
USDA, Forest Service  
Stanislaus National Forest  
#1 Pinecrest Lake Road  
Pinecrest, CA  95364

Ms. Julie Means, Sr. Environmental Scientist  
California Department of Fish and Game  
San Joaquin Valley and Southern Sierra Region  
1234 East Shaw Avenue  
Fresno, CA  93710-7838

Mr. Peter J. Kampa, General Manager  
Tuolumne Utilities District  
18885 Nugget Blvd.  
Sonora, CA  95370
April 16, 2010

Ms. Victoria Whitney, Deputy Director
State Water Resources Control Board
Division of Water Rights
P.O. Box 2000
Sacramento, CA 95812-2000

Re: Compliance Item: Immediate Attention Requested
Spring Gap-Stanislaus River Project, FERC No. 2130 -CA
Requesting Approval of the Pinecrest Lake Level Study Plan

Dear Ms. Whitney:


On June 16, 2009, subsequent to the PG&E and State Water Resources Control Board (State Water Board) requests for rehearing, the State Water Board, in Order No. WR 2009-0039, issued a revised Water Quality Certification (Certification) for FERC No. 2130. By the Commission’s October 15, 2009, Order on Rehearing, the replacement Certification was included in the appendices, which superseded the Certification provided in the April 24, 2009 Commission order issuing a new license.

The Appendix A of the October 15, 2009 Order, however, did not incorporate the June 16, 2009 revision to the Certification issued by the State Water Board.

On January 13, 2010, the Commission issued the Order Clarifying Prior Orders; Appendix A of this order incorporates the June 16, 2009 revised Water Quality Certification for the Project.

Condition 4 of the State Water Board revised Certification states (in part):

“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.”

PG&E informs the State Water Board it has developed the attached “Pinecrest Reservoir Lake Level Study Plan” (Plan) in consultation with Tuolumne Utility District, USDA Forest Service, State Water Board and the California Department of Fish and Game. A complete record of PG&E’s consultation with the agencies is located in an appendix to the Plan.
PG&E is requesting final approval of the Pinecrest Lake Level Study Plan.

Please contact me at (415) 973-5747 if you have any questions regarding this filing.

Sincerely,

 Ross C. Jackson, Senior License Coordinator
 Hydro Licensing

Attachment

cc: (via e-mail)
Mr. Russ J. Kanz
State Water Resources Control Board
Division of Water Rights
P.O. Box 2000
Sacramento, CA 95812-2000

Ms. Karen Caldwell
USDA, Forest Service
Stanislaus National Forest
#1 Pinecrest Lake Road
Pinecrest, CA 95364

Ms. Julie Means, Sr. Environmental Scientist
California Department of Fish and Game
San Joaquin Valley and Southern Sierra Region
1234 East Shaw Avenue
Fresno, CA 93710-7838

Mr. Peter J. Kampa, General Manager
Tuolumne Utilities District
18885 Nugget Blvd.
Sonora, CA 95370
MAY 6, 2010

Ross Jackson
Pacific Gas and Electric Company
P.O. Box 770000, Mail Code N11C
San Francisco, CA 94177

Dear Mr. Jackson:

APPROVAL OF THE PINECREST RESERVOIR LAKE LEVEL STUDY PLAN, SPRING GAP-STANISLAUS HYDROELECTRIC PROJECT, FERC #2130

The Federal Energy Regulatory Commission (Commission) issued a new license for the Spring Gap-Stanislaus Hydroelectric Project (Commission #2130) on April 21, 2009. As a condition of the water quality certification for the Spring Gap-Stanislaus Hydroelectric Project, the State Water Resources Control Board (State Water Board) included the requirement to submit a Pinecrest Reservoir Lake Level Study Plan for approval by the Deputy Director for Water Rights.

I received your request for approval of the Pinecrest Reservoir Lake Level Study Plan. This plan was developed in consultation with my staff, and they have recommended approval of the plan. I concur with their recommendation, and approve the Pinecrest Reservoir Lake Level Study Plan dated April 2010 for the Spring Gap-Stanislaus Project.

If you have any questions about these comments or would like to discuss any related issues, please contact Russ Kanz at (916) 341-5341.

Sincerely,

Victoria A. Whitney
Deputy Director for Water Rights

cc: Karen Caldwell
USDA Forest Service
Stanislaus National Forest
Summit Ranger District
1 Pinecrest Lake Road
Pinecrest, CA 95364

Pete Kampa
Tuolumne Utilities District
18885 Nugget Boulevard
Sonora, CA 95370

Continued on next page.
Ross Jackson  
Pacific Gas and Electric Company  

Julie Means  
California Department of Fish and Game  
1234 East Shaw Avenue  
Fresno, CA 93719  

Debbie Giglio  
U.S. Fish and Wildlife Service  
2800 Cottage Way, Room W-2605  
Sacramento, CA 95825
EMAILS
From: Peirano, Steve [mailto:SLP2@PGE.COM]
Sent: Tuesday, August 11, 2009 5:26 PM
To: petek
Cc: Jackson, Ross; Fee, Scott; Fransz, Matthew D
Subject: Pinecrest Minimum Lake Level Study

Pete,

Sorry I missed returning your calls last week until now. We are working on retaining a consultant for implementation of the new Spring Gap -Stanislaus FERC license. In response to your question, I expect we will be ready to begin consultation with TUD and others in early to mid-September on a draft study plan. We will contact you accordingly.

Regards,

Steve Peirano
Hydro Licensing
Pacific Gas and Electric Company
Power Generation Department
(415) 973-4481 office
(415) 238-0483 cell
From: petek [mailto:pkampa@tuolumneutilities.com]
Sent: Tuesday, August 11, 2009 5:50 PM
To: Peirano, Steve
Cc: Jackson, Ross; Fee, Scott; Fransz, Matthew D; Jesse Barton; Tom Scesa
Subject: RE: Pinecrest Minimum Lake Level Study

Steve,

Thank you for the update. It is of utmost importance to TUD that the scope of work for the development of the study be very clear and specific; articulating the focused goal of reducing the target lake elevation to the absolute minimum level where, through improvements if necessary, recreation may be supported, the water supply contract with TUD is protected and water deliveries can occur in all water year types. As you are aware, it will be extremely difficult to exceed the modified target or drawdown curves; therefore the appropriate new target must be established. We also want to assist PG&E in ensuring that the study plan is comprehensive enough to convince the SWRCB to approve the lowering of the target lake level. The more involved we can be, the better.

It would be most helpful if we could receive a copy of the scope of work being used to secure the study consultant. In addition, the earlier in the process we conduct a stakeholder meeting, the higher the probability that the study plan work product will meet the needs of the effected parties. I assume the timing of the consultation referred to in your message is before the consultant prepares the draft study plan?

Thank you again and look forward to working with you on this important project.

Peter J. Kampa
General Manager
Tuolumne Utilities District
18885 Nugget Blvd.
Sonora, CA  95370
P- (209) 532-5536 x 480
C - (209) 770-1545
F - (209) 536-6485
www.tudwater.com
Pete,

I want to share an update with you on this project. We anticipate consultation on this study plan will begin on or about October 9th, a few weeks later than indicated in my last email. January 23, 2010 remains the deadline for submittal of the study plan to the Deputy Director (SWRCB) for approval in accordance with the Revised Section 401 Water Quality Certification.

Regards,

Steve Peirano, P.E.
Senior Project Manager, Hydro Licensing
Pacific Gas and Electric Company
Power Generation Department
(415) 973-4481 office
(415) 238-0483 cell
From: Jackson, Ross
Sent: Tuesday, October 13, 2009 11:08 AM
To: petek; Russ Kanz; Kathy Burnett; jfrazier@fs.fed.us; jmeans@dfg.ca.gov
Subject: FERC 2130 DRAFT Pinecrest Lake Level Study Plan

Peter/Russ/Kathy/Jim/Julie:

By now your agencies should have received in over-night mail a hard copy of the draft "Pinecrest Reservoir Minimum Lake-level Study Plan". Attached are electronic copies of the cover letter and draft plan for your records.

If you would prefer to review the plan in a word doc format, please let me know. In word doc format, the file is much larger.

<<SG-S_Draft_Lake Level Study Plan_10-06-09.pdf>> <<100909 Agcy SGS DrftPinecrestRsvrMinLakeLevelStudyPln2009_26.DOC>>

Regards:
Ross Jackson
Senior License Coordinator
Pacific Gas & Electric Co.
245 Market St.
San Francisco, CA  94105-1702
(415) 973-5747
From: petek [mailto:pkampa@tuolumneutilities.com]  
Sent: Tuesday, October 13, 2009 12:35 PM  
To: Jackson, Ross  
Cc: Jesse Barton; Tom Scesa; Glen Nunnelley  
Subject: RE: FERC 2130 DRAFT Pinecrest Lake Level Study Plan  

Ross,

We received and reviewed the document yesterday, thank you. Our engineering team is currently evaluating the draft study plan from a water supply perspective and will shortly be developing comments and recommended changes to the document. We expect to have our review complete and proposed changes developed in red-line/strikeout format by October 30.

Pursuant to our previous conversation, I would still like to arrange a meeting with PG&E to discuss our comments and redline changes to the draft Lake Level Study Plan. As we discussed, this is a very important water supply project to TUD and a less than comprehensive study, with PG&E and TUD having dissimilar desired outcomes, could result in PG&E’s inability to meet its water supply obligations under the contract with TUD.

We propose a meeting on one of the following dates, at the TUD office or other location convenient for you:

November 2, 10:00 A.M. to 12:00 or 1:00 P.M. to 3:00
November 4, 10:00 A.M. to 12:00 or 1:00 P.M. to 3:00
November 5, 10:00 A.M. to 12:00 or 1:00 P.M. to 3:00
November 6, 10:00 A.M. to 12:00
November 9, 10:00 A.M. to 12:00 or 1:00 P.M. to 3:00

Thank you,
Peter J. Kampa
General Manager
Tuolumne Utilities District
18885 Nugget Blvd.
Sonora, CA 95370
P- (209) 532-5536 x 480
C - (209) 770-1545
F - (209) 536-6485
From: Vicki L Smith [mailto:vlsmith@fs.fed.us]
Sent: Thursday, October 26, 2006 12:38 PM
To: Jackson, Ross
Subject: Pinecrest Beach Area

Ross, Attached is the map file that I had, hope this works for you. If not let me know and I'll try to find it somewhere else

(See attached file: PINECRES.DWG)

Vicki Smith
Engineering
President NFFE Local 2195
Stanislaus National Forest
19777 Greenley Rd.
Sonora, CA 95370
209-532-3671 ext. 287
From: Jackson, Ross
Sent: Tuesday, November 10, 2009 8:59 AM
To: 'Kathy Burnett'; 'jfrazier@fs.fed.us'; 'Russ Kanz'; jmeans@dfg.ca.gov
Cc: petek; Peirano, Steve; Fransz, Matthew D; Jackson, Ross
Subject: FW: FERC 2130 DRAFT Pinecrest Lake Level Study Plan

Kathy/Jim/Russ:

Last week I sent out a "save this date" for a Stakeholder meeting to discuss the draft Pinecrest Lake-level Study Plan. The proposed date is Dec 9th.

The date is still good so far but with one change, the meeting needs to be held in Sacramento in the morning due to TUDs prior commitment in the afternoon. Julie Means has indicated that CDFG will be submitting comments but unable to attend the meeting.

Russ: If this date works for you, is it possible we can hold this meeting at your office? And is there conference call capability? The meeting would be from 9 to noon.

Regards
Ross
I reserved room 1410 in the Cal EPA Building for 12/9 at 9:00. The building is located at 1001 I Street. There is parking in the garage across I Street from the building. Call me if you need anything.

Russ J. Kanz  
State Water Resources Control Board  
P.O. Box 2000  
Sacramento, CA 95812-2000  
(916) 341-5341  
rkanz@waterboards.ca.gov
From: Ana Barrales-Santillo [mailto:abarralessantillo@fs.fed.us]
Sent: Thursday, November 19, 2009 9:37 AM
To: Jackson, Ross
Cc: Kathy Burnett
Subject: Draft letter from Kathy Burnett

Importance: High

Ross:

Kathy Burnett asked that I send you the draft letter below:

Ana Barrales-Santillo
Stanislaus National Forest
19777 Greenley Road
Sonora, CA 95370
E-mail: abarralessantillo@fs.fed.us
Phone: 209-532-3671 X461
Fax: 209-533-1890
Hi Ana, this is Kathy.

This isn't the letter. Can you look for 2770-2 letter to Ross Jackson (should be a three page letter).

Thanks, Kathy and Ross
Kathy and Ross,

I am sorry I sent you the incorrect letter the first time.

Here's the correct letter!

Ana Barrales-Santillo
Stanislaus National Forest
19777 Greenley Road
Sonora, CA 95370
E-mail: abarralessantillo@fs.fed.us
Phone: 209-532-3671 X461
From: Jackson, Ross  
Sent: Wednesday, December 02, 2009 3:32 PM  
To: Julie Means; Kathy Burnett; Karen Caldwell; Russ Kanz; petek; Deborah_Giglio@fws.gov; 'jfrazier@fs.fed.us'; Peirano, Steve; Fransz, Matthew D; Wayne Lifton; Moore, Terry; Fee, Scott; Glen Nunnelley; tscesa@tuolumnneutilities.com  
Cc: Studley, Thomas; Smith, Justin T (T&LS); Jackson, Ross  
Subject: PG&E; Spring Gap Stanislaus; Pinecrest Lake-level Study Plan Meeting  

All;  
This is to confirm the Pinecrest Lake-level Study Plan meeting to be held December 9th, 2009 starting at 9 AM. The meeting will be held at the Cal EPA Building 1001 I Street Sacramento. We will meet in the lobby and go up together. If you are unable to attend, you will have the ability to call in. The conference call number is toll free 1-866-279-1566 Meeting number *9734481* . Remember to enter the * before and after the meeting number. If for some reason you need to contact me (directions, running late, can't make it) please call my cell phone at (916) 214-7015.  

Also attached below is the agenda for the meeting:  

**Agenda for December 9, 2009 Pinecrest Lake Level Study Plan Consultation Meeting**  

Introduction - Status Update - License Compliance Objectives and Needs (PG&E)  

Review Draft Lake Level Study Plan Issued by PG&E for comments (PG&E)  

Summary of comments presented by each agency (SWRCB, USFS, TUD, CDFG if available)  

Identify commonality among comments and areas of divergence (All)  

Discuss and resolve key issues (All)  
- Need for clear study plan scope and schedule  
- Define study area and specific recreational uses  
- Define public involvement process  
- Identify how survey information will be gathered and define how will survey information be used.  
- Other items  

Deliverables (All)  

Schedule  
- Confirm prerequisite activities and sequence of events  
- Clarify reasonable and achievable compliance milestones  

Determine next steps to support 1/23/10 required Study Plan filing by PG&E at SWRCB and FERC  

Please contact me if you have any questions otherwise I will see all of you on the 9th.  

Regards  
Ross
Karen:
Just a reminder. To ask Julie where the boundary of the study should be for the South Shore Overflow beach area…

Ross
And the answer is that the southshore overflow seems to peter out around Lot 355,356.

Karen Caldwell
District Ranger
Summit Ranger District
#1 Pinecrest Lake Road
Pinecrest, CA  95364
(209)965-3434
Hi Wayne and Matthew:

We are just checking in to see if you have any questions with regards to the mapping data for Pinecrest. Hope you had a good holiday.

Also, may we get a copy of the signup sheet and minutes for the meeting of 12/09/09. Thank you.

Best Regards

Glen Nunnelley
Assistant Engineer
Tuolumne Utilities District
18885 Nugget Blvd.
Sonora, CA 95370
209.532.5536 Ext. 514
gnunnelley@tuolumneutilities.com
www.tudwater.com
Hi Glen,

PG&E is finalizing the Pinecrest Lake Level Study Plan meeting minutes. The list of attendees and meeting minutes will be appended to the revised plan as an attachment, which will be distributed/filed with the agencies and stakeholders as a complete package the latter half of the week of Jan. 18th (to comply with the SWRCB condition plan submittal date). Please let me know if this is satisfactory, or if TUD has another need for the information.

Regarding the Pinecrest Lake mapping data: PG&E is appreciative of TUD's collaborative spirit during this effort; the data was very useful and will meet our needs for the development of the revised lake level plan as discussed at the meeting.

Please feel free to call or email if there are any questions.

Thank you,

Matt Fransz
Aquatic Biologist

Technical and Scientific Support
Pacific Gas and Electric Company
3401 Crow Canyon Road
San Ramon, CA 94583
Phone: (925) 415-6350
Cell: (925) 785-7330
Fax: (925) 415-6848
mdfc@pge.com
Russ,

In response to your questions today, we are nearing completion of the revised study plan and concur that the digital terrain model is a useful tool and we are adopting that methodology. We are close to obtaining internal team comments and finalizing the revised plan. If you want the in-progress draft tomorrow for a quick look before PG&E’s submittal on Friday, please let Matt Fransz know. With that said, we have very little time to incorporate any comments and need to meet the submittal deadline. We understand you may make adjustments after our formal submittal.

As it stand now, the section about public process is very short. Please see the section below. If you have any specific requirements that you would like us to incorporate before Friday in this section, please let us know soon (I believe COB tomorrow would work).

Regards,

Steve Peirano, P.E.
Senior Project Manager, Hydro Licensing
Pacific Gas and Electric Company
Power Generation Department
(415) 973-4481 office
(415) 238-0483 cell

Task 3 Public Meeting
PG&E will hold a facilitated public meeting at the direction of the State Water Board. The location, timing, and invitees to this meeting also will be at the direction of the State Water Board.
Hi Russ,

As Steve indicated in his earlier email, we are on the final lap of completing the revised draft Pinecrest Lake Level Plan. I have attached the in-progress draft here for your review, as I understand the Water Board may have some specific needs for the public process procedure. PG&E would like to get all comments back to ENTRIX COB tomorrow to incorporate any comments/edits. This allows ENTRIX one day for final editing/formatting before Friday's submittal.

Please comment/edit using track changes mode and return to me and cc the others. If there are any problems with the attachment please let know as soon as possible.

Thank you,

Matthew Fransz  
Sr. Aquatic Biologist  
Technical and Scientific Support  
Pacific Gas and Electric Company  
3401 Crow Canyon Road  
San Ramon, CA  94583  
Phone: (925) 415-6350  
Cell: (925) 785-7330  
Fax: (925) 415-6848  
mdfc@pge.com
From: Fransz, Matthew D  
Sent: Friday, January 22, 2010 4:45 PM  
To: Victoria Whitney (vwhitney@waterboards.ca.gov); Russ J. Kanz (rkanz@waterboards.ca.gov); Karen Caldwell (kcaldwell@fs.fed.us); Kathy Burnett (kburnett@fs.fed.us); Pete Kampa; Julie Means (jmeans@dfg.ca.gov)  
Cc: Jackson, Ross; Peirano, Steve  
Subject: Spring Gap-Stanislaus Project Pinecrest Reservoir Minimum Lake-level Study Plan  

Dear Ms. Whitney,

Submitted for your approval is the revised draft Spring Gap-Stanislaus Project (FERC No. 2130) Pinecrest Reservoir Minimum Lake-level Study Plan as required by the California State Water Resources Control Board (SWRCB) Revised 401 Certification Condition 4. Condition 4 requires, in part, "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..."

Included in this submittal is PG&E's cover letter to the plan and the Pinecrest Reservoir Minimum Lake-level Study Plan.

A CD containing the plan and cover letter will be mailed to you; you may expect the CD next week. If there are problems with either the CD mailing or this email please do not hesitate to contact me.


Sincerely,

Matt Fransz  
Sr. Aquatic Biologist, PG&E  
for:  
Ross Jackson  
Senior License Coordinator  
Pacific Gas & Electric Co.  
245 Market St.  
San Francisco, CA 94105-1702  
(415) 973-5747
From: Fransz, Matthew D [MDfc@pge.com]
Sent: Saturday, January 23, 2010 11:19 AM
To: Pete Kampa
Cc: Jackson, Ross; Peirano, Steve
Subject: RE: Spring Gap-Stanislaus Project Pinecrest Reservoir Minimum Lake-level Study Plan

Attachments: 012210 Ltr-SWRCB-SGS Req Appvl Pinecrest.pdf

Hi Pete,

The following email distribution of the Spring Gap-Stanislaus Project Pinecrest Reservoir Minimum Lake Level Study Plan was distributed to the agencies/stakeholders by PG&E on Friday, January 22. I received a bounce back from the PG&E email system alerting me that the email distribution did not make it to your inbox. This may be due to the size of the attached plan (6MB) and the email size limitation of TUD's email system.

PG&E will be sending a CD of the plan and its cover letter via FedEx Monday morning; you should receive it by Tuesday, January 26 (if it does arrive by Wednesday, January 27, please contact me). If you should need the plan sooner, please do not hesitate to contact me and we can try other avenues to accommodate TUD's needs.

The cover letter to the plan is attached for your records.

Thank you,

Matthew Fransz
Sr. Aquatic Biologist

Technical and Scientific Support
Pacific Gas and Electric Company
3401 Crow Canyon Road
San Ramon, CA 94583
Phone: (925) 415-6350
Cell: (925) 785-7330
Fax: (925) 415-6848
mdfc@pge.com
Can I get a Word version of the study plan? (i.e. just the first 12 pages)

Thanks

Russ J. Kanz
State Water Resources Control Board
P.O. Box 2000
Sacramento, CA 95812-2000
(916) 341-5341
rkanz@waterboards.ca.gov
Hi Russ,

A word version should be available on the CD that was FEDEx'd on Monday (it is 8MB on its own). It may be waiting for you in the State Water Board's mail room; I am attaching a zip of the word doc for your use just in case.

Please do not hesitate to call or email if there is anything else I can assist with.

Thank you,

Matthew Fransz  
Sr. Aquatic Biologist 

Technical and Scientific Support  
Pacific Gas and Electric Company  
3401 Crow Canyon Road  
San Ramon, CA  94583  
Phone: (925) 415-6350  
Cell: (925) 785-7330  
Fax: (925) 415-6848  
mdfc@pge.com
From: Russ Kanz [mailto:RKANZ@waterboards.ca.gov]
Sent: Thursday, January 28, 2010 11:17 AM
To: Fransz, Matthew D
Cc: Jackson, Ross; Peirano, Steve
Subject: RE: Spring Gap-Stanislaus Project Pinecrest Reservoir Minimum Lake-level Study Plan

I made a few changes that I believe are necessary before I send this to the Deputy Director for approval. I consider these changes non-substantive but necessary for clarification. Please let me know if these are cause any concern from PG&Es perspective.

Thanks

Russ J. Kanz
State Water Resources Control Board
P.O. Box 2000
Sacramento, CA 95812-2000
(916) 341-5341
rkanz@waterboards.ca.gov
Russ,

Thanks for the preview of your comments. Most of the changes look fine except we have suggested alternate wording to Section 4.3, Public Meeting, as shown in the attached mark-up. As stated at our meeting on December 11th last year, we believe the study plan must have a clear path to completion. We therefore recommend against seeking public usability criteria as stated in the sentence (see pg A-8) "refine recreational uses and gather usability criteria from lake users" and we recommend softer alternate language as follows: "The objective of the meeting is to obtain further feedback on recreational uses as noted in Task 1."

Also, as noted in Ross's email below, it was PG&E's understanding that another meeting with the agencies (including TUD) would be planned later in February to review final changes to the study plan before approval by the Deputy Director. Will that still be possible?

Please call me if you would like to discuss this email. Thanks.

Steve Peirano, P.E.
Senior Project Manager, Hydro Licensing Pacific Gas and Electric Company Power Generation Department
(415) 973-4481 office
(415) 238-0483 cell
From: Peirano, Steve  
Sent: Wednesday, February 03, 2010 11:48 AM  
To: Russ Kanz, Jackson, Ross; Fee, Scott; Fransz, Matthew D  
Cc:  
Subject: Correction: Spring Gap-Stanislaus Project Pinecrest Reservoir Minimum Lake-level Study Plan  

Russ et. al, - Minor correction - the meeting was on December 9th, not the 11th as indicated in my email below. -Steve

Steve Peirano, P.E.  
Senior Project Manager, Hydro Licensing Pacific Gas and Electric Company Power Generation Department  
(415) 973-4481 office  
(415) 238-0483 cell
Ross,

Please let me open this message by stating that we are very pleased with the most recent version of the lake Level Study Plan as prepared by Entrix. We find that a majority of the changes and comments from our December 9 meeting are reflected in this version.

Attached, you will find a redline and clean version of the Lake Level Study plan, containing TUD’s suggested final changes. These proposed changes are primarily for clarity in understanding, logical task sequencing and to ensure that the SWRCB has the information necessary to approve a revised lower lake level once recommended by PG&E following this study.

Please give me a call or message to let me know how we should proceed in formally recommending that these changes be included in the final version approved by the SWRCB.

Thank you for your consideration,

Peter J. Kampa, SDA
General Manager
Tuolumne Utilities District
18885 Nugget Blvd.
Sonora, CA 95370
P-(209) 532-5536 x 480
C-(209) 770-1545
F-(209) 536-6485
www.tudwater.com
Hi Russ,

Thanks for giving Steve and I the opportunity today to discuss the Spring Gap-Stanislaus Pinecrest Lake Level and Spill Mgmt plans. I believe our discussion provided much needed clarity to the questions PG&E had. I want to take this opportunity to make sure we've accurately captured our action items for the plans, so we don't begin revisions to the plans headed in the wrong direction.

**Pinecrest Lake Level Plan:**
- PG&E will clarify the text in Section 4.3 (see pg A-8) referring to seeking public usability criteria as stated in the sentence: "refine recreational uses and gather usability criteria from lake users", to as follows: "The objective of the meeting is to obtain further feedback on recreational uses as noted in Task 1."
- PG&E will move Task 3 (in Section 4.3) to Task 1 (in Section 4.1) (the former Task 1 will consequently become Task 2, and Task 2 will become Task 3) to provide clarity to the order of events within the study.
- Post February 17 meeting: PG&E will begin to preview possible dates for the next meeting.

**Spill Channel Mgmt Plan:**
- Stanislaus Forebay turbidity monitoring sample locations were clarified; one monitoring site in the Middle Fork Stanislaus River upstream of Collierville Powerhouse will provide data on background conditions (pre-spill) and spill events, another monitoring site at Sand Bar Diversion will provide additional data on background conditions.
- A redundant/alternate turbidity monitoring unit may be installed at the Stanislaus Powerhouse to provide additional reliability to the collection of data in the event data is lost at the monitoring location upstream of Collierville Powerhouse; use of this data in evaluating turbidity from spill events will be used at the State Water Board's discretion.
- PG&E provided clarification to the proposed use of the bank erosion pins and the measurement of any bed aggradation/degradation in the spill channel. At a number of cross-sections for each spill channel aggradation/degradation to the spill channel bed will be measured using an autolevel, or equivalent.

Please let me know if I've misinterpreted any of the discussion items from our conference call this afternoon, or if you have any questions.

Thank you,

Matthew Fransz  
Sr. Aquatic Biologist  
Technical and Scientific Support  
Pacific Gas and Electric Company  
3401 Crow Canyon Road  
San Ramon, CA  94583  
Phone: (925) 415-6350  
Cell: (925) 785-7330  
Fax: (925) 415-6848  
mdfc@pge.com
From: Jackson, Ross  
Sent: Thursday, March 16, 2010 1:19 AM  
To: "petek" pkampa@tuolumneutilities.com, rkanz@waterboards.ca.gov, kcaldwell@fs.fed.us, jmeans@dfg.ca.gov  
Subject: FW: PG&E: Pinecrest Lake-level Plan; Next Step  

Peter/Russ/Karen/Julie  

All your comments/concerns have been addressed and its time to have our ast meeting regarding the Pinecrest Lake-level Study Plan before final approval by the WB Deputy Director.  

Russ: Does the offer still hold to have the meeting at your location?  

Just throwing out a couple of dates, how about on a Thursday April 1st or April 8th, or Wednesdays April 7th, or April 28th. Please feel free to suggest different dates. Suggested starting time, 9 AM>  

Please let me know your availability to meet.  

<<SGS_Final Pinecrest Lake Level Plan_3-8-10.doc>>  

Regards  

Ross Jackson  
Senior License Coordinator  
Pacific Gas & Electric Co.  
245 Market St.  
San Francisco, CA 94105-1702  
(415) 973-5747
I prefer April 1 or 8. We need to meet in the beginning of April. We can meet at my office.

Russ J. Kanz
State Water Resources Control Board
P.O. Box 2000
Sacramento, CA 95812-2000
(916) 341-5341
rkanz@waterboards.ca.gov
Ross, sorry for the confusion. Looks like the FS does not need/want to participate at this time. Thx for the invite and good luck rounding up a date. kc

Karen Caldwell
District Ranger
Summit Ranger District
Stanislaus National Forest
#1 Pinecrest Lake Road
Pinecrest, CA 95364
(209)965-3434
Is it possible to have the meeting on May 28? The permittees are meeting that day. We may be able to hold the meeting in the morning. Please let me know if you are available that day.

Thanks

Russ J. Kanz
State Water Resources Control Board
P.O. Box 2000
Sacramento, CA 95812-2000
(916) 341-5341
rkanz@waterboards.ca.gov
Russ, I am likely not back from surgery on that date, but as we discussed, TUD will likely have representation by Board members and Tom Scesa. Please let me know and if the presentation is completed soon, I would appreciate an advance review. Thanks,

Peter J. Kampa, SDA
General Manager
Tuolumne Utilities District
18885 Nugget Blvd.
Sonora, CA 95370
P- (209) 532-5536 x 480
C - (209) 770-1545
F - (209) 536-6485
www.tudwater.com

T.U.D. Mission: "To responsibly manage District resources in order to provide our community with reliable, high quality water, wastewater and other utility services."
From: Fransz, Matthew D  
Sent: Friday, April 16, 2010 1:36 PM  
To: Victoria Whitney (vwhitney@waterboards.ca.gov)  
Cc: Jackson, Ross; Peirano, Steve; Russ J. Kanz (rkanz@waterboards.ca.gov); Karen Caldwell (kcaldwell@fs.fed.us); Kathy Burnett (kburnett@fs.fed.us); Pete Kampa; Julie Means (jmeans@dfg.ca.gov)  
Subject: Spring Gap-Stanislaus Project Pinecrest Reservoir Lake Level Study Plan

Dear Ms. Whitney,

Submitted for your approval is the revised draft of the Spring Gap-Stanislaus Project (FERC No. 2130) Pinecrest Reservoir Lake Level Study Plan (Plan) as required by the California State Water Resources Control Board (SWRCB) Revised 401 Certification Condition 4. Condition 4 requires, in part, "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..."

Included in this email submittal is PG&E's cover letter to the Plan. A CD containing the Plan and cover letter will be mailed to you; you may expect the CD next week. If there are problems with either the CD mailing or this email please do not hesitate to contact me.

A separate email will be submitted to those on the cc list where an Adobe Acrobat pdf copy of the Plan will be provided for their immediate review.

<< File: Req Appvl-Pinecrest Lake Level Study Plan.pdf >>

Sincerely,

Matt Fransz  
Sr. Aquatic Biologist, PG&E  
for:  
Ross Jackson  
Senior License Coordinator  
Pacific Gas & Electric Co.  
245 Market St.  
San Francisco, CA 94105-1702  
(415) 973-5747
All,
Attached for your review is the revised Pinecrest Reservoir Lake Level Study Plan.

<<SGS_Pinecrest Lake Level Plan_4-16-10.pdf>>

Please let me know if there are any comments or questions.

Thank you,
Matthew Fransz
Sr. Aquatic Biologist

Technical and Scientific Support
Pacific Gas and Electric Company
3401 Crow Canyon Road
San Ramon, CA  94583
Phone: (925) 415-6350
Cell: (925) 785-7330
Fax: (925) 415-6848
mdfc@pge.com
From: petek [mailto:pkampa@tuolumneutilities.com]  
Sent: Tuesday, April 20, 2010 2:32 PM  
To: Fransz, Matthew D; rkanz@waterboards.ca.gov; kcaldwell@fs.fed.us; kburnett@fs.fed.us; jmeans@dfg.ca.gov  
Cc: Jackson, Ross; Peirano, Steve  
Subject: RE: Spring Gap-Stanislaus Project Pinecrest Reservoir Lake Level Study Plan  

Matt,

Can you highlight the changes made from the March 2101 version? Pursuant to our meeting only?

Thank you

Peter J. Kampa, SDA  
General Manager  
Tuolumne Utilities District  
18885 Nugget Blvd.  
Sonora, CA 95370  
P- (209) 532-5536 x 480  
C - (209) 770-1545  
F - (209) 536-6485  
www.tudwater.com
Hi Pete,

Attached is a copy showing all edits between the April 16 and the previous version (January 22 distribution). You can follow the edits by comparing the the April 1 meeting notes to the text of the plan.

I had to print the plan to pdf for distribution due to the size of the Word version (>10MB).

Hope this helps. Please let me know if there is anything else I can assist with.

Thank you,

Matthew Fransz
Sr. Aquatic Biologist

Technical and Scientific Support
Pacific Gas and Electric Company
3401 Crow Canyon Road
San Ramon, CA 94583
Phone: (925) 415-6350
Cell: (925) 785-7330
Fax: (925) 415-6848
mdfc@pge.com
From: petek [mailto:pkampa@tuolumneutilities.com]

Sent: Tuesday, April 20, 2010 5:08 PM

To: Fransz, Matthew D

Subject: RE: Spring Gap-Stanislaus Project Pinecrest Reservoir Lake Level Study Plan

Thank you very much matt.

Sent from my HTC
SPRING GAP-STANISLAUS PROJECT

Pinecrest Lake Level Study Plan Consultation Meeting

Wednesday, December 9, 2009

Time: 9:00 a.m. – 1:00 p.m. / Coordinator: Steve Peirano - PG&E

State Water Board’s Offices
(Cal EPA Building, 1001 I Street, Room 1410, Sacramento, CA)
Teleconference: 1-866-339-6643, access code 530 335 5653

Note taker: Veronica Romero, ENTRIX, Inc.

Participants:

<table>
<thead>
<tr>
<th>NAME</th>
<th>ORGANIZATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glen Nunnelley</td>
<td>Tuolumne Utilities District (TUD)</td>
</tr>
<tr>
<td>Tom Seesa</td>
<td>TUD</td>
</tr>
<tr>
<td>Pete Kampa</td>
<td>TUD</td>
</tr>
<tr>
<td>Matt Fransz</td>
<td>Pacific Gas &amp; Electric Company (PG&amp;E)</td>
</tr>
<tr>
<td>Ross Jackson</td>
<td>PG&amp;E</td>
</tr>
<tr>
<td>Steve Peirano</td>
<td>PG&amp;E</td>
</tr>
<tr>
<td>Wayne Lifton</td>
<td>ENTRIX, Inc. (ENTRIX)</td>
</tr>
<tr>
<td>Mike Rudd</td>
<td>ENTRIX</td>
</tr>
<tr>
<td>Russ Kanz</td>
<td>State Water Resources Control Board (State Water Board)</td>
</tr>
<tr>
<td>Karen Caldwell</td>
<td>U.S. Forest Service (Forest Service)</td>
</tr>
<tr>
<td>Jim Frazier</td>
<td>Forest Service</td>
</tr>
<tr>
<td>Tracy Weddle</td>
<td>Forest Service</td>
</tr>
<tr>
<td>Veronica Romero</td>
<td>ENTRIX</td>
</tr>
</tbody>
</table>

Via Teleconference

<table>
<thead>
<tr>
<th>NAME</th>
<th>ORGANIZATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scott Fee</td>
<td>PG&amp;E O&amp;M</td>
</tr>
<tr>
<td>Terry Moore</td>
<td>PG&amp;E Hydro Angels Camp</td>
</tr>
<tr>
<td>Larry Wise</td>
<td>ENTRIX</td>
</tr>
</tbody>
</table>

Introductions and Safety (PG&E)

- Steve Peirano kicked-off meeting with participant introductions. He provided an overview on the Spring Gap-Stanislaus License (issued April 24, 2009) and the Pinecrest Lake Level Study Plan (Plan).
- Pete Kampa, from Tuolumne Utility District (TUD), explained TUD’s interest in the study and their objective to maintain a balance between the water supply and recreation.
- Russ Kanz reviewed emergency procedures. Meeting participants with CPR training were identified.
Status Update (PG&E)

- Russ Kanz asked if a discussion with FERC was in order to revise the license based on potential revisions to 401 Certification. Steve replied PG&E will proceed with the Plan as if it is part of the license requirement.

- Ross Jackson provided information on the rehearing with FERC. The wrong 401 Certification had been attached by FERC to its October 15, 2009 Order on Rehearing, which did not include the Pinecrest Lake level study requirement. This was an administrative oversight and FERC has been notified of the error. It is expected that a new order will be issued.

Meeting Objective (PG&E)

- PG&E’s objective is to determine a clear direction for the Plan in consultation with the State Water Board, the Forest Service, TUD, and CDFG, if they participate, in order to develop a scope of work that can be implemented to meet the requirements and to assure compliance is reasonably achievable.

Review Draft Lake Level Study Plan Issued by PG&E for comments (PG&E)

Wayne Lifton provided an overview of the objectives of the Plan to:

- Identify major tasks and implementation schedule.
- Meet 401 Certification Requirements.
- Review proposed major data gathering activities which focus on facilities and topography.

PG&E/ENTRIX prepared and distributed a table of comments received from participants involved in the consultation process, including comments from State Water Board, the Forest Service, and TUD. Similar comments were grouped by “Topic/Issue” and discussed by the group.

Summary of topic/issue discussion with identified follow-up, action item, and agreements noted in bold.

<table>
<thead>
<tr>
<th>TOPIC / ISSUE</th>
<th>DISCUSSION</th>
</tr>
</thead>
<tbody>
<tr>
<td>01a. Study Requirements - Minimum Elevation / The study's elevation range end at 5,600 ft msl or lower, rather than 5,604 ft msl.</td>
<td>TUD proposed the study’s minimum elevation range be 5,595 ft msl based on historical operations information. State Water Board recommended it be at least 5,600 ft msl. <strong>AGREEMENT:</strong> The minimum elevation for the study will be 5,595 ft msl.</td>
</tr>
<tr>
<td>01b. Study Requirements - Maximum Elevation / The study's elevation range begin at the full reservoir pool.</td>
<td>401 Certification requires a minimum reservoir elevation of 5,608 ft msl between the time spill ends and Labor Day. Baseline recreation data is needed above that elevation to understand and compare potential effects of drawdown below 5,608 ft. <strong>AGREEMENT:</strong> The maximum elevation for the study will be 5,617 ft msl. Baseline data will be developed for elevations between 5,617 and 5,610 ft msl. Elevations between 5,608 and 5,595 ft msl are identified as the target range for evaluation of potential effects of lowered lake levels. Only effects identified within this lower range are subject to mitigation.</td>
</tr>
<tr>
<td>TOPIC / ISSUE</td>
<td>DISCUSSION</td>
</tr>
<tr>
<td>--------------</td>
<td>------------</td>
</tr>
<tr>
<td>01c. Study Requirements - Measurement Increments / Data collected at a minimum of one foot contours.</td>
<td>This topic is tied to 5b. Study Requirements – Scope – photographic Survey</td>
</tr>
<tr>
<td></td>
<td>TUD’s preference, from an engineering perspective, is to use a digital terrain model (DTM), which can provide more data and be used as a visual tool for the public. The benefit is that a topographic map and cross-sections can be easily developed for any lake level. To that end, TUD has contracted the services of a photogrammetrist to develop a DTM, contour map with one-foot interval, and an orthophoto of the study area. This data would be available in 2 to 3 weeks.</td>
</tr>
<tr>
<td></td>
<td><strong>AGREEMENT:</strong> TUD will provide the DTM data to PG&amp;E for use in this study. PG&amp;E will evaluate the data when it is available, and barring any conflicts or issues with the data, will modify the Plan to reflect this new development.</td>
</tr>
<tr>
<td></td>
<td><strong>FOLLOW-UP:</strong> Tom Scesa, TUD, will provide PG&amp;E and ENTRIX (Mike Rudd) with the digital terrain model link by the end of next week (December 18, 2009).</td>
</tr>
<tr>
<td>01d. Study Requirements - Measurement Reference / Lake elevation values reference PG&amp;E existing lake level measurements and the spillway crest as 5,611.5 ft msl.</td>
<td>• TUD requested clarification/relationship of elevations taken from PG&amp;E datum (5,611.5 ft msl) to USGS datum. • After a quick investigation, Scott Fee stated that the USGS datum and PG&amp;E datum are equal at Pinecrest.</td>
</tr>
<tr>
<td></td>
<td><strong>ACTION ITEM:</strong> ENTRIX to incorporate a clarification that the data used is taken from PG&amp;E datum, which is equal to the USGS datum.</td>
</tr>
<tr>
<td>01e. Study Requirements – Scope / Study Range</td>
<td>See Topics 01a and 01b.</td>
</tr>
<tr>
<td>02a. Study Requirements - Additional Facilities / Additional facilities beyond those stated in the plan need to be included in the study.</td>
<td>Additional recreation facilities potentially impacted by the lowered lake level need to be included in the Plan. A map was drawn on the white board and photo taken for the record (see Attachment).</td>
</tr>
<tr>
<td></td>
<td><strong>AGREEMENT:</strong> The Plan will include seven recreation facilities/areas: 1) gas docks and slips, 2) boat ramp and courtesy dock, 3) designated/buoyed swim area, 4) mixed day use area (SE of #3), 5) ADA accessible fishing access, 6) south shore overflow (near private parking), and 7) overflow area north of marina (both mixed use areas).</td>
</tr>
<tr>
<td></td>
<td><strong>ACTION ITEM:</strong> Karen Caldwell to identify parameters of south shore overflow area (#6) and forward information to Ross Jackson and/or Matt Fransz.</td>
</tr>
<tr>
<td>02b. Study Requirements - Additional Facilities - Areas Included / The study area should include the area northeast of the marina.</td>
<td>See Topic 02a.</td>
</tr>
<tr>
<td>03. Study Requirements - Additional Research / The plan should include identification and analysis of existing information, such as recent surveys.</td>
<td><strong>ACTION ITEM:</strong> ENTRIX will include in the Plan a task to work with PG&amp;E and the Forest Service to obtain relevant existing recreation user information.</td>
</tr>
<tr>
<td>04. Study Requirements – Timeframe / The survey timeframe should be expanded to get a thorough understanding of recreational use patterns.</td>
<td>Lower lake levels of interest cannot occur under the existing license until after Labor Day, when uses and users may change. Collection of use data would not be equivalent before and after Labor Day. Recreational usability of the seven recreation features rather than use would be a better measure of effect.</td>
</tr>
<tr>
<td></td>
<td>See Topic 06b.</td>
</tr>
<tr>
<td>TOPIC / ISSUE</td>
<td>DISCUSSION</td>
</tr>
<tr>
<td>---------------</td>
<td>------------</td>
</tr>
<tr>
<td>05a. Study Requirements - Survey Method / Survey should use more detailed and use more advanced techniques.</td>
<td>See Topic 05b.</td>
</tr>
<tr>
<td>05b. Study Requirements - Scope - Photographic Survey / Photographic surveys should be at all lake elevations and follow changes made in Task 1.</td>
<td>Proposed methodology to be used needs to capture water elevations and provide an image of the recreation feature at the agreed upon elevations. <strong>AGREEMENT:</strong> Lake level elevations will be analyzed at one-foot increments from 5,617 to 5,595 ft msl using a DTM and orthophoto. See Topics 01b and 01c.</td>
</tr>
<tr>
<td>05c. Study Requirements - Scope - Rocks and Obstructions / Underwater rocks and other obstructions should be included in the analysis to determine minimum elevation, due to potential impacts to boats.</td>
<td><strong>AGREEMENT:</strong> It is not possible to map-out all rocks in the lake; however, maps will be created in this study showing specific lake elevations and exposed rocks within the range levels being studied.</td>
</tr>
<tr>
<td>05d. Study Requirements - Scope - Lake Terrain / A digital terrain model of the lake bottom should be prepared.</td>
<td>See Topic 01c and 05b.</td>
</tr>
<tr>
<td>06a. Study Requirements - Scope - User Satisfaction / The plan should include a literature review summarizing lake level impacts.</td>
<td>See Topic 06b.</td>
</tr>
<tr>
<td>06b. Study Requirements - Scope - Summer Recreational Use / Define recreational use patterns during summer.</td>
<td>Discussion on what type of user surveys would be needed to capture public response to the different lake levels and determine how recreation is impacted. Suggested using baseline data to define recreation use and usability, and photographic data along with modeled topographic characteristics to evaluate effects of lowered lake levels on the usability of the seven recreation features. <strong>AGREEMENT:</strong> Plan will not include user surveys, and will include one facilitated public outreach meeting. ENTRIX to include proposed process to evaluate usability in the Plan.</td>
</tr>
<tr>
<td>07. Study Requirements - Scope – Redefined.</td>
<td>See topics 01b, 02a, and 06b.</td>
</tr>
<tr>
<td>08. Study Requirements - Scope - 4(e) Conditions / The Plan should coordinate with improvements outlined in the Recreation Implementation Plan, required in the Forest Service's 4(e) Condition 29.</td>
<td></td>
</tr>
</tbody>
</table>
09. Study Requirements - Hydrologic Data
Hydrologic data based on various water levels should be included in the study.

10a. Impact Criteria / Minimum reservoir elevations should be based on improvements to recreational facilities.

10b. Impact Criteria – Flexibility / The commenter suggests that a floating minimum level based on several criteria should be used rather than a single fixed point.

11. Mitigation Measures / The final report should include recommendations for improvements that can protect recreational uses at lower reservoir elevations.

12a. Consultation – Public / Public consultation through meetings and surveys done to establish water surface elevations that support each of the recreational uses.

12b. Consultation - Final Meeting / A final meeting with agencies should be planned prior to submission of the plan's final draft.

**DISCUSSION**

See topics 01a, 01b, and 05b.

The Plan will cover specific recreation areas and how they will be affected by the lake levels. See topics 01a, 01b, and 05b.

See topic 01a.

Intent of the study plan is to determine impacts to recreation features at lake levels between 5,608 ft msl and 5,595 ft msl. This information can then be used to formulate appropriate mitigation measures and enhancements.

See Topic 06b.

Review of steps to finalize plan and schedule meetings as needed.

**ACTION ITEM:** Include statement in plan that consultation will be continued after submittal.

**AGREEMENT:** Resubmit plan on January 22, 2010, and if there are additional agency comments incorporate afterwards. The incorporation of these comments will be noted in the plan.

**FOLLOW-UP:** A revised draft of Plan will be provided by January 22, 2010. Meet and review plan sometime after February 17, 2010.

**Schedule**

**Confirm prerequisite activities and sequence of events**

Steve Peirano explained the sequence of events for the study plan is to identify the key activities and schedule accordingly to meet the January 23, 2010 filing (nine months from license issuance) with FERC.

**Determine next steps to support January 23, 2010 required Study Plan filing by PG&E at State Water Board and FERC**

Participants agreed to have a follow up consultation meeting after February 17, 2010 to review the revised draft Pinecrest Lake Level Plan.
Attachment
SPRING GAP-STANISLAUS PROJECT

(PERC No. 2130)

Pinecrest Lake Level Study Plan Consultation Meeting

Thursday, April 1, 2010

Time: 9:00 a.m. – 1:00 p.m. / Coordinator: Ross Jackson - PG&E

State Water Board’s Offices
(Cal EPA Building, 1001 I Street, Room 1410, Sacramento, CA)
Teleconference: 1-866-339-6643, access code 530 335 5653

Note taker: Veronica Romero, ENTRIX, Inc.

Participants:

<table>
<thead>
<tr>
<th>NAME</th>
<th>ORGANIZATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Julie Means</td>
<td>California Department of Fish and Game (CDFG)</td>
</tr>
<tr>
<td>Russ Kanz</td>
<td>State Water Resources Control Board (State Water Board)</td>
</tr>
<tr>
<td>Pete Kampa</td>
<td>Tuolumne Utilities District (TUD)</td>
</tr>
<tr>
<td>Steve Peirano</td>
<td>Pacific Gas &amp; Electric (PG&amp;E)</td>
</tr>
<tr>
<td>Matt Fransz</td>
<td>PG&amp;E</td>
</tr>
<tr>
<td>Ross Jackson</td>
<td>PG&amp;E</td>
</tr>
<tr>
<td>Wayne Lifton</td>
<td>ENTRIX, Inc. (ENTRIX)</td>
</tr>
<tr>
<td>Mike Rudd</td>
<td>ENTRIX</td>
</tr>
<tr>
<td>Veronica Romero</td>
<td>ENTRIX</td>
</tr>
</tbody>
</table>

Introductions

Ross Jackson identified the meeting participants for Julie Means who called into the meeting.

Ross explained the objective of the meeting was to go through the Response to Comments table (Appendix A of the Study Plan, page A-26).

U.S. Forest Service decided not to attend this meeting because they agree with the March 2010 Pinecrest Reservoir Lake Level Study Plan and they concur with State Water Board’s comments. This was communicated in an email between Karen Caldwell and Ross Jackson, dated March 18, 2010.

Julie Means asked about the lake level and the fishing platform. Pete Kampa responded that part of the proposed mitigation was to determine the lake level that makes the handicap access unusable.
**Review of Response to Comments Table (RTC)**

Matt Fransz went through the comments received from the State Water Board and Tuolumne Utilities District (TUD).

<table>
<thead>
<tr>
<th>Section, Topic or Issue / Paragraph or Bullet</th>
<th>Comment #</th>
<th>Meeting</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.0 Methods Paragraph 1</td>
<td>SWB 1</td>
<td>Mike Rudd explained that the text was reworded so that the focus was on assessing the impact of lowering the lake level on usability of the recreation features. TUD and State Water Board concur with modification in RTC table.</td>
</tr>
<tr>
<td>4.2 Task 2 – Collect Recreation Data and Conduct Photo Survey Middle of Paragraph 2</td>
<td>SWB 2</td>
<td>TUD concurs with State Water Board, comment adopted.</td>
</tr>
<tr>
<td>4.3 Task 3 Public Meeting Paragraph 1</td>
<td>SWB 3</td>
<td>State Water Board concurs with the adopted modification.</td>
</tr>
<tr>
<td>4.5 Task 5 – Analyze Potential Recreation Impacts to the Seven Recreational Features Paragraph 1</td>
<td>SWB 4</td>
<td>Mike Rudd explained that elevation data would be analyzed at one foot increments between the agreed upon range (5,617 and 5,595 ft msl), usability data would be collected at two foot intervals from 5,617 to 5,610 ft msl, and one foot intervals from 5,608 to 5,595 ft msl. Russ replied that he initially thought there was a data gap but after rereading the text, he sees that the necessary data would get collected. Pete Kampa said we should clarify the range for the two foot levels. Mike added that we would include the actual elevations in the text so that there is no confusion regarding the elevations that will be analyzed. <strong>CLARIFICATION:</strong> Baseline data for recreational usability will be collected and analyzed at two foot intervals as follows: 5,617; 5,615; 5,613; 5,611; and also at 5,610 ft msl. Baseline elevation data will be analyzed at one foot intervals between 5,617 and 5,610 ft msl. One foot intervals will be analyzed from 5,608 to 5,595 ft msl. State Water Board and TUD concur with clarification.</td>
</tr>
<tr>
<td>Section, Topic or Issue / Paragraph or Bullet</td>
<td>Comment #</td>
<td>Meeting</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>-----------</td>
<td>---------</td>
</tr>
<tr>
<td>8.1 Draft Lake Level Study Report Bullet 2</td>
<td>SWB 5</td>
<td>TUD and State Water Board concur with modification in RTC table.</td>
</tr>
<tr>
<td>4.0 Methods Middle of Paragraph 1</td>
<td>TUD 1</td>
<td>TUD and State Water Board concur with modification in RTC table.</td>
</tr>
<tr>
<td>Task 4.1 Obtain and Review Existing Information Bullet 3</td>
<td>TUD 2</td>
<td>State Water Board concurs with TUD, comment adopted.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The suggested location for the public meeting is U.S. Forest Service’s basement. Russ Kanz suggested the following potential dates: May 12, 13, and 20 and/or June 3 and 14. Ross asked how the public meeting should be advertised via Friends of Pinecrest and the permittees and encouraging them to spread the word.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ACTION ITEM:</strong></td>
<td>Need to set dates for two events: the public meeting and the field visit.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ACTION ITEM:</strong> Ross Jackson will secure a meeting location.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task 4.1 Obtain and Review Existing Information Bullet 3</td>
<td>TUD 3</td>
<td>Wayne Lifton said he is proposing having a facilitator (such as Bill Pistor) lead the public meeting. Russ is okay with this recommendation and he will work with Bill to draft an outline of the meeting. Wayne will work with ENTRIX’s Recreation Specialist regarding the recreation survey methods so they will be prepared to discuss at the meeting.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ACTION ITEM:</strong> Russ Kanz to take the first cut at the agenda, and then work with Bill Pistor, and Mike Rudd to put together the outline for the public meeting.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task 4.1 Obtain and Review Existing Information Bullet 4</td>
<td>TUD 3</td>
<td>State Water Board concurs with TUD, comment adopted.</td>
</tr>
<tr>
<td>4.2 Task 2 – Collect Recreation Data and Conduct Photo Survey Paragraph 2</td>
<td>TUD 4</td>
<td>The elevations will be consistent with previous point. TUD accepts the water elevation identified by State Water Board.</td>
</tr>
</tbody>
</table>
Pinecrest Lake Level Study Plan Consultation Meeting
Spring Gap-Stanislaus Project (FERC No. 2130)

Written comments received from the State Water Board on January 28, 2010
(to the January version of the Plan)

<table>
<thead>
<tr>
<th>Section, Topic or Issue / Paragraph or Bullet</th>
<th>Comment #</th>
<th>Meeting</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.2 Task 2 – Collect Recreation Data and Conduct Photo Survey End of Paragraph 2</td>
<td>TUD 5</td>
<td>State Water Board concurs with TUD, comment adopted.</td>
</tr>
<tr>
<td>4.5 Task 5 – Analyze Potential Recreation Impacts to the Seven Recreational Features Paragraph 1</td>
<td>TUD 6</td>
<td>State Water Board concurs with TUD, comment adopted.</td>
</tr>
<tr>
<td>4.6 Task 6 – For Identified Impacts, Identify Potential Mitigation Measures and Preliminary Concept Descriptions Paragraph 1</td>
<td>TUD 7</td>
<td>Pete Kampa explained TUD’s intention is to identify their need for a lake level lower than 5,608 ft and review the proposed mitigation for those levels, only as needed. If there is a need to be able to operate to a lake level below 5,608 ft, TUD would submit a modification request to PG&amp;E. The study plan identifies the water level 5,608 ft msl as the point where potential mitigation measures may be needed. From there, PG&amp;E would need to go to the State Water Board for a change to the 401 Certification condition. Pete asked Russ if he thought the study plan was sufficient and Russ said yes. Russ said we also have the intent captured from the record based on the petitions. Steve Peirano said would be prepared to address TUD’s request. He said after the approval of the report there will be time to determine appropriate the mitigation. TUD agrees with the reasoning for Not Adopting the comment, SWB concurs.</td>
</tr>
<tr>
<td>8.1 Draft Lake Level Study Report Bullet 3</td>
<td>TUD 8</td>
<td>The modification requested was to strike the bullet. State Water Board concurs with TUD, based on previous modifications, comment adopted.</td>
</tr>
<tr>
<td>8.1 Draft Lake Level Study Report Bullet 4</td>
<td>TUD 9</td>
<td>State Water Board concurs with TUD, comment adopted.</td>
</tr>
<tr>
<td>8.1 Draft Lake Level Study Report Bullet 5</td>
<td>TUD 10</td>
<td>The focus of this study is to assess impacts on recreation usability and to identify potential mitigation measures for those impacts. Further analysis or recommendation is beyond the scope of this study, therefore this comment was not adopted. State Water Board and TUD concurred, comment not adopted.</td>
</tr>
</tbody>
</table>
**Written comments received from the State Water Board on January 28, 2010**
**to the January version of the Plan**

<table>
<thead>
<tr>
<th>Section, Topic or Issue / Paragraph or Bullet</th>
<th>Comment #</th>
<th>Meeting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix A Consultation Documentation</td>
<td>TUD 11</td>
<td>Pete Kampa explained that the strike-out of appendix A was a mistake and not intended; therefore, the comment was not adopted.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>State Water Board and TUD concur, comment not adopted.</td>
</tr>
</tbody>
</table>

**Determine next steps for final filing of Study Plan between PG&E and State Water Board**

Ross Jackson asked Russ Kanz how he wanted to handle the next steps of processing and approving this final version of the study plan and Russ requested an electronic copy for himself with a hardcopy sent to Vicky Whitney.

A conference call was arranged between Russ Kanz, Mike Rudd, Wayne Lifton, and Matt Fransz to discuss planning for the public meeting.
ATTACHMENT B

STATE WATER BOARD APPROVAL LETTER FOR THE PINECREST RESERVOIR LAKE LEVEL STUDY PLAN
MAY 06 2010

Ross Jackson
Pacific Gas and Electric Company
P.O. Box 770000, Mail Code N11C
San Francisco, CA 94177

Dear Mr. Jackson:

APPROVAL OF THE PINECREST RESERVOIR LAKE LEVEL STUDY PLAN, SPRING GAP-STANISLAUS HYDROELECTRIC PROJECT, FERC #2130

The Federal Energy Regulatory Commission (Commission) issued a new license for the Spring Gap-Stanislaus Hydroelectric Project (Commission # 2130) on April 24, 2009. As a condition of the water quality certification for the Spring Gap-Stanislaus Hydroelectric Project, the State Water Resources Control Board (State Water Board) included the requirement to submit a Pinecrest Reservoir Lake Level Study Plan for approval by the Deputy Director for Water Rights.

I received your request for approval of the Pinecrest Reservoir Lake Level Study Plan. This plan was developed in consultation with my staff, and they have recommended approval of the plan. I concur with their recommendation, and approve the Pinecrest Reservoir Lake Level Study Plan dated April 2010 for the Spring Gap-Stanislaus Project.

If you have any questions about these comments or would like to discuss any related issues, please contact Russ Kanz at (916) 341-5341.

Sincerely,

[Signature]
Victoria A. Whitney
Deputy Director for Water Rights

cc: Karen Caldwell
USDA Forest Service
Stanislaus National Forest
Summit Ranger District
1 Pinecrest Lake Road
Pinecrest, CA 95364

Pete Kampa
Tuolumne Utilities District
18885 Nugget Boulevard
Sonora, CA 95370

Continued on next page.
Julie Means
California Department of Fish and Game
1234 East Shaw Avenue
Fresno, CA 93719

Debbie Giglio
U.S. Fish and Wildlife Service
2800 Cottage Way, Room W-2605
Sacramento, CA 95825