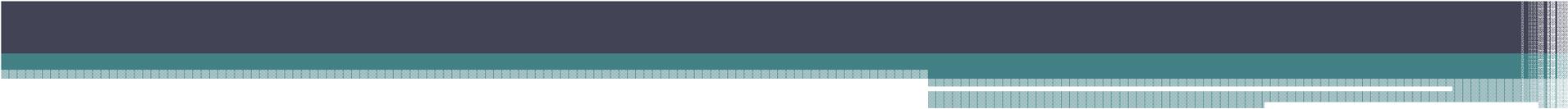


# Upper North Fork Feather River (UNFFR) Hydroelectric Project

State Water Resources Control Board Staff Meeting -  
Soliciting Comments on Draft Environmental Impact Report

Presented by: Erin Ragazzi & Peter Barnes  
February 11, 2015  
Chester, California

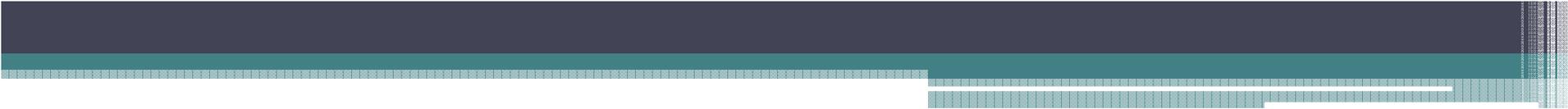


# Meeting Schedule

1. Welcome and Review Meeting Logistics
2. Presentation by State Water Board staff
3. Comments by Attendees
4. Closing and Next Steps

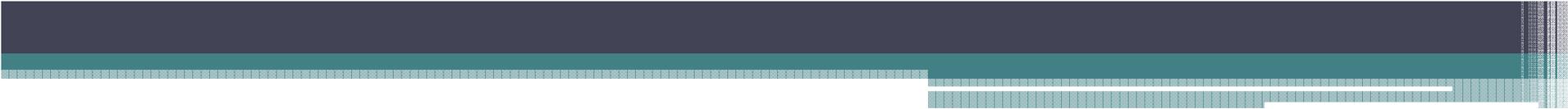
# Meeting Logistics and Ground Rules

- Sign-in sheet and speaker cards
  - Fill out a speaker card if you wish to comment
- Comments may be limited to a set amount of time depending on number of people wishing to speak
- Purpose of meeting is to accept comments; purpose is not to discuss comments
- **No decisions will be made today**
- **Please respect all speakers**
  - All points of view are valid



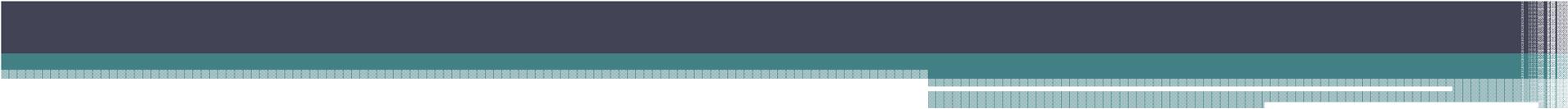
# Presentation Outline

- Meeting Objective
- State Water Board's Mission
- California Environmental Quality Act (CEQA)
- Purpose of Draft Environmental Impact Report (EIR)
- Development of Alternatives
- Alternatives Evaluated in EIR
- Findings Summary
- Mitigation Measures
- State Water Board Staff Recommendation



# Meeting Objective

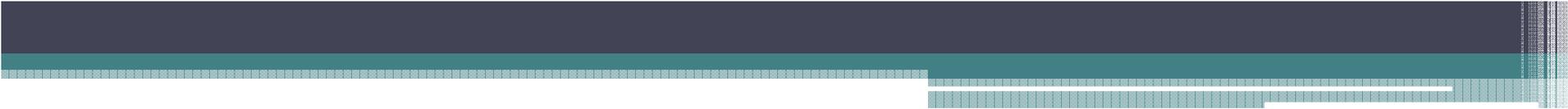
- Provide an overview of:
  - State Water Board's mission and involvement in UNFFR Project relicensing
  - Draft EIR
  - State Water Board Staff Recommendation



# State Water Board's Mission

***To preserve, enhance, and restore the quality of California's water resources **and drinking water for the protection of the environment, public health, and all beneficial uses, and ensure proper water resource allocation allocation and efficient use, for the benefit of present and future generations.*****

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

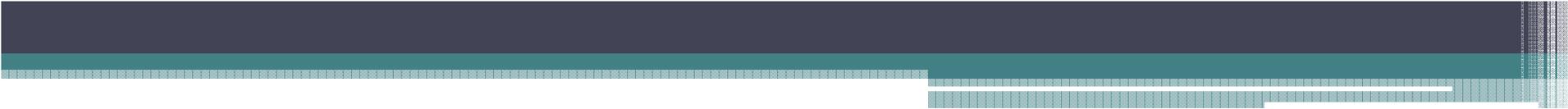


# Why is the State Water Board involved?

- State Water Board conditions hydroelectric projects via issuance of water quality certifications (Section 401 of Clean Water Act)
  - Protect water quality standards
    - Beneficial Uses
    - Water Quality Objectives
    - Anti-degradation Requirements

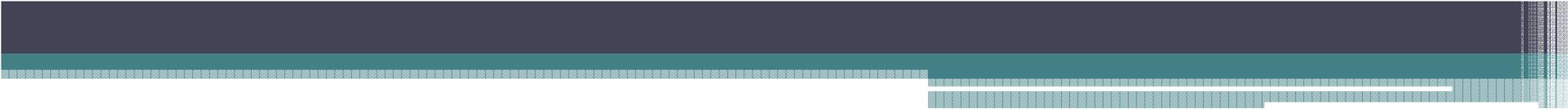
# CEQA

- State Water Board is making a discretionary decision with respect to issuance of a water quality certification and must comply with CEQA
- State Water Board is lead agency
  - Responsible for development of environmental document
- State Water Board developed Draft Environmental Impact Report (EIR) for UNFFR Project
  - Represents State Water Board's independent judgment

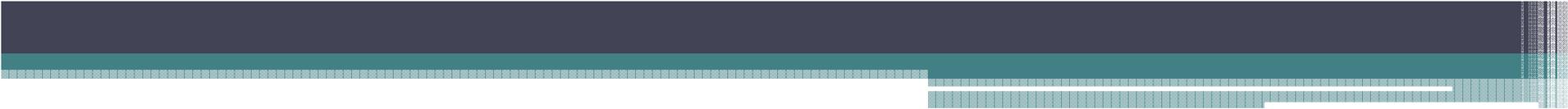


## Purpose of this Draft EIR - CEQA

- Disclose potential significant adverse environmental impacts associated with the Pacific Gas and Electric's (PG&E) proposed project and alternatives
- Evaluate ability to meet project objectives
- Indicate the manner in which any adverse impacts can be mitigated or avoided
- Facilitate public involvement
- Foster coordination among various governmental agencies

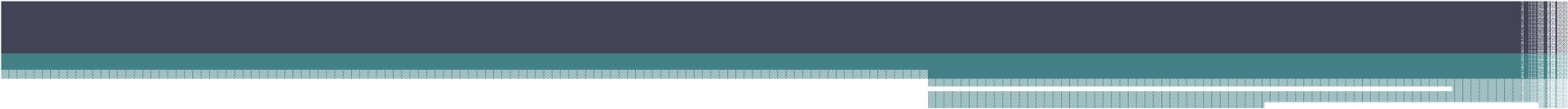


# CEQA Alternative Development



# Settlement Agreement

- Reached in 2004
- Covered many aspects of the UNFFR Project, including recreation facilities development, river sediment management, streamflow for whitewater boating, etc.
- Did not address North Fork Feather River temperature
  - Listed as impaired on 303(d) list, and requires consideration as part of the certification process



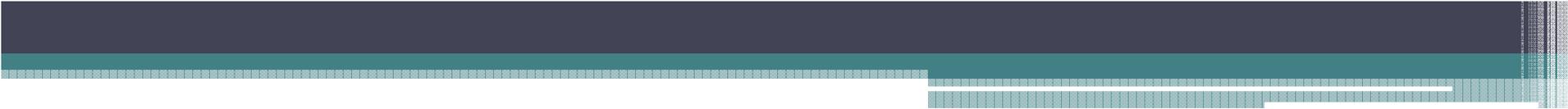
# Development of Alternatives and Evaluation Process

- State Water Board used a tiered approach – known as levels 1, 2, and 3 – to develop an array of project alternatives that could reduce water temperatures in the North Fork Feather River

# Level 1 and Level 2 Reports

- Level 1 - “Cast a wide net” to capture all possible water quality measures and then subject them to initial screening criteria:
  - Effectiveness and Reliability
  - Technological Feasibility and Constructability
  - Logistics
  - Reasonableness
  - Fatal Flaws
- Level 2 - Screened remaining alternatives using additional criteria:
  - Environmental Challenges
  - Economic Feasibility

## Appendix D



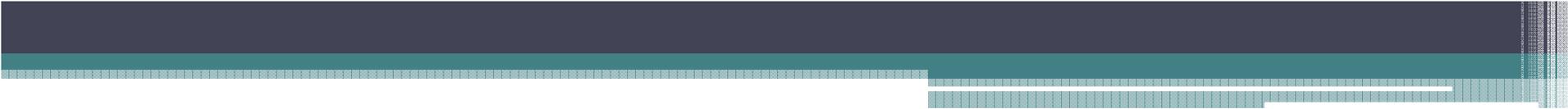
## Level 3 Report

- 16 discrete alternatives were advanced from Level 2, including those within and outside the UNFFR Project boundary
- No detailed screening of alternatives was conducted for reaches outside of the UNFFR Project boundary in the Level 3 analysis

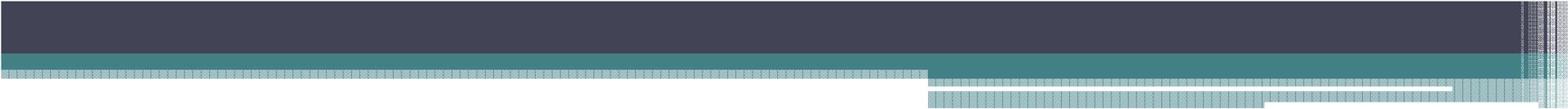
# Appendix E

# Outcome of Level 3 Analysis

- Four possible modifications to UNFFR Project facilities or operations that would reduce North Fork Feather River mean daily water temperatures to varying degrees:
  - Thermal curtain at Prattville intake on Lake Almanor
  - Thermal curtain near Caribou No. 1 and No. 2 intakes on Butt Valley reservoir
  - Modify Canyon dam low level outlets and increase releases up to 600 cubic feet per second, while decreasing releases to Prattville intake
  - Use Caribou powerhouse No. 1 preferentially over Caribou powerhouse No. 2



Evaluated in EIR



# Proposed UNFFR Project

- Composed of:
  - PG&E's application to Federal Energy Regulatory Commission (FERC); and
  - Modifications made in accordance with:
    - 2004 Settlement Agreement
    - Mandatory Conditions (e.g., United States Forest Service 4(e) Conditions)
    - FERC Staff Alternative

## Chapter 3

# Alternatives Evaluated in EIR

## Alternative 1

- Proposed UNFFR Project with modified minimum instream flows
- Thermal curtains in Lake Almanor and Butt Valley Reservoir
- Increased Canyon Dam flows during summer months

## Alternative 2

- Proposed UNFFR Project with modified minimum instream flows
- Thermal curtains in Lake Almanor and Butt Valley Reservoir

\* Impacts associated with staff's proposed recommendation are disclosed in the EIR, where appropriate. Such impacts are a subset of the impacts associated with Alternatives 1.

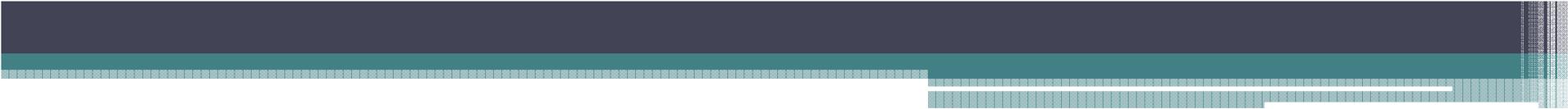
## Chapter 4

# Findings - Summary

- In looking at impacts of the proposed alternatives, Draft EIR looks at effects on the North Fork Feather River and Lake Almanor
- In general, modeling of proposed alternatives estimates a 0.8-2.0°C (Alternative 1) or 0.2-1.3°C (Alternative 2) temperature reduction in the North Fork Feather River when compared to the Present Day alternative in August of warmest years

## Findings - Summary (continued)

- Currently in August of a normal water year most of the North Fork Feather River would have temperatures exceeding 20°C
- With implementation of Alternative 1, in August of a normal water year, only the Poe Reach would have temperatures exceeding 20°C; however, the coldwater habitat in Lake Almanor would be reduced from 5% to 4% of total lake volume



# Mitigation Measures

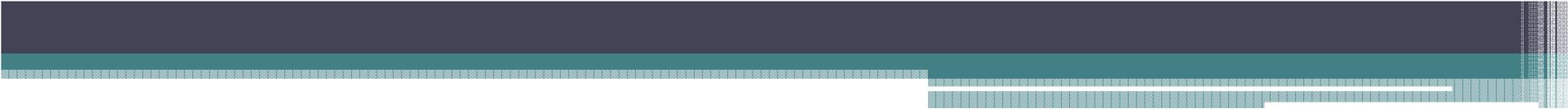
- Approval of Construction Activities by the State Water Board
  - Mitigation Measure GGS-1: Turbidity and Total Suspended Solids
  - Mitigation Measure WQ-8: Hazardous Materials

## **Table ES-1**

# **Executive Summary**

## Mitigation Measures (continued)

- Mitigation Measure WQ-1: Implement Temperature and Operations Coordination and Augment Stocking of Coldwater Fishery following Critically Dry Water Years
  - Reduces uncertainty associated with summer coldwater habitat estimates for Lake Almanor by increasing the base of monitoring information to improve the understanding of coldwater habitat conditions
  - Improve the ability of the coldwater fishery to recover after critically dry water years.



## Mitigation Measures (continued)

- Multiple mitigation measures necessary for protection of biological resources.
- Additional mitigation measures related to cultural resources, traffic control, noise, and emissions.
  - PG&E agreed to implement many of these mitigation measures

## Potentially Significant and Unavoidable Impacts



Even with the implementation of **Mitigation Measure LU-2: Relocation of the Marvin Alexander Day Use Area**, Alternative 1 or Alternative 2 would substantially change the character of, or be disharmonious with, existing land uses and **aesthetic** features around Lake Almanor or Butt Valley Reservoir

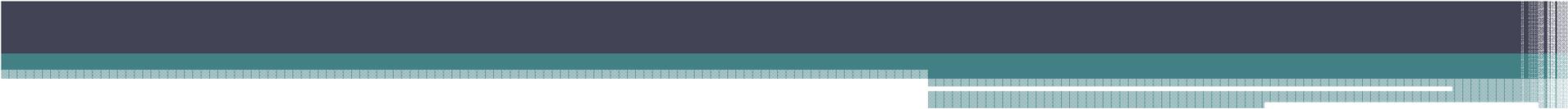
# Chapter 6.9

# State Water Board Staff Recommendation

- Implementation of Proposed UNFFR Project with the alternative minimum instream flows;
- Increased releases of up to 250 cubic feet per second from the low level outlet at Canyon dam from June 15 to September 15 (for purposes of temperature control);
- Monitoring of North Fork Feather River and Lake Almanor to evaluate temperatures and fisheries effects resulting from implementation of new license; and
- Adaptive management and a reservation of authority, whereby State Water Board could require installation of thermal curtains at Lake Almanor and Butt Valley reservoir based on monitoring results, if appropriate

# What's Next?

- Comments on Draft EIR are due by 12:00 p.m. (NOON) on Thursday, March 26, 2015
- The State Water Board is also accepting comments on the Proposed Staff Recommendation
- Further down the road:
  - State Water Board staff will release a draft water quality certification
  - The draft water quality certification will be publicly noticed and comments will be accepted.



# Comments

- All comments should be submitted to Peter Barnes at:

State Water Resources Control Board  
Division of Water Rights

Water Quality Certification Program

P.O. Box 2000

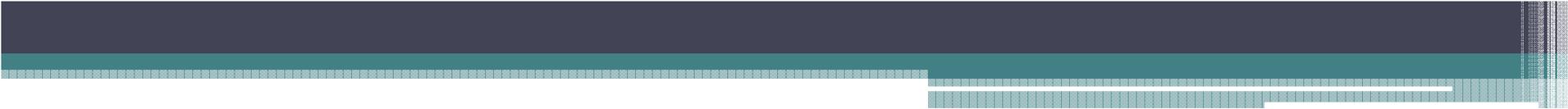
Sacramento, CA 95812-2000

or

Email: [Peter.Barnes@waterboards.ca.gov](mailto:Peter.Barnes@waterboards.ca.gov)

# Stay Informed of Project Milestones

- To receive emails related to the UNFFR Project and other projects pursuing water quality certifications, enroll in the “Water Rights Water Quality Certification” email notification service.
  - Click on the SUBSCRIBE button at the bottom of the Division of Water Rights’ Water Quality Certification Program webpage at:  
[http://www.waterboards.ca.gov/waterrights/water\\_issues/programs/water\\_quality\\_cert/](http://www.waterboards.ca.gov/waterrights/water_issues/programs/water_quality_cert/)



## Next Step this Evening

- Short Break (if desired)
- Public Comment Period
  - If you wish to speak, please complete a comment card and place it in the box at the back of the room