

2016 SACRAMENTO RIVER TEMPERATURE MANAGEMENT PLANNING AND IMPLEMENTATION WORKSHOP



CALIFORNIA

Water Boards

STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

Purpose of Workshop

- Receive public input on Sacramento River temperature management issues, including the 2016 Sacramento River Temperature Management Plan (TMP)
- Requirement of December 15, 2015 State Water Board Order 2015-043 (Order on Reconsideration of Temporary Urgency Changes to Delta Requirements)

Agenda

- State Water Board staff
- U.S. Bureau of Reclamation
- Fisheries Agencies
 - National Marine Fisheries Service (NMFS) (including presentation on NMFS's RAFT and Salmon Survival models)
 - California Department of Fish and Wildlife
 - U.S. Fish and Wildlife Service
- Northern California Water Association Panel
- San Luis & Delta Mendota Water Authority Panel
- Public Comments

Order 90-5 Sacramento River Temperature Requirements

- Requires daily average temperature of 56 degrees F on Sacramento River at Red Bluff Diversion Dam “during periods when higher temperatures will be detrimental to the fishery”
- Allows temperature control point to be moved upstream upon concurrence of fisheries agencies and State Water Board
- Requires planning, monitoring and reporting
- Includes ramping rates and no impacts to Trinity

Order 2015-0043

TMP Requirements

- Requires development of 2016 TMP early in the year (March 15)
- Workshop on TMP before March 31, 2016
- No impacts to redd dewatering, stranding, or redirected impacts to other Sacramento or Trinity salmonids
- Stakeholder outreach
- Reevaluation of TMP on a monthly basis

Other Temperature Related Requirements of Order 2015-0043

- 2016 Drought Contingency Plan with updates
- Modeling, monitoring, reporting and coordination
 - Regular reservoir temperature profiles
 - Implementation of plan for accurate, timely, transparent, consistent and comparable modeling
- Evaluation of issues that occurred in 2015
 - Reservoir temperature profile measurement errors
 - Temperature exceedances and flow fluctuations
 - Modeling discrepancies on Sacramento and Trinity

Workshop Notice

Matters for Discussion

- 2016 TMP protection of winter-run Chinook salmon and other Sacramento River salmonids without redirected impacts
- Impacts and benefits of 2016 TMP
- Compliance with Order 2015-0043 requirements
- Long term measures to protect winter-run Chinook salmon
- Stakeholder input

2014 and 2015 Lessons Learned

- Begin planning early, particularly in potentially difficult years
- Regular and accurate reservoir temperature monitoring and reporting
- Margin of safety for climate and hydrologic forecast data
- Timely, accurate, transparent and consistent temperature modeling
- Improvements to temperature model and interpretation and development of other tools
- Maintain cold water at the redds without constraining redd location
- Avoid flow and temperature fluctuations until fish emerge, including use of more protective averaging period for temperatures
- Avoid use of side gates of temperature control device (TCD), prevent leakage of warm water in TCD, install Oak Bottom Curtain
- Preserve cold water as long as possible- temperature is key not quantity above a minimum level
- Improve stakeholder coordination

Questions?

