Salmon Monitoring Team (SaMT) Weekly Meeting

Conference call: 10/20/2020 at 9:00 a.m.

Objective: Provide information to the Water Operations Management Team (WOMT), the U.S. Bureau of Reclamation (Reclamation) and California Department of Water Resources (DWR) on potential effects from Delta operations of the CVP and the SWP on salmonids and green sturgeon. Meeting notes will be posted to Reclamation's SaMT web page here.

Meeting participants include representatives from: California Department of Fish and Wildlife (CDFW), DWR, National Marine Fisheries Service (NMFS), State Water Resources Control Board (SWRCB), Reclamation, and the US Fish and Wildlife Service (USFWS). A list of <u>call participants</u> can be found on the SaMT MS Teams site.

Agenda Items:

- 1. Introductions
- 2. Relevant Actions and Triggers
- 3. Outlook, Current Operations, and Weather Forecast
- 4. Fish Abundance and Distribution
- 5. Fish Exposure and Behavioural Cues
- 6. Other Topics
- 7. Additional Considerations for WOMT
- 8. Next SaMT Meeting

Agenda Item 2. Relevant Actions and Triggers Review

Delta Cross Channel (DCC) Gate Operations

From October 1 to November 30 Reclamation proposes to operate the DCC gates consistent with past operations. See Reclamation's Proposed Action (PA), Section 4.10.5.3 (page 4-55).

The DCC gates are scheduled to be closed from 1600 hours on 10/20/20 to approximately 1000 hours on 10/24/20 during the Lower Mokelumne River pulse flow release. Closures are in accordance with the DCC operations described in the PA. Closure of the gates is anticipated to reduce straying of Mokelumne River fall-run Chinook salmon through the DCC and into the Sacramento River system during the attraction pulse flows.

Reclamation and DWR are continuing to evaluate additional DCC gate closures this month in coordination with the Mokelumne River pulse flows to meet environmental requirments (Rio Vista flows, salmonid protection, water quality).

Agenda Item 3. Weekly Fish and Water Operations Outlook, Current Operations Project Operations

SaMT reviewed and updated the Outlook document.

Fish Monitoring Gear Efficiency/Disruptions: COVID-19 or air quality impacts.

	Status (as of 10/20/20) Most Recent Change	
Monitoring Survey	in Green	
Delta		
SWP regular counts, CWT reading, and larval sampling	Ongoing	
CVP regular counts, CWT reading, and larval sampling	Ongoing	
Smelt Larval Survey		
20mm Survey		
Bay Study		
DJFMP- Chipps and Sacramento Trawls	Ongoing	
DJFMP- Seines	Ongoing	
EDSM	Ongoing	
EMP		
Mossdale	Ongoing	
USGS Flow monitoring	Continuous monitoring continues	
Sacramento River		
Red Bluff Diversion Dam screw trap	Ongoing	
Knights Landing screw trap	Ongoing through modified staffing	
Tisdale screw trap	Ongoing through modified staffing	
Redd dewatering and stranding surveys	Ongoing	
Sacramento Carcass and Redd Surveys	Continuing	
Spring Kodiak Trawl	Typically sample in Dec but starting in Jan this year	
San Joaquin River		
SJRRP CDFW Field Monitoring	Start 10/6/20	
SJRRP USFWS and USBR Field Monitoring	Since 8/31 with some interruption due to air quality	

Fish Monitoring: Salvage

Salvage and loss of ESA-list species are reported in the assessment.

SaMT Estimates of Fish Distribution

SaMT estimates of the current distribution of listed Chinook salmon, as a percentage of the population, are based on recent monitoring data and historical migration timing patterns and are reported in the Assessment.

Location	Yet to Enter Delta (Upstream of Knights Landing)	In the Delta	Exited the Delta (Past Chipps Island)
Young-of-year (YOY) winter-	99-100%	0-1%	0%
run Chinook salmon	Last week: 99-100%	Last week: 0-1%	Last week: 0%
YOY spring-run Chinook	100%	0%	0%
salmon	Last week: 100%	Last week: 0%	Last week: 0%
YOY hatchery winter-run	N/A	N/A	N/A
Chinook salmon	Last week: N/A	Last week: N/A	Last week: N/A
Natural origin steelhead	99-100%	0-1%	0%
	Last week: 99-100%	Last week: 0-1%	Last week: 0%

Since August, the Glenn Colusa Irrigation District (GCID) rotary screw traps (RSTs) have observed over 700 winter-run Chinook salmon juveniles (by length at date criteria) in their daily catches. A second pulse of fish has arrived since the beginning of October. Since few winter-run Chinook salmon have been observed in RST monitoring locations farther downstream (Tisdale and Knights Landing), the fish appear to be holding in the middle reaches of the Sacramento River. SaMT anticipates that the movement of winter-run Chinook salmon juveniles into the lower reaches of the Sacramento River and upper Delta will occur with precipitation events and increasing river flows and turbidity.

Based on information from the Livingstone National Fish Hatchery, the current year's winter-run broodstock (BY 2020) exhibited thiamine deficiency, as was seen in last year's adults. SaMT recognizes that this year's natural winter-run Chinook salmon juvenile population may also show higher than expected mortality due to the thiamine deficiency and will monitor this situation.

Agenda Item 5. Fish Exposure and Behavioral Cues, Current Conditions, Sensitivity to Operational Actions

SaMT reviewed and updated the Assessment document.

Agenda Item 6. Other Topics

CDFW on ITP Risk Assessment– Risk of entrainment to juvenile winter-run Chinook salmon into the interior Delta and at the facilities is similar to last week and considered to be low this week. Cumulative catch of juvenile winter-run Chinook salmon at GCID has been 721 while 323 juvenile winter-run Chinook salmon have been observed over the last week (10/13/20 to 10/20/20). A single individual juvenile winter-run Chinook salmon was observed in the monitoring stations as far downstream as the Knights Landing rotary screw traps. This information along with seasonal timing and RBDD historical passage trends, indicates a majority of the population occupies the reaches between RBDD and Tisdale. SaMT still estimates that the majority of the population of juvenile winter-run Chinook salmon (99-100%) are yet to enter the Delta. Risk to juvenile winter-run Chinook salmon entrainment into the interior Delta may increase over the weekend due to the Delta Cross Channel gates opening Saturday morning, but based on the current distribution, risk remains in the low category. USBR indicated that DCC gate closure may occur next week.

22 length at date juvenile spring-run Chinook salmon have been observed at GCID, but no other spring-run Chinook salmon have been observed in the monitoring this past week and in consideration of the seasonal timing, SaMT continues to estimate 0% of the juvenile spring-run Chinook salmon population are currently present in the Delta. SaMT did not assess risk to juvenile spring-run Chinook salmon this week.

This risk assessment does not address effects to adult fall-run Chinook salmon based on DCC gate operations. Additionally, no juvenile Chinook salmon have been observed in salvage this past week. Currently the controlling factor for exports is Delta outflow.

Reclamation addressed current SaMT document sharing and meeting notes process:

- Weekly agendas provided to the SaMT on Monday
- Draft meeting notes provided to SaMT for review and feedback on Tuesday; feedback due by 5pm Thursday
- Final notes provided to SaMT by 5pm Friday
- Complication: NMFS and CDFW noted inability to utilize MS Teams, but will follow-up internally

Agenda Item 7. Additional Considerations for WOMT

No additional considerations for WOMT were noted.

Agenda Item 8.

Next SaMT Meeting is scheduled for Tuesday, 10/27/20 at 9:00 a.m.