

Salmon Monitoring Team (SaMT) Weekly Meeting

Conference call: 6/9/20 at 9:00 a.m.

Executive Summary:

- DSM2 runs for the assessment assessed the impacts of Old and Middle River (OMR) flows ranging from -1,500 cfs to -5,000 cfs.
- No Delta performance measures have been exceeded.
- On 6/1/20 SaMT began to track temperature conditions which are a component of the trigger for the end of OMR Flow Management for juvenile salmonids.
- SaMT requested WOMT clarify end of OMR Flow Management criteria under the 2019 NMFS BO: 1) discrepancy between temperature value (71.6° F vs 72.0° F) and 2) discrepancy in time-frame for OMR flow management for steelhead (June 15 vs June 30).

Objective: Provide information to the WOMT, the U.S. Bureau of Reclamation (Reclamation) and California Department of Water Resources (DWR) on measures to reduce adverse effects from Delta operations of the Central Valley Project (CVP) and the State Water Project (SWP) on salmonids and green sturgeon. SaMT notes and other meeting materials (e.g., weekly outlook and assessment) will be accessible on [Reclamation's web page](#).

- **California Department of Fish and Wildlife (CDFW):** Geir Aasen, Adam Chorazyczewski, Kristal Davis-Fadtke, Kyle Griffiths, Sheena Holley, Jason Julienne, Vanessa Kollmar, Ken Kundargi, Duane Linander, Jonathan Williams, Lauren McNabb
- **DWR:** Chris Cook, Brittany Davis, Bryant Giorgi, Farida Islam, Tracy Pettit, Kevin Reece, Reza Shahcheraghi, Ian Uecker, Mike Ford
- **Kearns & West:** Matt Marvin
- **National Marine Fisheries Service (NMFS):** Kristin Begun, Jeff Stuart
- **Reclamation:** Towns Burgess, Elissa Buttermore, Josh Israel, Suzanne Manugian, Tom Patton
- **State Water Resources Control Board (SWRCB):** Chris Carr, Erin Foresman, Michael Macon, Alessia Siclari
- **US Fish and Wildlife Service (USFWS):** Geoff Steinhart, Katherine Sun

Agenda Items:

1. Introductions
Purpose: Provide an accurate record of who is attending these calls.
2. Group Norms
Purpose: Establish expectations for meeting participants and facilitator.
3. Relevant Actions and Triggers
Purpose: Review of relevant actions and triggers status and discuss any changes.
4. Outlook, Project Operations, and Weather Forecast
Purpose: Review operations and weather sections on Weekly Outlook. Discuss Delta operations to consider context for evaluating Assessment questions about Delta operation effects.

5. Review of Environmental Data
Purpose: Review environmental data to consider context for evaluating Assessment questions about Delta operations effects.
6. Fish Abundance and Distribution
Purpose: Review fish monitoring data to inform fish distribution estimates, fish exposure, and behaviour cues that is part of the next section.
 - a. Hatchery Releases
 - b. Historical Fish Monitoring Data
 - c. Fish Monitoring: RSTs/trawls/seines
 - d. Fish Monitoring: Salvage
 - e. Migration Status: Estimates of Fish Distribution
7. Fish Exposure and Behavioural Cues
Purpose: Assist in assessing entrainment risk of Delta operations on salmonids and sturgeon. Complete Evaluation section questions of the Assessment. Review draft Assessment.
 - a. Historical Patterns (Comparison of abundance, timing, and loss to prior years)
 - b. Current Conditions (DSM2, Entrainment Models)
 - c. Sensitivity to Operational Actions - review Assessment document
8. Other Topics
Purpose: Identify additional topics that are not in the regular agenda.
9. Considerations for WOMT
Purpose: Highlight information that SaMT would like WOMT to consider related to changes to Delta water operations.
10. Next SaMT Meeting

Agenda Item 2.

Group Norms

The Group Norms were reviewed and described as a set of expectations for SaMT which were developed by the Long Term Operations (LTO) guidance group. SaMT members are required to comply with group norms and should contact their respective LTO guidance group representative if they have questions or input.

Agenda Item 3.

Relevant Actions and Triggers Review

Delta Cross Channel (DCC) Gate Operations

- DCC gates were opened on 6/5/20 at 1000 hours for the weekend and then closed on 6/8/20 at 1000 hours. Gates will then be closed throughout the week and open on 6/12/20 at 1000 hours and remain open for the summer.

OMR Flow Management

- Implementation of this action in water year (WY) 2020 began on 1/1/20 under the 2009 NMFS LTO biological opinion and was superseded by Reclamation's Proposed Action section 4.10.5.10 (OMR Management) on 2/18/20 following the signing of the Record of Decision, and requires that OMR flow be no more negative than -5,000 cfs. OMR flows are reported weekly with the OMR index and the tidally filtered U.S. Geological Survey (USGS) gauges at the daily, 5-day and 14-day running averages.
- End of OMR Flow Management:
 - Reclamation's Proposed Action section 4.10.5.10.4: End of OMR flow Management occurs on June 30 (for Chinook salmon), or June 15 (for steelhead/rainbow trout), or when the following species-specific off ramps have occurred, whichever is earlier:
 - when more than 95 percent of salmonids have migrated past Chipps Island, as determined by their monitoring working group, OR
 - after daily average water temperatures at Mossdale exceed 71.6° F for 7 days during June (the 7 days do not have to be consecutive).
 - 2019 NMFS Biological Opinion: OMR criteria may control operations until June 30, or when both of the following conditions have occurred, whichever is earlier:
 - Delta smelt: when the daily mean water temperature at Clifton Court Forebay reaches 25°C for 3 consecutive days.
 - Salmonids: when more than 95 percent of listed salmonids have migrated past Chipps Island, as determined by the Delta monitoring working group, OR after daily average water temperatures at Mossdale exceed 72°F for 7 days during June (the 7 days do not have to be consecutive).
 - DWR's Incidental Take Permit (ITP) Section 8.8: End of OMR Flow Management:
 - 1) More than 95% of winter-run and spring-run migrated past Chipps Island, AND
 - 2) Daily average water temperatures at Mossdale exceed 22.2°C for 7 days in June (days do not have to be consecutive), AND
 - 3) Daily average water temperatures at Prisoner's Point exceed 22.2°C for 7 days in June (days do not have to be consecutive).
 - Discrepancies were discussed during the meeting which involved getting clarity for the end of OMR Flow Management criteria under the 2019 NMFS BO: 1) discrepancy between temperature value (71.6° F vs 72.0° F) and 2) discrepancy in time-frame for OMR flow management for steelhead (June 15 vs June 30).
- Refer to the weekly operations and fish outlook for more triggers relevant to the CDFW ITP and the 2019 ROC Proposed Action (see Agenda Item 3), which will be posted to [Reclamation's web page](#)
- DWR's ITP was signed on 3/31/20 and can be found online here: [Incidental Take Permit for Long Term Operations of the State Water Project](#)

Agenda Item 4.

Weekly Fish and Water Operations Outlook.

SaMT reviewed the Outlook document. The Outlook document will be posted to the [WOMT web page](#).

Project Operations

Operations Category	Location	Operations on 6/2/20	Operations on 6/9/20
Clifton Court Inflow	Clifton Court Forebay	600 cfs and holding	500 cfs currently and holding at least the next 2 days
SWP Reservoir Releases	Feather – Oroville	3,000 cfs	3,000 cfs. Scheduled slight increase up to 3,300 cfs on 6/11/20.
SWP Reservoir Storage	San Luis (SWP)	889 TAF	865 TAF
SWP Reservoir Storage	Oroville	2,421 TAF	2,376 TAF
Environmental Parameters	Sacramento River at Freeport	11,450 cfs	11,680 cfs
Environmental Parameters	San Joaquin River at Vernalis	1,790 cfs	1,400 cfs
Environmental Parameters	Delta Outflow Index	9,320 cfs	7,800 cfs
Environmental Parameters	E:I (14-day)	10% (14-day average)	24% (3-day average)
Environmental Parameters	X2	79 km, expected to shift upstream with the high tides on 6/6/20 and 6/7/20	81km, expected to remain stable.
CVP Exports	Jones Pumping Plant	900 cfs. Scheduled to increase to 1,800 cfs on 6/3/20 and to increase again to 2,700 cfs on 6/4/20	2,700 cfs and holding
CVP Reservoir Releases	American – Nimbus	1,750 cfs and holding	2,250 cfs. Scheduled to increase to 2,500 cfs on 6/11/20.

Operations Category	Location	Operations on 6/2/20	Operations on 6/9/20
CVP Reservoir Releases	Sacramento – Keswick	10,500 cfs and holding	10,500 cfs currently. Scheduled to increase to 11,000 cfs on 6/11/20 and to 11,500 cfs on 6/12/20.
CVP Reservoir Releases	Stanislaus - Goodwin	1,500 cfs and holding. Evaluating plans to decrease releases to fluctuate between weekends and weekdays.	1,500 cfs. Currently fluctuating between 800 cfs on weekends for public safety and 1,500 cfs on weekdays. Maintaining operations for Vernalis flow requirements for the month of June.
CVP Reservoir Releases	Trinity - Lewiston	Last month of pulse flow. 850 cfs currently. One more pulse anticipated for June. Decreases to minimum flows expected in July.	750 cfs. One more pulse flow scheduled in June up to 1,400 cfs and then decreasing by end of month.
CVP Reservoir Storage	San Luis (CVP)	404 TAF and decreasing	377 TAF and decreasing storage
CVP Reservoir Storage	Shasta	3,531 TAF and decreasing	3,453 TAF and decreasing storage
CVP Reservoir Storage	Folsom	791 TAF and increasing	794 TAF and decreasing storage
CVP Reservoir Storage	New Melones	1,835 TAF and decreasing	1,804 TAF and decreasing storage
CVP	DCC Gates	Closed, weekend opening scheduled continuing until 6/15/20.	Closed through 6/12/20 at which time they will open for the summer.

cfs = cubic feet per second

MAF = million acre feet

TAF = thousand acre feet

km = kilometer

Location of X2 measured from the Golden Gate

Factors controlling Delta exports, 6/2/20 – 6/8/20: Controlling factors for the previous week include Delta water quality criteria that may have limited exports [i.e., Emmaton electrical conductivity (EC), Delta outflow, Collinsville EC]. Water quality constraints [i.e., Delta outflow, Emmaton electrical conductivity (EC), and Collinsville EC] are anticipated to remain as controlling factors.

Agenda Item 5.

Review of Environmental Data

OMR Index and USGS Tidally Filtered Values are displayed on SacPAS.

http://www.cbr.washington.edu/sacramento/data/delta_loss.html

Approximate OMR gauge data as of 6/1/20

	USGS gauges (cfs)	Index (cfs)
Daily	-800 cfs	-1,500 cfs
5-day	-800 cfs	-1,300 cfs
14-day	-1,200 cfs	-1,200 cfs

- OBI gauge missing datapoints on a few days, enough to not be able to do calculations

Approximate OMRs as of 6/8/20:

	Index (cfs)
Daily	-3,300 cfs
5-day	-3,300 cfs
14-day	-2,100 cfs

Average Daily Water Temperature as of 6/1/2020:

http://cdec.water.ca.gov/dynamicapp/staMeta?station_id=MSD

http://cdec.water.ca.gov/dynamicapp/staMeta?station_id=PPT

Tidal Information: Spring tides on June 4 and June 21.

Agenda Item 6.

Fish Abundance and Distribution

Hatchery Releases

On 6/7/20, CDFW released approximately 250,000 brood year 2019 fall-run Chinook salmon from Mokelumne River Fish Hatchery into net pens at Pillar Point Harbor. This release will include 25% adipose fin clip and Coded Wire Tagged (CWT) fish.

Fish Monitoring

Historical Fish Monitoring Data

Average percent of annual emigrating population for each species of interest (based on LAD) captured at the following locations by 6/7 for the years 2005 to 2018. [SacPAS Migration Timing Website](#)

Species	Red Bluff Diversion Dam	Tisdale RST	Knights Landing RST	Sac Trawl (Sherwood)	Chipps Island Trawl	Average Percent Salvaged at SWP and CVP Delta Facilities
Winter-run Chinook salmon	100%	100%	100%	100%	100%	100%
Spring-run Chinook salmon	100%	100%	100%	100%	100%	99.6%
Steelhead	25.1%	93.6%	98.7%	99.3%	99.1%	96.4%

Current Fish Monitoring Data

Fish monitoring data summarized over the past week are found on Bay Delta Live. Unless otherwise noted, reported races are based on fork length (LAD).

Location	Feather River RST Eye Channel ^A	Feather River RST Herringer ^B	GCID RST ^C	LAR RST ^D	Sacramento Trawls ^E	Chippis Island Midwater Trawl ^E
Sample Dates	6/3/20 – 6/5/20	6/3/20 – 6/5/20	6/2/20 – 6/6/20	6/2/20 – 6/5/20	5/31/20-6/6/20	5/31/20-6/6/20
Chinook						
FR Chinook	177	14	72 juv.	88	2	1
SR Chinook						
WR Chinook						
LFR Chinook						
Chinook (ad-clip)						
Steelhead (natural)	2			1 fry, 1 yearling		
Steelhead (ad-clip)						
Green Sturgeon						
Flows (avg. cfs)	950	3,000	1,619			
W. Temp. (avg. °F)	59	65	61.8			
Turbidity (avg. NTU)	1.6	2.6	6.1			

^A Feather River RST data from Eye Side Channel sampling period was from 6/3/20 at 8:40 to 6/5/20 at 11:40. Traps pulled for the weekend on 6/5/20. No weekend trapping for the remainder of the season.

^B Feather River RST data at Herringer sampling period was from 6/3/20 at 9:29 to 6/5/20 at 10:25. Traps pulled for the weekend on 6/5/20. No weekend trapping for the remainder of the season.

^C GCID RST sampling period was from 6/2/20 to 6/6/20. RST operating at half cone. 6/6/20 GCID RST was raised due to heavy debris and will be lowered when load become manageable under the live specimen safety protocol.

^D Lower American River RST sampling period was from 6/2/20 to 6/5/20.

^E DatCall sampling data period was from 5/31/20 to 6/6/20.

Tisdale and Knights Landing trapping ended on 5/26/20 due to river temperatures reaching 70°F.

Fish monitoring gear efficiency, COVID-19 impacts, current status:

Monitoring Survey	Status (6/9/20, new changes in green)
Delta	
SWP regular counts, CWT reading, and larval sampling	Ongoing through modified staffing
CVP regular counts, CWT reading, and larval sampling	Ongoing through modified staffing.
Smelt Larval Survey	Suspended temporarily. Completed data analysis ongoing.
20mm Survey	Starting 4/13/20, modified (prioritizing South/Central Delta). Starting on 5/11/20, increased to predominantly an entire survey with 44 of 47 stations representing all strata.
Bay Study	Suspended temporarily
DJFMP - Chipps and Sacrament Trawls	Occurring
DJFMP- Seines	Suspended since 3/17/20
EDSM	Occurring
EMP Continuous	Occurring
EMP Discrete	Suspended temporarily
Mossdale	Suspended since 3/16/20
USGS Flow monitoring	Occurring
Sacramento River	
Acoustic tagging - Battle Creek "Jumpstart" hatchery winter run Chinook	Tagged ~ 250 fish
Acoustic tagging - Offsite Release study of fall run Chinook	Postponed until 2021
Acoustic tagging - Spring run Chinook	CDFW taking on tagging in Butte (14 tagged 5/15/20, 9 tagged 5/18/20) – as fish come into trap and as staff are available
Acoustic tagging - Pulse Flow experiment	Approximately 623 fish tagged.
Red Bluff Diversion Dam screw trap	Suspended since 3/26/20
Knights Landing screw trap	Sampling completed for WY 2020.
Tisdale screw trap	Sampling completed for WY 2020.
Redd dewatering and stranding surveys	Suspended March and April of 2020. Resumed May 2020
Sacramento Carcass and Redd Surveys	Carcass surveys continuing. Redd surveys suspended March and April but resumed and partially in May 2020 An aerial survey occurred last week.
San Joaquin River	
SJRRP CDFW and USFWS Field Monitoring	On hold until further notice
SJRRP USBR Field Monitoring	Ongoing with modified staffing
San Joaquin River Steelhead (Mokelumne Hatchery) acoustic tagging	Cancelled

Green Sturgeon

Ten juvenile green sturgeon were detected on the Sacramento River north of Sherman Lake. Five or six adult green sturgeon observed on the Yuba River at Daguerre Point Dam. Adult green sturgeon were also detected along the Feather River: one at the Thermalito Afterbay Outlet, three fish at Sunset Pumps, and one fish at Beer Can Beach on acoustic receivers.

DOSS Weekly Salvage Update

Reporting Period: June 1-June 7, 2020

Prepared by Kyle Griffiths on June 8, 2020 15:17

Preliminary Results -Subject to Revision

Criteria	1-Jun	2-Jun	3-Jun	4-Jun	5-Jun	6-Jun	7-Jun	Trend	
Loss Densities									
Wild older juvenile CS	0	0	0	0	0	0	0	→	0.00
Wild steelhead	0	0	0	0	0	0	0	→	0.00
Exports									
SWP daily export	1,256	954	772	767	1,315	1,212	1,066	→	1,049
CVP daily export	1,783	1,821	3,624	5,196	4,682	6,798	5,297	↗	4,172
SWP reduced counts	0	0	0	0	0	24%	0		
CVP reduced counts	0	0	0	0	25%*	0	0		

Loss Density = fish lost/TAF; water export = AF; Trend = compared to previous week; wild = adipose fin present

Loss = estimated number of fish lost at the CVP and SWP Delta export facilities based on estimated salvage (see below)

Reduced counts = percentage of time that routine salvage sample time were less than 30 min per 2 hours of salvage and export operations

Yellow highlighted dates indicate TFCF salvage outage occurred

Chinook Salmon Weekly/Season Salvage and Loss

Combined salvage and loss for both CVP and SWP fish facilities

Race determined by size at date of capture; hatchery = adipose fin missing;

Category	Weekly Total			Season Total		Season Total - LAD	
	Salvage	Loss	Trend	Salvage	Loss	Salvage	Loss
Wild							
Winter Run	0	0	→	45	80	107	197
Spring Run	0	0	↘	171	478	2265	4168
Late Fall Run	0	0	→	12	8	12	8
Fall Run	32	22	↗	3,174	5,341	1018	1535
Unclassified	0	0	→	0	0	0	0
Total	32	22		3,402	5,908	3,402	5,908
Hatchery							
Winter Run	0	0	→	18	16	80	94
Spring Run	0	0	→	1,177	1,595	1048	1473
Late Fall Run	0	0	→	195	153	186	144
Fall Run	0	0	→	49	35	125	88
Unclassified	0	0	→	0	0	0	0
Total	0	0		1,439	1,799	1,439	1,799

Trend = weekly loss per race; Salvage = estimated number of fish collected by the CVP and SWP fish protective facilities per unit of time

NC = cannot be calculated; hatchery salmon salvage and loss estimates have been corrected using CWT readings when available

Steelhead Weekly/Season Salvage and Loss

Combined salvage and loss for both CVP and SWP fish facilities

Category	Weekly Total			Season Total		Season Total > Apr.1	
	Salvage	Loss	Trend	Salvage	Loss	Salvage	Loss
Wild	0	0	→	300	726	149	324
Hatchery	0	0	→	428	659		
Total	0	0		728	1,385		

State Water Project loss = salvage x 4.33; Central Valley Project loss = salvage x 0.68

It was reported during the SaMT call that the Skinner Fish Facility experienced reduced counts on Saturday, 6/6/2020, due to high numbers of fish observed in salvage, the majority being striped bass.

The following was provided by Griffiths (CDFW) after the conclusion of the 6/9/20 SaMT call. Early in the morning of 6/5/20, high debris loads entered the Tracy Fish Collection Facility (TFCF) inlet channel upstream of the trash rack. The high debris loads continued to accumulate, leading to a head differential at the trash rack of more than 4 feet between the water surface elevation in the inlet channel and the outside Delta waters. The Jones Pumping Plant (JPP) was notified and pumping was reduced until completely shut down on 6/5/20 at 0609 hours. Between 0609 hours and 0955 hours on 6/5/20, there was no pumping at JPP, no salvage at TFCF, and no fish counts at TFCF. Pumping at the JPP and fish salvage at the TFCF resumed at 0955 hours on 6/5/20 with 1 unit. Additional pumping units were brought back online approximately every 15 minutes until all 4 units were operational at 1045 hours.

SaMT Estimates of Fish Distribution

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

Location	Yet to Enter Delta (Upstream of Knights Landing)	In the Delta	Exited the Delta (Past Chippis Island)
<i>Young-of-year (YOY) winter-run Chinook salmon</i>	0% Last week: 0%	0% Last week: 0-1%	100% Last week: 99-100%
<i>YOY spring-run Chinook salmon</i>	0% Last week: 0-5%	5-10% Last week: 5-15%	90-95% Last week: 85-90%
<i>YOY hatchery winter-run Chinook salmon</i>	0% Last week: 0%	0% Last week: 0-1%	100% Last week: 99-100%
<i>Natural origin steelhead</i>	0-2% Last week: 0-5%	13-35% Last week: 20-40%	65-85% * Last week: 55-80%

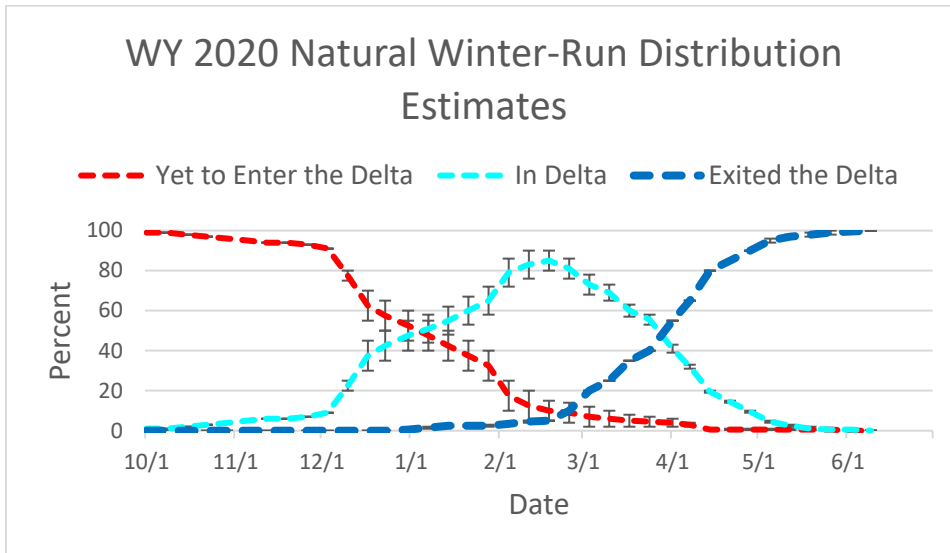
* During the SaMT meeting, distribution of juvenile natural origin steelhead exited the Delta was miscalculated 60-85%

Rationale for changes in distribution

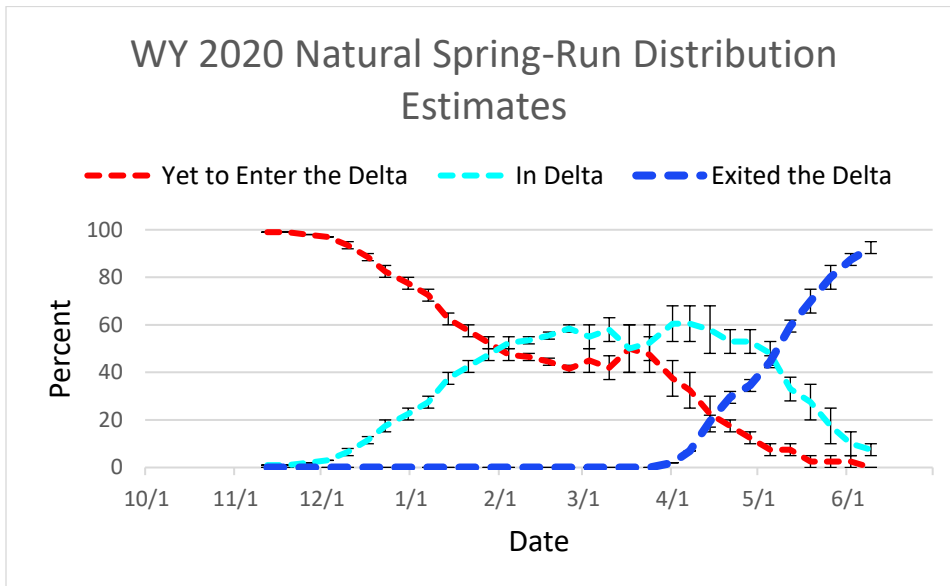
Described in the Assessment document in abundance and distribution sections. A draft Assessment document is sent to SaMT members prior to the weekly call. Final weekly Assessment documents will be posted to the [WOMT web page](#).

Distribution estimate figures

Distribution estimate figures for natural winter-run and spring-run Chinook salmon as discussed during the SaMT meetings.



WY 2020 natural winter-run Chinook salmon distribution



WY 2020 natural spring-run Chinook salmon distribution

Agenda Item 7.

**Fish Exposure and Behavioral Cues:
Historical Patterns**

Described in Assessment document in abundance and distribution sections (Figures 3 and 4) posted on the [WOMT web page](#).

Current Conditions

Entrainment into the Interior Delta:

Described in Assessment document posted on the [WOMT web page](#).

DSM2

DSM2 – Results are provided in the Assessment document weekly on Mondays and Fridays. The Assessment document is posted on the [WOMT web page](#).

Sensitivity to Operational Actions - SaMT Feedback on Entrainment Risk

SaMT members are provided a draft Assessment Fridays. The most recent draft Assessment distributed was on 6/5/20 prior to the 6/9/20 meeting. Input that was received on the draft Assessment document was incorporated into the draft Assessment document that SaMT reviewed during this call. This week's Assessment document was finalized 6/9/20 and will be posted to the [WOMT web page](#).

Agenda Item 8.

Other Topics

SaMT discussed [DWR's ITP](#) categorization for entrainment, exposure, export, and overall risk.

SaMT provides weekly entrainment risk outlooks by considering (a) two different categories of entrainment risk based on listed fish distribution and (b) factors that influence their potential for entrainment. The two entrainment risk categories considered include:

- Interior Delta Entrainment Risk- fish in the Sacramento River that have the potential to be entrained into the Interior Delta through the Delta Cross Channel (when open) and/or Georgiana Slough; and
- CVP/SWP Facilities Entrainment Risk- fish in the Interior Delta that have the potential to be entrained into the CVP/SWP facilities.

Influencing factors considered include:

- Exposure Risk (both categories): estimated scale (low, medium, high) of fish anticipated to be in vicinity of an entrainment risk,
- Routing Risk (Interior Delta Entrainment Risk): estimated scale (low, medium, high) that flow split conditions could result in fish migrating into the Interior Delta instead of remaining in main channel, and
- OMR/Export Risk (CVP/SWP Facilities Entrainment Risk): for fish in the Interior Delta, estimated scale (low, medium, high) that OMR and/or export levels could result in entrainment into the CVP/SWP facilities.

To provide an overall assessment of entrainment risk, the estimated current status of these influencing factors are described below for each of the entrainment risk categories.

8.1.5.1.C. Assessment of risk of entrainment into the central Delta and CVP/SWP facilities for winter-run Chinook salmon and spring-run Chinook salmon in the Sacramento River over the next week:

8.1.5.1.C.ii. Exposure Risk:	Winter-run Chinook salmon: N/A* Spring-run Chinook salmon: Low
8.1.5.1.C.iii. Routing Risk:	Winter-run Chinook salmon: N/A Spring-run Chinook salmon: Low
8.1.5.1.C.iv. Overall Risk:	Winter-run Chinook salmon: N/A Spring-run Chinook salmon: Low

*SaMT estimates that all of the current brood year’s winter-run Chinook salmon population has migrated out of the Delta at this time, and therefore are not at risk of entrainment.

8.1.5.1.D. CVP/SWP facilities entrainment risk for winter-run Chinook salmon and spring-run Chinook in the central Delta over the next week:

8.1.5.1.D.iii. Exposure Risk Assessments:	Winter-run Chinook salmon: N/A** Spring-run Chinook salmon: Low
8.1.5.1.D.iv. Reporting OMR/Export Risk:	
OMR -1,500 cfs:	Winter-run Chinook salmon: N/A Spring-run Chinook salmon: Low
OMR -3,000 cfs:	Winter-run Chinook salmon: N/A Spring-run Chinook salmon: Low
OMR -5,000 cfs:	Winter-run Chinook salmon: N/A Spring-run Chinook salmon: Medium
8.1.5.1.D.v. Overall Entrainment Risk:	
OMR -1,500 cfs:	Winter-run Chinook salmon: N/A Spring-run Chinook salmon: Low
OMR -3,000 cfs:	Winter-run Chinook salmon: N/A Spring-run Chinook salmon: Low
OMR -5,000 cfs:	Winter-run Chinook salmon: N/A Spring-run Chinook salmon: Low

**SaMT estimates that all of the current brood year’s winter-run Chinook salmon population has migrated out of the Delta at this time, and therefore are not at risk of exposure or entrainment to export actions.

Agenda Item 9.

Considerations for WOMT

- SaMT requested WOMT clarify end of OMR Flow Management criteria under the 2019 NMFS BO: discrepancy between temperature value (71.6° F vs 72° F), discrepancy in time-frame for OMR flow management for steelhead (June 15 vs June 30).

Agenda Item 10.

Next SaMT Meeting is scheduled for Tuesday, 6/16/20 at 9:00 a.m.