

**PUBLIC MEETINGS FOR
LOWER KLAMATH PROJECT
LICENSE SURRENDER
DRAFT ENVIRONMENTAL IMPACT
REPORT**

February 2019

Yreka – February 5

Arcata – February 6

Orleans – February 7

Sacramento (webcast) – February 15

MEETING SCHEDULE & LOGISTICS

- Meeting Schedule:
 - Presentation by State Water Board staff
 - Comment period
- Logistics:
 - Please sign-in
 - If you wish to speak, please fill out a speaker card and provide it to staff
 - Speaker time will be determined based on number of individuals that wish to provide comments



GROUND RULES

- Please silence electronic devices
- Please respect all speakers and points of view
- One person speaks at a time – all speakers must use a microphone
- Please hold comments until end of presentation
- Recognize short time frame to receive oral comments, please respect time limits so we can hear from everybody
- Written comments are an option for those that would like to provide additional comments beyond allotted time or those that do not wish to speak today

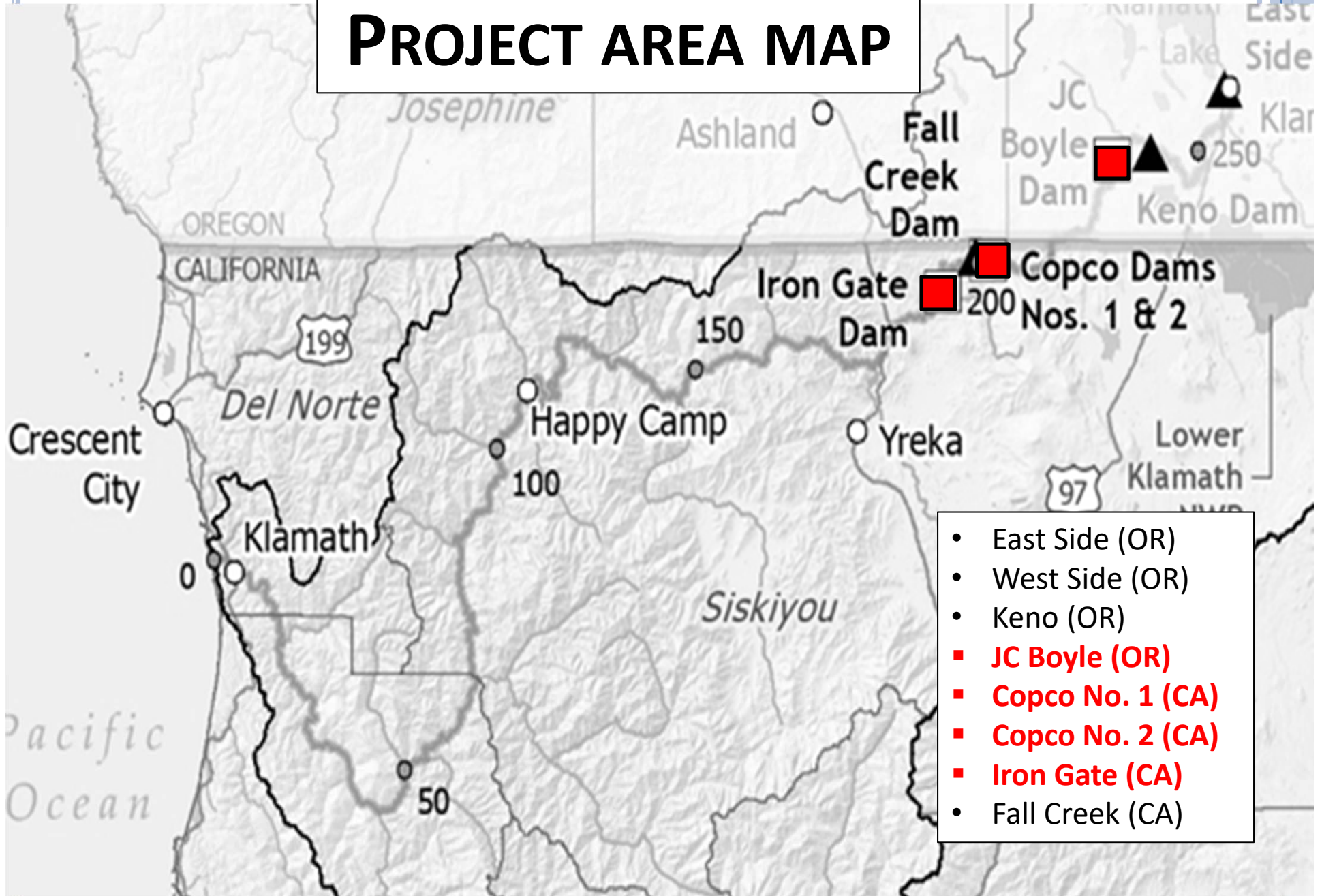


PRESENTATION OUTLINE

- Background
- Authorities related to hydroelectric licensing actions
- Why we are here today
- Water quality certification process
- California Environmental Quality Act (CEQA) process
- Overview of Draft Environmental Impact Report (EIR)



PROJECT AREA MAP



- East Side (OR)
- West Side (OR)
- Keno (OR)
- **JC Boyle (OR)**
- **Copco No. 1 (CA)**
- **Copco No. 2 (CA)**
- **Iron Gate (CA)**
- Fall Creek (CA)

AUTHORITIES RELATED TO HYDROELECTRIC LICENSING ACTIONS

- **Federal Energy Regulatory Commission (FERC):**
Federal agency with broad authority over hydroelectric projects
 - Controls all aspects of proposed action (energy production, facility operations, design requirements, navigation, water quality, fish resources, recreation, etc.)
- **State Water Resources Control Board (State Water Board):**
State agency responsible to certify whether proposed action (construction, operation, decommissioning) can meet water quality standards, and to impose conditions to protect water quality
 - Authority over water quality, through water quality certification

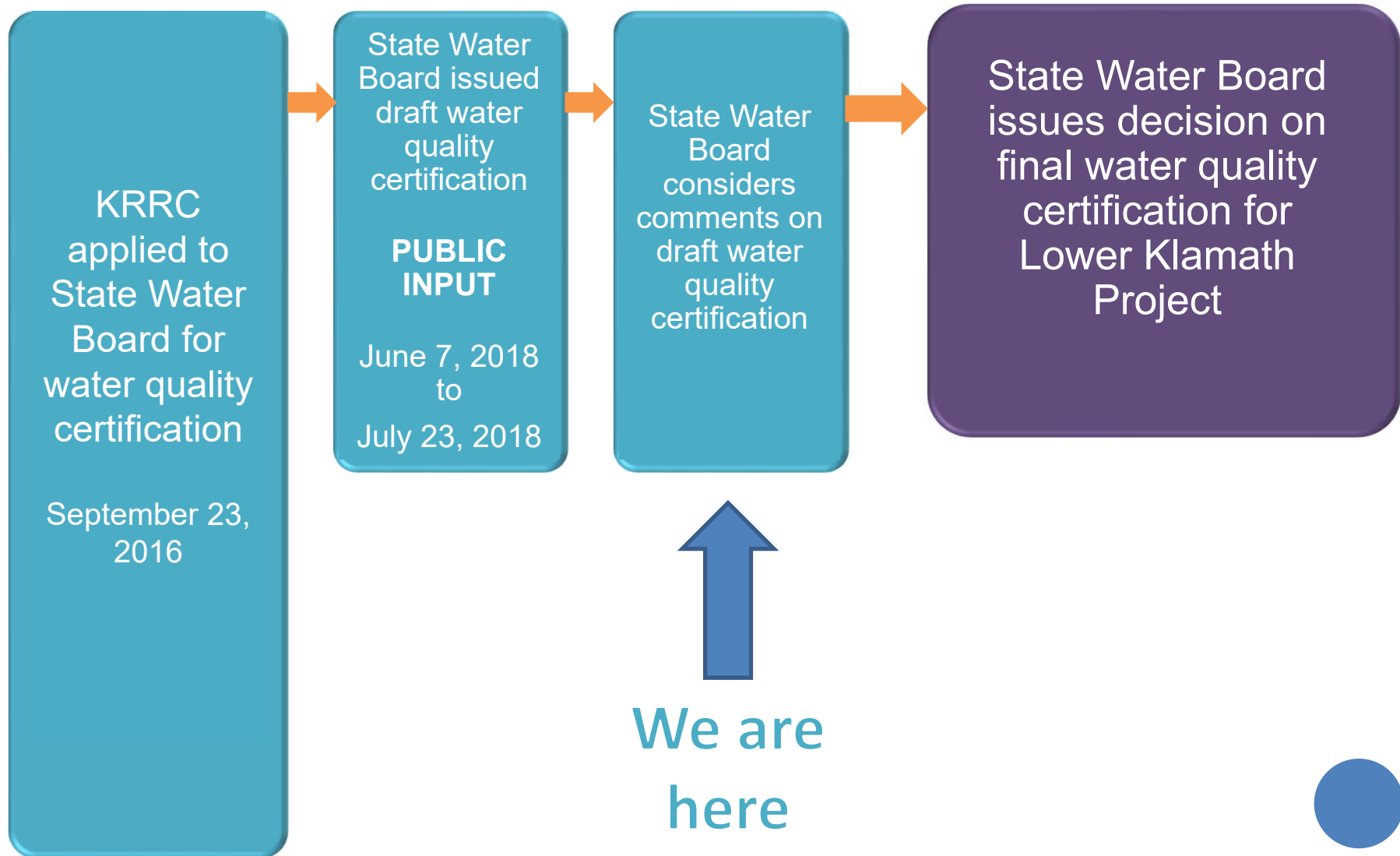


WHY WE ARE HERE TODAY

- Klamath River Renewal Corporation (KRRC) submitted a water quality certification application to the State Water Board
- To take an action on application, State Water Board must comply with CEQA
- To comply with CEQA, we have issued a draft environmental impact report (EIR) for public review and comment



WATER QUALITY CERTIFICATION

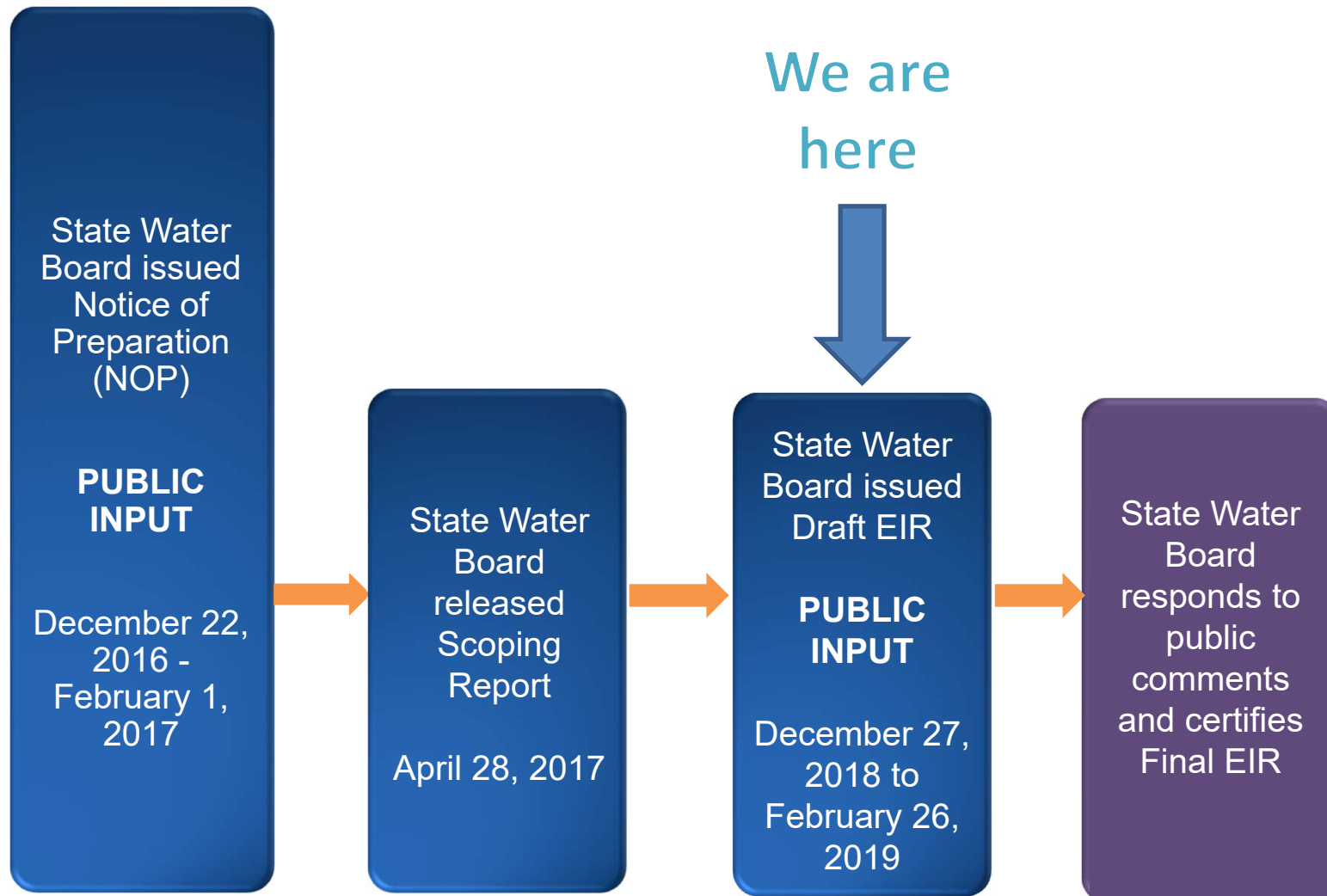


CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

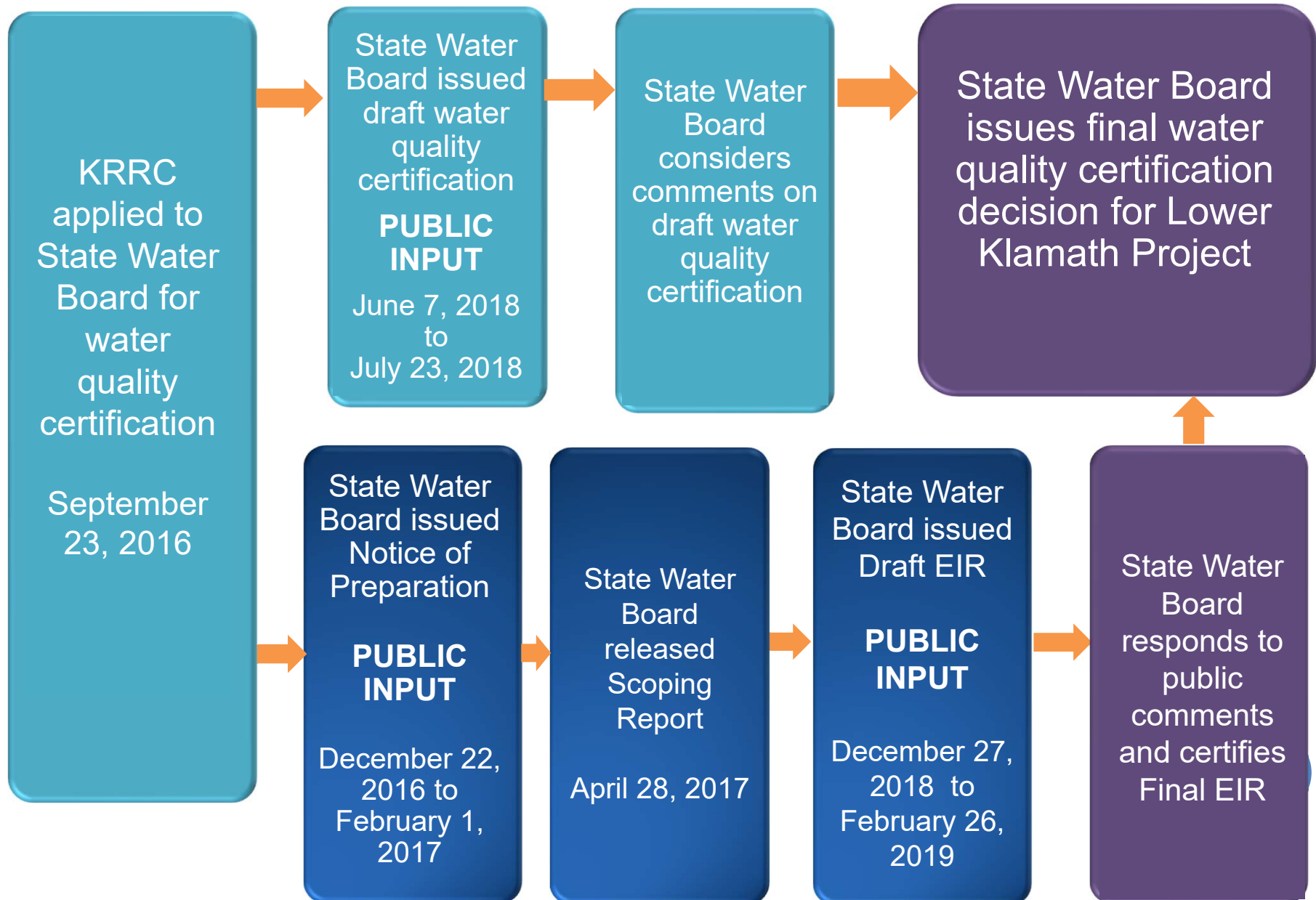
- CEQA requires an environmental impact report (EIR) to:
 - Undertake broad evaluation of project's potential significant environmental impacts
 - Identify ways to avoid, minimize, or mitigate identified impacts, where feasible
 - Evaluate feasible alternatives that accomplish most of project's goals
 - Include agency and public involvement



CEQA



WATER QUALITY CERTIFICATION & CEQA



DRAFT ENVIRONMENTAL IMPACT REPORT:

ORGANIZATION

Volume 1:

- Executive Summary
- Section 1: Introduction
- Section 2: Proposed Project
- Section 3: Environmental Setting, Impacts, and Mitigation Measures
- Section 4: Alternatives
- Section 5: Other Required CEQA Discussion and Considerations of Social and Economic Factors

Volume 2:

- Appendices A-W



DRAFT ENVIRONMENTAL IMPACT REPORT:

EXECUTIVE SUMMARY – PROJECT OBJECTIVES

- Improve long-term water quality conditions associated with Lower Klamath Project
- Advance long-term restoration of natural fish populations in Klamath Basin
- Restore volitional (unaided) anadromous fish passage
- Reduce disease conditions for Klamath River salmonids



DRAFT ENVIRONMENTAL IMPACT REPORT:

EXECUTIVE SUMMARY – IMPACT AND MITIGATION TABLE

Table ES-1. Summary of Impacts and Mitigation Measures.

Potential Impacts								
PP = Proposed Project; NP = No Project Alternative; PR = Partial Removal Alternative; CO = Continued Operations with Fish Passage; 2R = Two Dam Removal Alternative; 3R = Three Dam Removal Alternative; NH = No Hatchery Alternative								
Geographic or Other Additional Information (as needed)	Time Frame ¹		Beneficial	No Significant Impact ²	Mitigation	No Significant Impact with Mitigation	Significant and Unavoidable	Significant and Unavoidable with Mitigation
Water Quality								
Potential Impact 3.2-1. Short-term and long-term alterations in water temperatures due to conversion of the reservoir areas to a free-flowing river.								
Hydroelectric Reach to the confluence with the Salmon River	S	L	PP, PR, 2R, 3R, NH					
Middle Klamath River downstream from the Salmon River, Lower Klamath River, Klamath River Estuary, Pacific Ocean nearshore environment	S	L		PP, PR, 2R, 3R, NH				
Potential Impact 3.2-2. Short-term and long-term alterations in seasonal water temperatures in the Klamath River Estuary due to morphological changes induced by dam removal sediment release and subsequent deposition in the estuary.								
	S	L		PP, NP (S only), PR, CO, 2R, 3R, NH				

DRAFT ENVIRONMENTAL IMPACT REPORT:

SECTION 1 – INTRODUCTION, KEY INFORMATION SOURCES

- Public Comments on Notice of Preparation
- Tribal Consultation and Meetings
 - Assembly Bill (AB) 52: Shasta Indian Nation, Shasta Nation, Yurok
 - Outside AB 52: Karuk and discussions with other tribes
- Information from federal, local, and state entities
- Scientific information
- Information from KRRC – application and additional information submittals



DRAFT ENVIRONMENTAL IMPACT REPORT:

SECTION 2 - PROPOSED PROJECT

- Klamath River Renewal Corporation's Proposed Project is to remove following four dams and associated facilities:
 - J.C. Boyle (Oregon)
 - Copco No. 1 (California)
 - Copco No.2 (California)
 - Iron Gate (California)



DRAFT ENVIRONMENTAL IMPACT REPORT:

SECTION 3 - ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION MEASURES

3.2 Water Quality

3.3 Aquatic Resources

3.4 Phytoplankton and Periphyton

3.5 Terrestrial Resources

3.6 Flood Hydrology

3.7 Groundwater

3.8 Water Supply/Rights

3.9 Air Quality

3.10 Greenhouse Gas

3.11 Geology and Soils

3.12 Historical/Tribal

3.13 Paleontological Resources

3.14 Land Use

3.15 Agriculture and Forestry

3.16 Population and Housing

3.17 Public Services

3.18 Utilities

3.19 Aesthetics

3.20 Recreation

3.21 Hazards and Haz. Mats.

3.22 Traffic/Transportation

3.23 Noise

3.24 Cumulative Effects



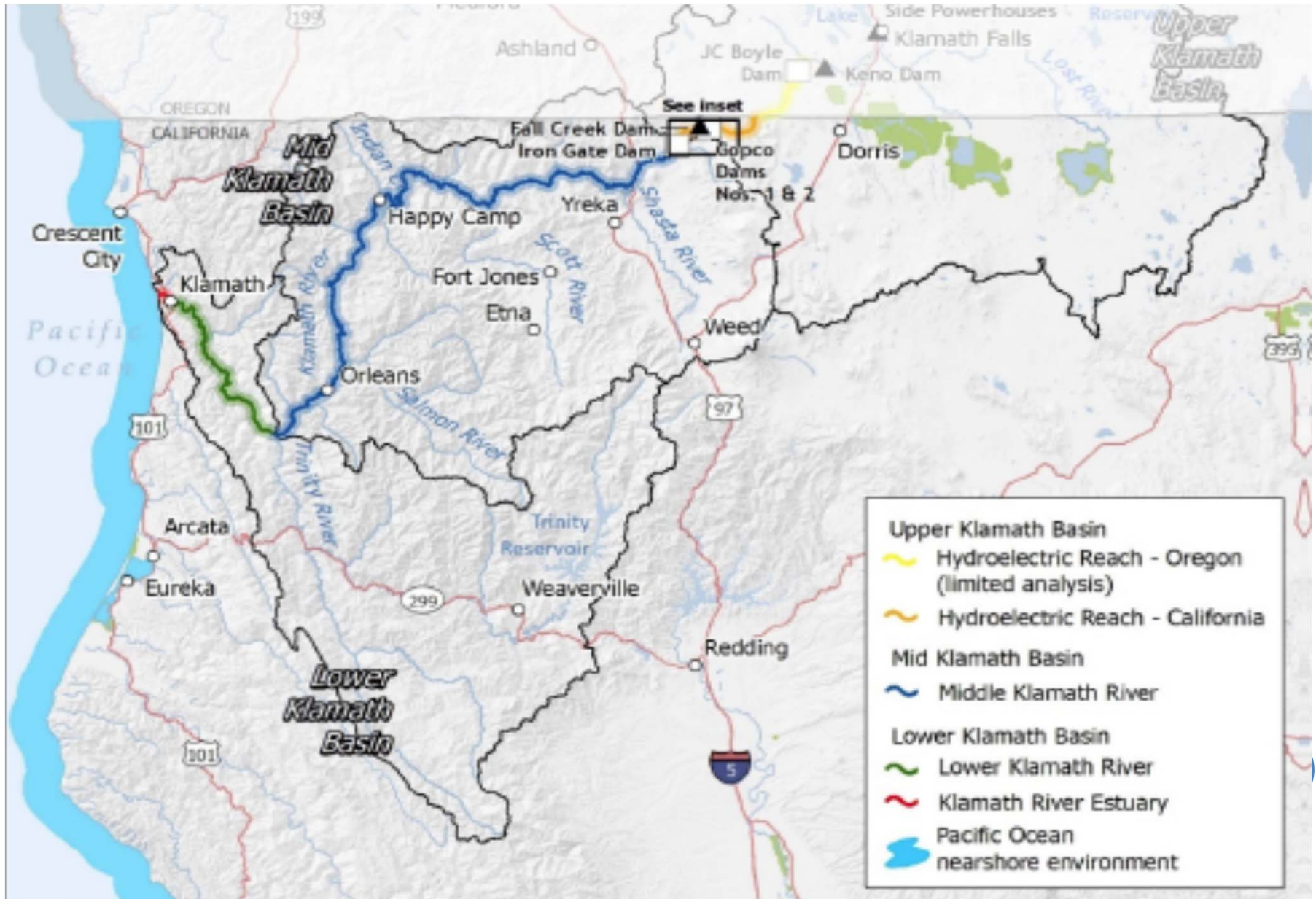
DRAFT ENVIRONMENTAL IMPACT REPORT:
**SECTION 3 - ENVIRONMENTAL SETTING, IMPACTS, AND
MITIGATION MEASURES**

Each resource area includes discussion of:

- Area of Analysis
- Environmental Setting (baseline)
- Significance Criteria
- Impact Analysis Approach
- Potential Impacts and Mitigation



SECTION 3: EXAMPLE AREA OF ANALYSIS (WATER QUALITY)



SECTION 3: ENVIRONMENTAL SETTING/BASELINE (EXAMPLE: WATER QUALITY)

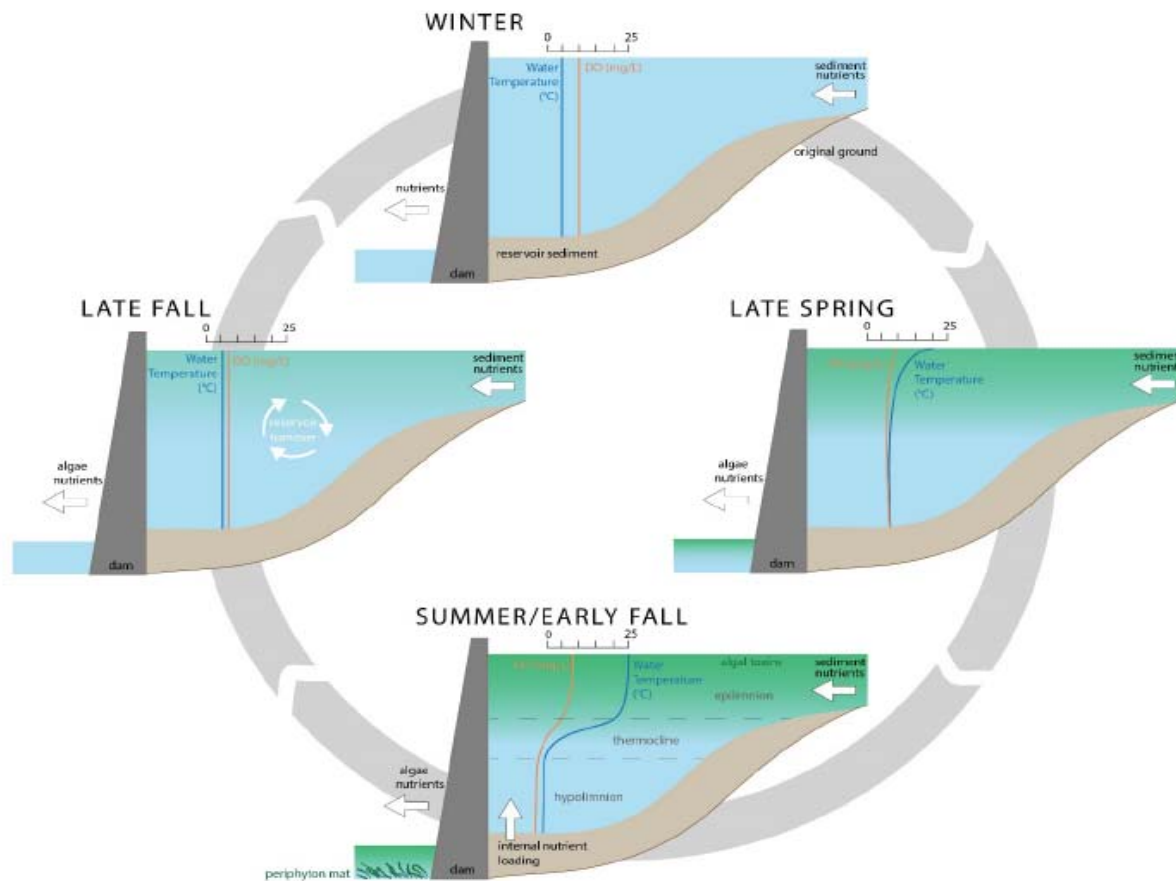


Figure 3.2-2. General Seasonal Pattern of Thermal Stratification, Dissolved Oxygen Concentrations, and Algae Blooms in Relatively Deep, Productive Reservoirs in Temperate Climates, With Darker Green Shading In Surface Waters Representing a Higher Intensity of Algae Growth.

SECTION 3: SIGNIFICANCE CRITERIA AND IMPACT ANALYSIS APPROACH (EXAMPLE: WATER QUALITY)

- Significance Criteria:
 - Exceed (or substantially contribute to existing exceedance of) a water quality standard
 - Cause a change in water quality that would result in failure to meet existing beneficial uses of water or to protect existing water quality
 - Result in a substantial adverse impacts to human health or environmental receptors
- Impact Analysis Approach
 - Timeframe for short and long term impacts
 - Defined water quality parameters
 - Described models used to inform impact analysis



SECTION 3: POTENTIAL IMPACTS AND MITIGATION (EXAMPLE: WATER QUALITY)

Potential Impact

- * Example: Short and Long-term alterations in water temperature due to conversion of reservoirs to a river condition

Impact Analysis

- Water temperatures below Iron Gate Dam 4-18 degrees Fahrenheit warmer in summer and fall
- Water temperatures below Iron Gate Dam 2- 5 Fahrenheit cooler in spring
- Implementation of Proposed Project removes temperature related impacts

Significance Determination

- Beneficial in Hydroelectric Reach and Middle Klamath River to Salmon River
- No significant impact from Salmon River to Pacific Ocean

Mitigation Measures (where feasible or appropriate)

- None required



POTENTIAL IMPACT TYPES

- Beneficial
 - No significant impact
 - No significant impact with mitigation
 - Significant and unavoidable impact
 - Significant and unavoidable impact with mitigation
- ❖ Analyses may be further evaluated based on time scale (short term versus long term impacts) or geographic scale



DRAFT ENVIRONMENTAL IMPACT REPORT: SUMMARY OF RESOURCES AREAS – BENEFICIAL*

- 3.2 Water Quality
- 3.3 Aquatic Resources
- 3.4 Phytoplankton and Periphyton
- 3.5 Terrestrial Resources
- 3.6 Flood Hydrology
- 3.7 Groundwater
- 3.8 Water Supply/Rights
- 3.9 Air Quality
- 3.10 Greenhouse Gas
- 3.11 Geology and Soils
- 3.12 Historical/Tribal
- 3.13 Paleontological Resources
- 3.14 Land Use
- 3.15 Agriculture and Forestry
- 3.16 Population and Housing
- 3.17 Public Services
- 3.18 Utilities
- 3.19 Aesthetics
- 3.20 Recreation
- 3.21 Hazards and Haz. Mats.
- 3.22 Traffic/Transportation
- 3.23 Noise
- 3.24 Cumulative Effects

* Indicates **at least one** potential impact in resource area deemed **beneficial**

Purple: short- & long-term benefit Blue: only long-term benefit



DRAFT ENVIRONMENTAL IMPACT REPORT: SUMMARY OF RESOURCES AREAS – SIGNIFICANT AND UNAVOIDABLE*

3.2 Water Quality

3.3 Aquatic Resources

3.4 Phytoplankton and Periphyton

3.5 Terrestrial Resources

3.6 Flood Hydrology

3.7 Groundwater

3.8 Water Supply/Rights

3.9 Air Quality

3.10 Greenhouse Gas

3.11 Geology and Soils

3.12 Historical/Tribal

3.13 Paleontological Resources

3.14 Land Use

3.15 Agriculture and Forestry

3.16 Population and Housing

3.17 Public Services

3.18 Utilities

3.19 Aesthetics

3.20 Recreation

3.21 Hazards and Haz. Mats.

3.22 Traffic/Transportation

3.23 Noise

3.24 Cumulative Effects

* Indicates **at least one** potential impact in resource area deemed **significant and unavoidable**

Orange: only short-term Green: short-term & long-term Blue: only long-term

DRAFT ENVIRONMENTAL IMPACT REPORT:

SECTION 4 – PROJECT ALTERNATIVES

- Partial Removal
- Continued Operations with Fish Passage Facilities
- Two Dam Removal (Copco No. 2 & J.C. Boyle remain)
- Three Dam Removal (J.C. Boyle remains)
- No Hatchery
- No Project



Comments due by 12:00 (noon) on February 26, 2019

Email: WR401Program@waterboards.ca.gov

or

Mail:

Michelle Siebal

State Water Resources Control Board

P.O. Box 2000

Sacramento, CA 95812-2000

Lower Klamath Project Website:

http://www.waterboards.ca.gov/waterrights/water_issues/programs/water_quality_cert/lower_klamath_ferc14803.shtml



HOW TO STAY INFORMED

- Refer to first page of Notice of Availability
- Subscribe to “Lower Klamath Project License Surrender” Email List

Webpage:

http://www.waterboards.ca.gov/resources/email_subscriptions/swrcb_subscribe.shtml#rights

1. Provide name and email in required fields
2. In categories below, select “Water Rights,” then “Lower Klamath Project License Surrender”
3. Click “Subscribe” button
4. An email will be sent to you; you must respond to email message to confirm membership



PUBLIC COMMENT AND GROUND RULES REMINDERS

- Public Comment:
 - **State and spell** your **first and last name** for court reporter; provide your affiliation (if desired)
 - Use microphone
 - Respect time limits and follow ground rules
- Ground Rules:
 - Respect all speakers and points of view
 - One person speaks at a time – all speakers must use a microphone
 - Respect time limits so we can hear from everybody; if time remains after everyone has had an opportunity to comment, we can allow for additional comments from those who wish to come up again

