

An aerial photograph of a vast, dense pine forest. In the background, a range of mountains is visible under a clear sky. The text is overlaid on the image in a yellow, sans-serif font.

Pinecrest Reservoir Public Workshop

October 4, 2012

State Water Resources Control Board

Division of Water Rights

An aerial photograph of a vast, dense forest of evergreen trees. In the distance, a range of mountains is visible under a clear sky. The overall color palette is dominated by greens and blues, with a slight blue tint over the entire image.

Workshop Schedule

1. Welcome and Review of Ground Rules
2. Presentation by State Water Board Staff
3. Comments by Attendees
4. Closing and Next Steps


Meeting Ground Rules

- Sign in sheet and speaker cards are at -----
- Fill out a speaker card if you wish to comment
- Comments may be limited to a set amount of time based on the number of people wishing to speak
- Questions will be answered to best of staff's ability (please save questions for end of presentation)
- Please respect all speakers, all points of view are valid
- No decisions will be made today

An aerial photograph of a vast, green forested valley. In the center, a large, dark reservoir is visible. The background shows rolling hills and mountains under a clear sky. The text is overlaid on this image.

Presentation Outline

- **Background**
 - State Water Board's Mission/Role
 - Water quality certification for Spring Gap- Stanislaus Hydroelectric Project
 - Overview of operations of Hydroelectric Project below Pinecrest Reservoir
- **Pacific Gas and Electric Company's (PG&E's) Request**
- **Staff Recommendation**
- **Next Steps & Additional Information**

An aerial photograph of a vast, dense forest covering a valley. In the center, a dark, calm lake is visible, surrounded by more trees. In the background, a range of mountains stretches across the horizon under a clear sky. The overall scene is serene and natural.

State Water Board's Mission

To preserve, enhance, and restore the quality of California's water resources, and ensure their proper allocation and efficient use for the benefit of present and future generations.

<http://www.waterboards.ca.gov>

An aerial photograph of a vast, dense forest covering a valley. In the background, a range of mountains is visible under a clear sky. The overall color palette is dominated by greens and blues, with the text overlaid in a bright yellow color.

State Water Board: Background

- Joint authority for water rights and water quality to provide protection of California's waters
- Protect and enforce many water uses including needs of industry, agriculture, municipal districts, and environment
- Balancing role between the various beneficial uses of water

Why are we here?

- State Water Board regulates hydroelectric projects via issuance of water quality certifications (§401 of Clean Water Act)
 - Protect water quality
 - Balance beneficial uses
 - Consider existing water rights

Spring Gap-Stanislaus Hydroelectric Project

- PG&E owns Hydroelectric Project
- Pinecrest Reservoir part of Hydroelectric Project, regulating water distribution downstream
- Water quality certification
 - Originally issued September 15, 2008, minimum Pinecrest Lake level of 5,610 feet on Labor Day
 - Amended via State Water Board Order 2009-0039, minimum Pinecrest Lake level of 5,608 feet on Labor Day

Beardsley Reservoir

**PG&E's Donnell's /
Beardsley Project**

Pinecrest Reservoir
(aka Strawberry Dam)
~18,000 acre feet

**PG&E's Spring Gap-
Stanislaus Project**

Spring Gap
Powerhouse

M. F. Stanislaus Riv

Philadelphia
Ditch

S. F. Stanislaus River

Stanislaus
Powerhouse

Lyons Reservoir
~5,500 acre feet

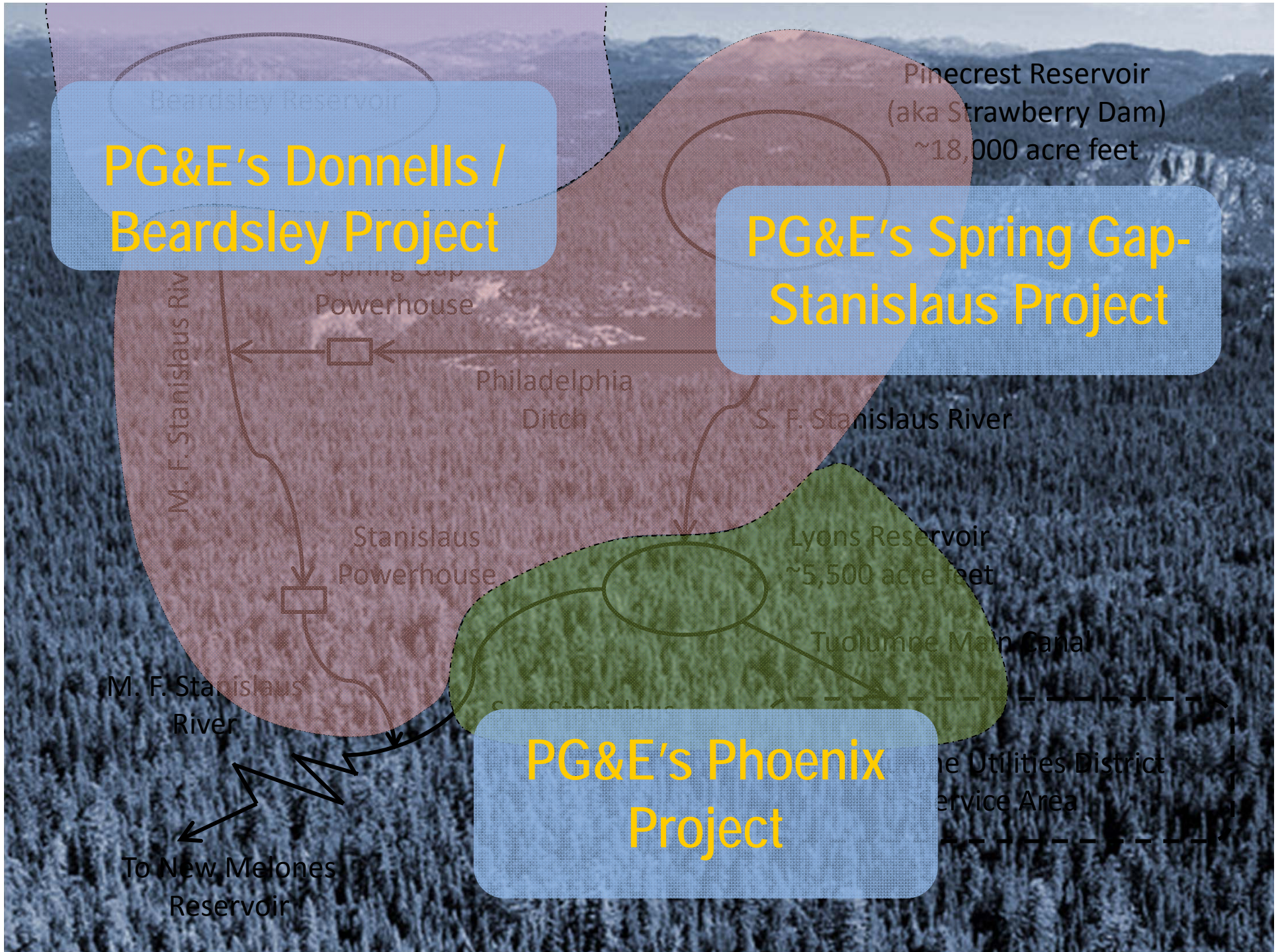
Tuolumne Main Canal

M. F. Stanislaus
River

**PG&E's Phoenix
Project**

the Utilities District
Service Area

To New Melones
Reservoir



Pinecrest Lake Level Study

- Developed by PG&E as requirement of water quality certification
- Focused on affects of lake level on various recreation features
- 14 comments received on the study:
 - All commenters were opposed to lowering of Labor Day minimum lake level
 - Majority encouraged extending minimum elevation of 5,608 feet until October 1

PG&E's Request

- PG&E requested the following modifications to minimum lake level:
 - 5,606 feet in Wet Water Years
 - 5,604 feet in Wet-Normal Water Years
 - 5,600 feet in Normal-Dry and Dry Water Years

Water Year Types

- Based on the Department of Water Resources forecast for annual unimpaired inflow into New Melones Reservoir
- Set into water year types by ranges of total acre-feet of water forecasted for that water year

Example: Critically Dry is defined as a forecasted inflow of less than 350,000 acre-feet into New Melones Reservoir

An aerial photograph of a vast, densely forested valley. The trees are a mix of green and brown, suggesting a dry or late autumn season. In the distance, a range of mountains is visible under a clear sky. The overall scene is a natural, rugged landscape.

Staff Recommendation on Lake Levels

- Lake levels to remain at 5,608 feet until Labor Day except in Dry water years when the spills from Pinecrest Reservoir end before July 1 (such as this past year)
 - In those (dry) years minimum lake levels would be lowered to 5,606 feet
- In critically dry years, PG&E is able to request a minimum lake level appropriate for that year's situation (existing condition)

Factors Influencing Staff Recommendations

- Historic lake levels on Labor Day before this condition was in effect are not comparable
 - Leakage through the Dam during summer elevations was ~10 cubic feet per second (cfs) in 1980's and ~20 cfs in the 1990's
 - Repair work by PG&E in 2002 reduced that leakage to a range of 1 – 5 cfs

Factors Influencing Staff Recommendations

- Staff recommendation would have covered Tuolumne Utilities District's (TUD) needs for 2012, which had earliest end of spill on record
- TUD's 2010 Urban Water Management Plan, finalized in June 2011, estimates there is a reliable supply of water through 2035*, even considering multiple dry years

*The estimate assumes steady population growth through 2035, however 2011 Department of Transportation growth analysis estimates a flat or negative population growth for Tuolumne County

Table 6-5: Projected Treated and Untreated Water Sales, Additional Water Uses and Losses, and Total Water Demand (ac-ft/yr)

Year	Treated Water			Raw and Recycled Water				Water Demand Total
	Treated Water Sales	Additional Treated Water Uses and Losses ⁽²⁾	Wholesale Deliveries	Agriculture Irrigation as Raw Water	Agriculture Irrigation as Recycled Water	Wholesale Deliveries	Additional Raw Water Uses and Losses ⁽³⁾	
2010 ⁽¹⁾	4,197	926	208	2,366	1,850	501	5,465	15,513
2015	5,257	1,017	289	2,829	2,308	575	6,645	18,920
2020	5,904	1,142	305	2,985	2,421	607	7,295	20,659
2025	6,636	1,284	321	3,149	2,540	641	8,021	22,592
2030	7,465	1,444	339	3,322	2,664	676	8,831	24,741
2035	7,870	1,522	358	3,505	2,794	713	9,312	26,074

Notes:

1. Based on actual year.
2. Additional treated water uses and losses are described in Section 3.5 and Table 3-13.
3. Water loss through ditch conveyance system is assumed to be 40% of surface water supply based on historical data.

From TUD's 2010 Urban Water Management Plan

Table 6-3: Supply Reliability for the TUD Water System for Year 2035 (ac-ft/yr)					
Source	Normal Water Year	Single-Dry Water Year	Multiple-Dry Water Years		
			Year 1	Year 2	Year 3
Surface Water	24,500	24,500	24,500	24,500	24,500
Groundwater	1,311	656	656	656	656
Recycled Water	2,794	2,217	2,217	2,217	2,217
Total	28,606	27,372	27,372	27,372	27,372
Percent of Normal		96%	96%	96%	96%

Note:

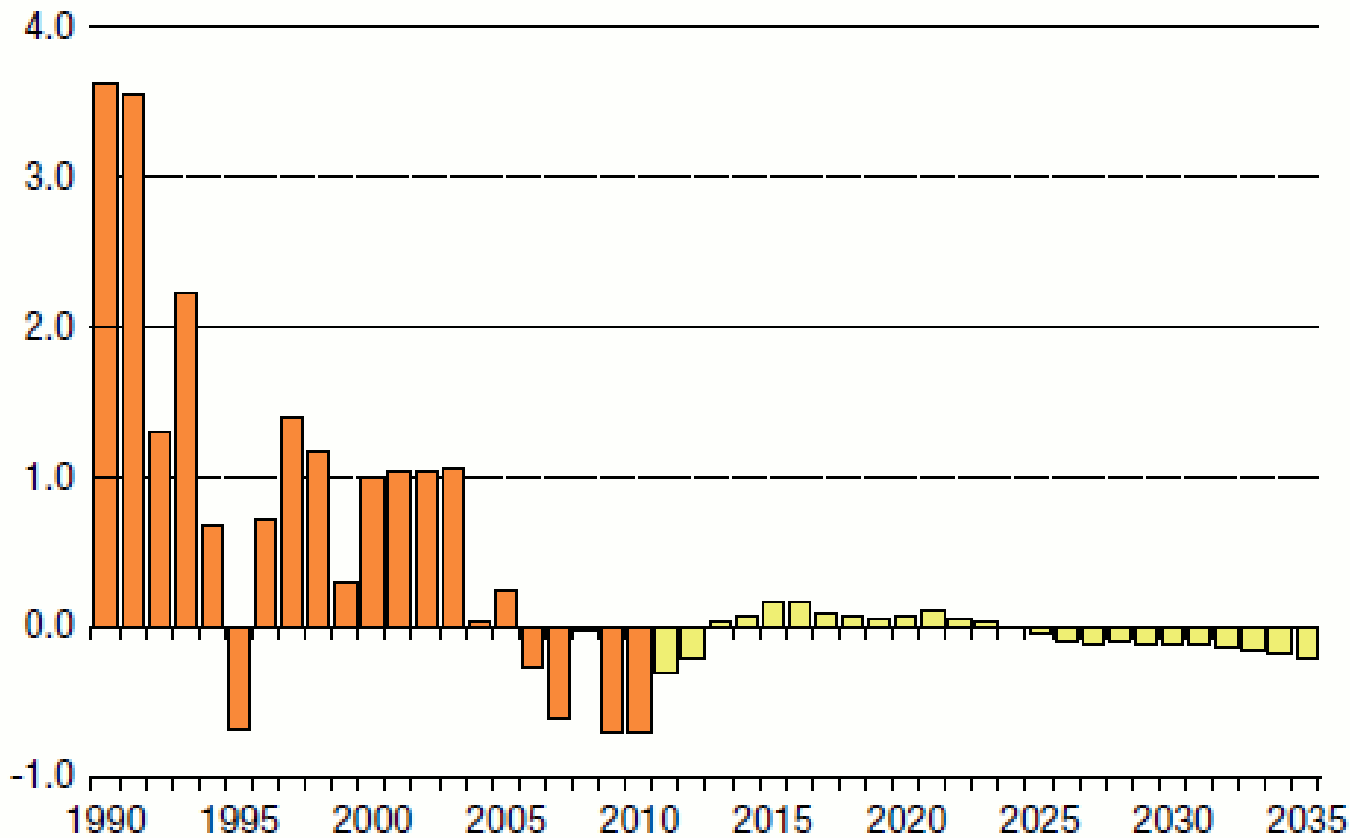
Table format based on DWR Guidebook Table 28.

As discussed above, TUD's surface water supply from the South Fork of the Stanislaus River, which accounts for 89 percent of the total available water supply and 95 percent of the supply available for potable use, is expected to be 100 percent reliable. As shown in Table 6-3, TUD total water supply is projected to be 96 percent reliable for the Year 2035.

percent
change

Population Growth

1990 - 2035



From the CA Department of Transportation Economic
Analysis Branch 2011 Tuolumne County Report

Factors Influencing Staff Recommendations

- PG&E's Lake Level Study and comments from Pinecrest recreationists cite that water hazards or loss of recreation viability begin to appear below 5,606 feet
- Each foot of elevation equates to about 260 acre-feet (af), which after an estimated 40 percent loss during delivery only provides 156 af of water to TUD customers

Waste & Unreasonable Use (WURU)

- Complaint received claiming PG&E's Tuolumne Main Canal and TUD's ditch system water losses represent a WURU of water because of claimed 40 percent* water loss in canal
- Staff recommendation would add a condition allowing an update to water quality certification if action is taken on the WURU complaint

* 40 percent is consistent with the estimated losses included in TUD's 2010 Urban Water Management Plan

Next Steps

- Accepting written comments until Noon on Thursday, October 18, 2012; send to Mr. Jeffrey Parks:
 - Email: jparks@waterboards.ca.gov
 - State Water Resources Control Board
Division of Water Rights
Attn: Jeffrey Parks
P.O. Box 2000
Sacramento, CA 95812
 - See agenda for additional submittal methods

Next Steps

- Presentation will be posted to Spring Gap-Stanislaus Hydroelectric Project webpage
- State Water Board Executive Director may issue an amended certification based on comments received and available information

Additional Information

- Available on State Water Board's webpage at:
http://www.waterboards.ca.gov/waterrights/water_issues/programs/water_quality_cert/ceqa_projects.shtml#ferc2130

Future Updates

- To receive future updates sign up to receive emails online at:

http://www.waterboards.ca.gov/resources/email_subscriptions/

- Select "State Water Resources Control Board"
- Enter email address and full name
- Under Categories, select "Water Rights"
- Select Box for "Water Rights Water Quality Certification"
- Click "Subscribe" button at top

An aerial photograph of a vast, dense forest, likely a coniferous forest, covering a valley. In the background, a range of mountains is visible under a clear sky. The text is overlaid on the image in a yellow, sans-serif font.

Questions

Following questions we will proceed with the
public comment period