#### Sacramento River Temperature Task Group (SRTTG) Meeting February 24, 2022 | 1:00 PM – 2:45 PM Meeting Summary

#### **Participants**

**Bill Poytress, USFWS** Charlie Chamberlain, USFWS Chris Laskodi. Yurok Tribe Craig Anderson, USFWS Crystal Rigby, CDFW Cyril Michel, SWFSC Doug Killam, CDFW Diane Riddle, SWRCB Erica Meyers, CDFW Eric Danner, SWFSC Gabe Singer, CDFW Garwin Yip, NMFS James Gilbert, SWFSC Jeff Laird, SWRCB Jeff Onsted, DWR John Hannon. Reclamation Jonathan Williams, CDFW Josh Israel, Reclamation Kevin Reece, DWR Lauren McNabb, CDFW Lee Bergfeld, MBK Engineers/SRSC Lenny Grimaldo, DWR Liz Kiteck. Reclamation

Mary Suppiger, Reclamation Matt Brown. USFWS Matt Holland, SWRCB Michael Macon, SWRCB Mike Ford, DWR Mike Deas, Watercourse Engineering/SRSC Mike Prowatzke, WAPA Mike Wright, Reclamation Miles Daniels, SWFSC Roger Cornwell, River Garden Farms/SRSC Stephen Maurano, NMFS Suzanne Manugian, Reclamation Thad Bettner, GCID/SRSC Tom Patton, Reclamation Travis Webster, USFWS Vanessa Kollmar, CDFW

#### Facilitation Team

Alyson Scurlock, Kearns & West Adam Fullerton, Kearns & West Julie Leimbach, Kearns & West Maria Bone, Kearns & West

#### Key Discussion Topics with Summary of Recommendations and Outcomes

#### Action items

- 1. All Email Tom Patton, Reclamation, (<u>tpatton@usbr.gov</u>) with input and suggestions for the Jellys Ferry temperature gauge.
- 2. **Suzanne Manugian, Reclamation** Work with Charlie Chamberlin, USFWS, to include Clear Creek fisheries information in the Clear Creek Fisheries Outlook.
- 3. Diane Riddle, SWRCB Summarize Trinity requirements in 90-5.
- 4. Chris Laskodi, Yurok and Tom Patton, Reclamation Consider requirements, need, and timing for emergency consultation required in the 2000 Trinity River Record of Decision (ROD) and 2000 NMFS Biological Opinion (BiOp). Please include NMFS Trinity representative Justin Ly (justin.ly@noaa.gov) in communications.

## 1. Introductions

Julie Leimbach, Kearns & West, welcomed everyone and reviewed the meeting agenda.

#### 2. Prior Action Items

Julie Leimbach, Kearns & West reviewed action items from the previous meeting on January 27, 2022:

Addressed

- 1. **KW** Add an agenda item for Tom Patton, Reclamation, to report out on the Coordination Operations Agreement (COA) debt each meeting as part of the regular hydrology report.
- 2. **KW** Work with Key SRTTG participants to reschedule the SRTTG and its subgroup meetings series given input from participants.

#### 3. Approach to Responding to Stakeholder Assessment

On behalf of Mario Manzo, Reclamation, Julie Leimbach, Kearns & West, provided a brief update on Reclamation's approach for responding to the Stakeholder Assessment.

- Mario Manzo, Reclamation and Tom Patton, Reclamation, are working together to review the Stakeholder Assessment of the Shasta Groups and working internally to generate options to respond to the issues raised.
- Reclamation is bringing the issues and options to the Wednesday Long-Term Operations (LTO) group, then the Subdirectors Group, and as needed to the Thursday LTO group.
- Reclamation will reach out to those who don't have direct representation.
- Mario Manzo and Tom Patton will report outcomes back to the Shasta Groups.
- For now, the Shasta Groups will be following the current guidance.
- If you have follow-up questions, please contact Mario Manzo and Tom Patton.

## 4. River fish Monitoring: 1) Carcass surveys 2) Redd counts 3) Stranding and dewatering

Doug Killam, CDFW presented the river fish monitoring update.

- Flows at Keswick have been hovering around 3,250 cfs for the past few months; there has not been any stranding or dewatering with the lack of flow fluctuations.
- The carcass survey for late fall-run Chinook will extend to April; fish counts are low.
- Turbidity is still high in river which makes it difficult to see fish. Turbidity is impacting the ability for CDFW to count and monitor late fall-run Chinook redds.
- Winter-run Chinook juveniles are present in very low numbers above RBDD and distributed throughout the Sacramento River and to the Delta.
- 5. Fish Distribution/Forecasts: 1) Estimated percentage of the population upstream of Red Bluff Diversion Dam (RBDD) for steelhead, winter-run, and spring-run Chinook salmon 2) Sampling at rotary screw traps at Red Bluff Diversion Dam 3) Livingston Stone Hatchery

Bill Poytress, USFWS, presented the fish distributions/forecasts update for RBDD.

- Winter-run Chinook numbers have dissipated to intermittent status; Passage is around 99% with about +/- about 2% based on historical averages.
- USFWS are still catching fall-run Chinook; so far this year's passage of wild fish (excluding hatchery fish) is estimated at 60% +/- about 20% based on historical averages.
- Spring-run Chinook passage is estimated at 53% +/- about 20% based on historical averages; USFWS has not observed any smolts that fall into the spring-run Chinook size class yet but expects to see that in March.

Travis Webster, USFWS, reported that the final round of fish at Livingston Stone Hatchery is estimated to be released the first week of March.

## 6. Fish and Water Operations Outlook Language

The SRTTG reviewed the Fish and Water Operations Outlook language that is circulated weekly to the Delta monitoring teams.

The group revised the language as follows:

- Winter-run Chinook Salmon juveniles present in very low numbers above RBDD and distributed throughout the Sacramento River and to the Delta.
- Hatchery release of juvenile winter-run Chinook salmon from Livingston Stone Hatchery are in progress, some of these fish have been released on 2/9/2022 at boat ramp in Redding area. Other releases are going to occur in near future as fish grow to release size (approximately 3/2/2022). In addition, jumpstart winter-run in Battle Creek that will be released the week of 3/14/22.
- Winter-run Chinook salmon adults present in increasing numbers and are holding from RBDD to Keswick Dam.
- Spring-run Chinook Salmon fry present and migrating downstream. Spring-run juvenile passage has slowed, and fall-run Chinook salmon are dominant run passing at RBDD currently.
- Some fall-run Chinook Salmon alevin remain in gravel, fry emergence and passage at RBDD is ongoing daily.
- Late fall-run Chinook Salmon spawning occurring, eggs and alevins in the gravel.
- Green Sturgeon adults and juveniles present in lower river with Delta entry likely.
- Adult steelhead present; juveniles absent from upper river catch.

## 7. Hydrology, Operations and Forecasts, and Temperature Management

Tom Patton, Reclamation, provided an update on hydrology, operations and forecasts, and temperature management. For more detailed information, please refer to meeting packet. Key takeaways included:

Hydrology

- Conditions are very dry and there is very little precipitation. Water Year 2022 will likely be very dry like Water Year 2021.
- Storage
  - Shasta Reservoir storage just above 1.6 MAF 58% of the 15-year average.
  - Trinity Reservoir 54% of 15-year average
  - Folsom Reservoir 112% of the 15-year average.
- Runoffs are decent now, but Reclamation expects decreases due to February being dry.

Monitoring Gauges

- The Jellys Ferry bridge is going to be replaced and it will be difficult to affix a monitoring gauge to the new bridge abutments. Therefore, Reclamation is looking into options for relocating the Jellys Ferry water temperature gauge (see below for discussion).
- Reclamation has not installed a new gauge at Spring Creek Powerplant yet but is in the process of recording water temperatures out of the Spring Creek penstocks.

Operations

- Reclamation has been adjusting the Temperature Control Device (TCD) and closed all lower gates (PRG) and opened middle gates in early February to conserve coldwater pool for later in the year.
- The February 50% and 90% exceedance forecasts incorporates DWR's February 1 hydrology. Reclamation estimates that Shasta will not rise above the 1,035 elevation needed to utilize the upper gates shown in both forecasts.
- The end of January Coordinated Operations Agreement (COA) balance is 289 TAF. This estimate is not adjusted for New Melones flows or water transfers from Water Year 2021.

Forecasts

- Since the February forecasts were produced, Shasta and Trinity Reservoir inflows have decreased compared to the January forecasts and are expected to continue to reduce through the spring:
  - Shasta Reservoir Inflows
    - 50% Exceedance forecast inflows decreased 625 TAF
    - 90% Exceedance forecast inflows decreased 325 TAF
  - Trinity Reservoir Inflows
    - 50% Exceedance forecast inflows decreased 170 TAF
    - 90% Exceedance forecast inflows decreased 105 TAF
- February forecasts for Shasta and Trinity Reservoir storage predict comparatively less end of season storage than in Water Year 2021.
  - Shasta Reservoir storage
    - 90% Exceedance forecast
      - End of April 2 MAF
      - End of September 900 TAF, (less than Water Year 2021)
    - Reclamation expects the March forecasts to be worse.
  - Trinity Reservoir storage
    - End of September 500 TAF at the end of September in 90% forecast

• Reclamation is planning for reduced diversions this year compared to last year and overall very little diversions from the Trinity River system.

The group discussed the following:

- Jellys Ferry Water Temperature Gauge Reclamation asked for input on the importance of having a water temperature gauge at Jellys Ferry long-term or location suggestions for a gauge around River Mile 34 between Balls Ferry and Bend Bridge.
  - Challenge: There is not a good way to attach a gauge to the new Jellys Ferry bridge abutments.
  - Need
    - Very useful water temperature value in this river section when winter-run Chinook used to spawn in this section.
    - In the recent past, Reclamation used Jellys Ferry as the compliance point for temperature management for winter-run Chinook and it may be needed as a compliance point again.
    - The Jellys Ferry gauge is valuable as a redundant gauge during gauge outages.
  - Options
    - Publicly-accessible gauge concern about interruption of use and cost of maintenance due to vandalism.
    - Private property gauge concern about access and interruption of use and cost of maintenance due to vandalism. Coordination with land owner.
    - Estimate water temperatures at Jellys Ferry temperature using surrounding water temperatures.
    - Airport Road Temperature Gauge During the last drought, DWR installed a station near the bridge by Airport Road in Anderson. DWR discontinued the gauge after a few years due to a lack of funds. That gauge bridged the gauging gap between Balls Ferry and Clear Creek.
  - Recommendations
    - Various members suggested re-installing the Jellys Ferry gauge and/or reoperating the Airport Road Temperature Gauge.
    - Check with modelers about Jellys Ferry gauge data in models
- Trinity River
  - Diversions to Sacramento River Basin
    - Reclamation cannot provide detail on how much of the diversion would go to different points of use. Reclamation can provide the magnitude of the diversions.
  - Emergency Consultation
    - The Yurok Tribe indicated that the 2000 Trinity River Record of Decision (ROD) and 2000 NMFS Biological Opinion (BiOp) specifies that an emergency consultation with the Yurok Tribe, Reclamation, USFWS, and NMFS is required when Trinity Reservoir falls below 600 TAF.
    - The Yurok Tribe requests to start the emergency consultation sooner rather than later.

- The consulting agencies will consider coordinating the emergency consultation.
- For emergency consultation with NMFS on the Trinity, coordinate with Justin Ly (justin.ly@noaa.gov).
- 90-5 language provided by SWRCB:

## <u>WRO 90-5</u>

Permittee shall not operate its Trinity River Division for water temperature control on the Sacramento River in such a manner as to adversely affect salmonid spawning and egg incubation in the Trinity River. Adverse effects shall be deemed to occur when average daily water temperature exceeds 56OF at the Douglas City Bridge between September 15 and October 1, or at 61. the confluence of the North Fork Trinity River between October 1 and December 31 due to factors which are (a) controllable by permittee and (b) are a result of modification of Trinity River operations for temperature control on the Sacramento River.

If the temperatures in the Trinity River exceed 56OF at the specified locations during the specified periods, Permittee shall immediately file with the Chief of the Division of Water Rights a report containing project operational data sufficient to demonstrate that the exceedance was not due to modifications of Trinity River operations for water temperature control on the Sacramento River. If, within fifteen days, the Chief of the Division of Water Rights does not advise Permittee that it is violating this condition of its water right, Permittee shall be deemed not to have caused the exceedance in order to control temperature on the Sacramento River.

# 8. Temperature Management and Temperature Dependent Mortality Modeling

SRTTG members did not have any new modeling results to share with the group.

## 9. Upper Sacramento Scheduling Team

The first Spring Pulse Flow meeting is scheduled for Wednesday, March 2.

## **10. Any Additional Discussion**

The group had no additional discussion items.

# 11. Review Action Items and Meeting Scheduling

Julie Leimbach, Kearns & West, reviewed the action items. The next SRTTG meeting is scheduled for Thursday, March 10, 2022.