Salmon Monitoring Team (SaMT) Weekly Meeting
Conference call: 6/16/20 at 9:00 a.m.

Executive Summary:

- DSM2 runs for the assessment assessed the impacts of Old and Middle River (OMR) flows ranging from -3,000 cfs to -5,000 cfs.
- No Delta performance measures have been exceeded.
- No winter-run or spring-run Chinook salmon or steelhead were salvaged in the past week (6/8/20-6/15/20).
- One juvenile green sturgeon was observed at the CVP fish facility on 6/9/20. Current juvenile green sturgeon salvage (4 fish) remains well below the cumulative salvage threshold of 74 fish.
- On 6/1/20 SaMT began tracking average daily water temperature conditions at specific Delta locations (Mossdale and Prisoners Point) which could trigger the end of OMR Flow Management for juvenile listed salmonids.
- Natural steelhead off ramp to end OMR Flow Management (per Reclamation's Proposed Action section 4.10.5.10.4: End of OMR Flow Management) occurred by calendar date on 6/15/20. Chinook salmon do not off ramp by calendar date until 6/30/20.

Objective: Provide information to the Water Operations Management Team (WOMT), the U.S. Bureau of Reclamation (Reclamation) and the 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, Kristal Davis-Fadtke, Sheena Holley, Jason Julienne, Vanessa Kollmar, Ken Kundargi, Duane Linander, Lauren McNabb, Paige Uttley, Jonathan Williams
- **DWR**: Chris Cook, Bryant Giorgi, Farida Islam, Kevin Reece, Alicia Seesholtz, Reza Shahcheraghi, Tracy Pettit, Ian Uecker, Marcia Scavonem
- **Kearns & West:** Matt Marvin
- **National Marine Fisheries Service (NMFS):** Jeff Stuart, Kristin Begun, Garwin Yip
- **Reclamation:** Towns Burgess, Josh Israel, Suzanne Manugian, Tom Patton
- **State Water Resources Control Board (SWRCB):** Chris Carr, Craig Williams, Stanley Mubako, 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. Relevant Actions and Triggers
   Purpose: Review of relevant actions and triggers status and discuss any changes.

3. 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.

4. Review of Environmental Data
   Purpose: Review environmental data to consider context for evaluating Assessment questions about Delta operations effects.

5. 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: Rotary Screw Traps (RSTs)/trawls/seines/acoustic tagging
   d. Fish Monitoring: Salvage
   e. Migration Status: Estimates of Fish Distribution

6. 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

7. Other Topics
   Purpose: Identify additional topics that are not in the regular agenda.

8. Considerations for WOMT
   Purpose: Highlight information that SaMT would like WOMT to consider related to changes to Delta water operations.

9. Next SaMT Meeting

Agenda Item 2.
Relevant Actions and Triggers Review

Delta Cross Channel (DCC) Gate Operations

- DCC gates were closed on 6/8/20 at 1000 hours after being open for the prior weekend. The gates were reopened on 6/12/20 at 1000 hours for the following weekend. The DCC gates will remain open for the summer starting on 6/15/20.
  - SaMT members clarified that while the DCC gates have been opened for the summer, there is the potential that water quality issues in the western Delta could result in the gates being closed to enhance flows in the Sacramento River downstream of the location of the gates.

OMR Flow Management

- Implementation of this action in water year (WY) 2020 began on 1/1/20 under the 2009 NMFS Long Term Operations (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 natural steelhead/rainbow trout), or when the following species-specific off ramps have occurred, whichever is earlier:
    - when more than 95 percent of each listed group of salmonids has migrated past Chipps Island, as determined by the SaMT, 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:
    - 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:
    - More than 95% of winter-run and spring-run migrated past Chipps Island, AND
    - Daily average water temperatures at Mossdale exceed 22.2°C for 7 days in June (days do not have to be consecutive), AND
    - Daily average water temperatures at Prisoner's Point exceed 22.2°C for 7 days in June (days do not have to be consecutive).
  - WOMT provided clarification for the following items that were "elevated" the WOMT meeting on 6/10/20:
    - 71.6°F vs. 72°F daily average temperature threshold: WOMT clarified the CVP daily average water temperature threshold at Mossdale used to end OMR flow management is 71.6 °F.
    - June 15 vs. June 30 for steelhead offramp: WOMT noted the end of OMR flow management occurs on June 15 for steelhead.
    - Consecutive vs. non-consecutive days: WOMT noted this did not need clarification, days can be non-consecutive. WOMT noted the number of days for temperature offramp are non-consecutive.
- 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 3.

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 6/9/20	Operations on 6/16/20
Clifton Court Inflow	Clifton Court Forebay	500 cfs currently and holding at least the next 2 days	500 cfs, increasing in coming days to as high as 1,800 cfs as more water enters the Delta from the upstream reservoir releases in the Sacramento River basin.
SWP Reservoir Releases	Feather – Oroville	3,000 cfs. Scheduled increase up to 3,300 cfs on 6/11/20.	3,300 cfs and holding, pending water quality
SWP Reservoir Storage	San Luis (SWP)	865 TAF	842 TAF
SWP Reservoir Storage	Oroville	2,376 TAF	2,326 TAF
Environmental Parameters	Sacramento River at Freeport	11,680 cfs	11,900 cfs currently and increasing to 13,000 cfs later this week
Environmental Parameters	San Joaquin River at Vernalis	1,400 cfs	1,300 cfs currently. Increasing to 1,600 cfs on 6/18/20 as a result of actions on Stanislaus River
Environmental Parameters	Delta Outflow Index	7,800 cfs	7,300 cfs
Environmental Parameters	E:I (14-day)	24% (3-day average)	21% (3-day average)

Operations Category	Location	Operations on 6/9/20	Operations on 6/16/20
Environmental Parameters	X2	81km, expected to remain stable.	80 km currently, location expected to move upstream with spring tide later this week
CVP Exports	Jones Pumping Plant	2,700 cfs and holding	2,700 cfs and holding. May be adjustments (up to 2,800 cfs) to allow for testing of one unit at JPP
CVP Reservoir Releases	American – Nimbus	2,250 cfs. Scheduled to increase to 2,500 cfs on 6/11/20.	2,750 cfs and holding
CVP Reservoir Releases	Sacramento – Keswick	10,500 cfs currently. Scheduled to increase to 11,000 cfs on 6/11/20 and to 11,500 cfs on 6/12/20.	12,000 cfs and holding
CVP Reservoir Releases	Stanislaus - Goodwin	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.	1,500 cfs. Fluctuations between 800 cfs on weekends for public safety and 1,500 cfs on weekdays. This will continue through June.
CVP Reservoir Releases	Trinity - Lewiston	750 cfs. One more pulse flow scheduled in June up to 1,400 cfs and then decreasing by end of month.	1,350 cfs currently. Peaked at 1,400 on 6/15/20 during this last pulse flow. Decreasing to 450 cfs (minimum summertime flow) in early July
CVP Reservoir Storage	San Luis (CVP)	377 TAF and decreasing storage	345 TAF and decreasing storage
CVP Reservoir Storage	Shasta	3,453 TAF and decreasing storage	3,371 TAF and decreasing storage
CVP Reservoir Storage	Folsom	794 TAF and decreasing storage	777 TAF and decreasing storage

Operations Category	Location	Operations on 6/9/20	Operations on 6/16/20
CVP Reservoir Storage	New Melones	1,804 TAF and decreasing storage	1,775 TAF and decreasing storage
CVP	DCC Gates	Closed through 6/12/20 at which time they will open for the summer.	Open for 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, 6/9/20 – 6/15/20: 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 4.
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 6/13/20:

	USGS gauges (cfs)	**Index (cfs)**
Daily	-2,600 cfs	-3,100 cfs
5-day	-3,200 cfs	-3,100 cfs
14-day	N/A	-2,800 cfs

* OBI gauge missing data, not able to calculate 14-day average.

Approximate OMRs as of 6/15/20:

	Index (cfs)
Daily	-3,300 cfs
5-day	-3,100 cfs
14-day	-3,000 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
* CDEC missing MSD data for 6/13/20 and 6/14/20.

Tidal Information: Spring tide on June 21.

- SaMT members noted over the course of the week of 6/15/20, Sacramento River flows are expected to be around 13,000 cfs and OMR can be expected to reach -4,500 cfs.

Agenda Item 5.

Fish Abundance and Distribution

Hatchery Releases
On 6/11/20, CDFW released approximately 485,000 brood year 2019 fall-run Chinook salmon from Mokelumne River Fish Hatchery into the San Francisco Bay at Fort Baker. This release included 25% adipose fin clip and Coded Wire Tagged (CWT) fish.

On 6/13/20, 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 included 25% adipose fin clip and 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 6/14 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%	100%
Steelhead	28.2%	93.6%	98.7%	99.8%	99.3%	97.7%

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]	Chipps Island Midwater Trawl [E]
Sample Dates	6/8/20 – 6/12/20	6/8/20 – 6/11/20	6/9/20 – 6/15/20	6/9/20 – 6/12/20	6/7/20 – 6/13/20	6/7/20 – 6/13/20
Chinook						
FR Chinook	231	35	114 juveniles	10		1
SR Chinook						
WR Chinook						
LFR Chinook	1	2				
Chinook (ad-clip)						
Steelhead (natural)	3					
Steelhead (ad-clip)						
Green Sturgeon						
Flows (avg. cfs)	650	3,000	1,141			
W. Temp. (avg. °F)	61.75	64.33	59.74			
Turbidity (avg. NTU)	1.65	3.43	6.33			

[A] Feather River RST data from Eye Side Channel sampling period was from 6/8/20 at 11:25 to 6/12/20 at 10:17. Traps pulled for the weekend on 6/12/20. No weekend trapping for the remainder of the season.

[B] Feather River RST data at Herringer sampling period was from 6/8/20 at 9:45 to 6/11/20 at 10:01. Traps pulled for flow increase on 6/11/20. No weekend trapping for the remainder of the season.

[C] GCID RST sampling period was from 6/9/20 to 6/15/20. RST operating at half cone. 6/8/20 GCID RST was lowered at 9:00; 4:00am debris removal scheduled until debris becomes more manageable. 6/12/20 GCID RST was raised in the morning due to heavy debris. 6/14/20 GCID RST was lowered at 9:00.

[D] Lower American River RST sampling period was from 6/9/20 to 6/12/20.

[E] DatCall sampling data period was from 6/7/20 to 6/13/20.

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 (6/16/20, 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	**Expected to resume by end of June 2020**
DJFMP - Chipps and Sacrament Trawls	Occurring
DJFMP- Seines	**Expected to resume in the first week of July 2020**
EDSM	Occurring
EMP Continuous	Occurring
EMP Discrete	**Expected to resume by end of June 2020**
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	**Current plans to resume operations on 7/1/20.**
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

Five juvenile green sturgeon were tagged on the Sacramento River north of Sherman Lake, two on 6/9/20 and three on 6/11/20. All five were BY 2018. Eight juvenile green sturgeon were detected on the Sacramento River north of Sherman Lake on 6/9/20 and 6/11/20. Three of those individuals were detected on both survey dates.

DOSS Weekly Salvage Update

Reporting Period: June 8-June 14, 2020

Prepared by Kyle Griffiths on June 15, 2020 15:35

Preliminary Results -Subject to Revision

Criteria	8-Jun	9-Jun	10-Jun	11-Jun	12-Jun	13-Jun	14-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	1,276	352	889	714	907	552	378	↘	724
CVP daily export	5,296	5,299	5,310	5,275	5,342	5,361	5,358	↗	5,320
SWP reduced counts	0	0	0	0	0	0	0		
CVP reduced counts	0	0	0	0	0	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;

		Weekly Total			Season Total		Season Total - LAD	
Category		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	24	17	↘	3,198	5,358	1,042	1,552
	Unclassified	0	0	→	0	0	0	0
	Total	**24**	**17**		**3,426**	**5,924**	**3,426**	**5,924**
Hatchery								
	Winter Run	0	0	→	18	16	80	94
	Spring Run	0	0	→	1,177	1,595	1,048	1,473
	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

	Weekly Total			Season Total		Season Total > Apr. 1	
Category	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

- SaMT members noted that there were no shutdowns last week and no reports of weed issues which shut down operations at the CVP the prior week. There is the potential for a "weed issue" on the trash racks when Delta winds pick up or when there is an increase in flow through Clifton Court Forebay.
- SaMT members noted that there was a green sturgeon salvage event on 6/9/20: one green sturgeon (430 mm total length) was observed at the CVP (salvage = 4 fish).

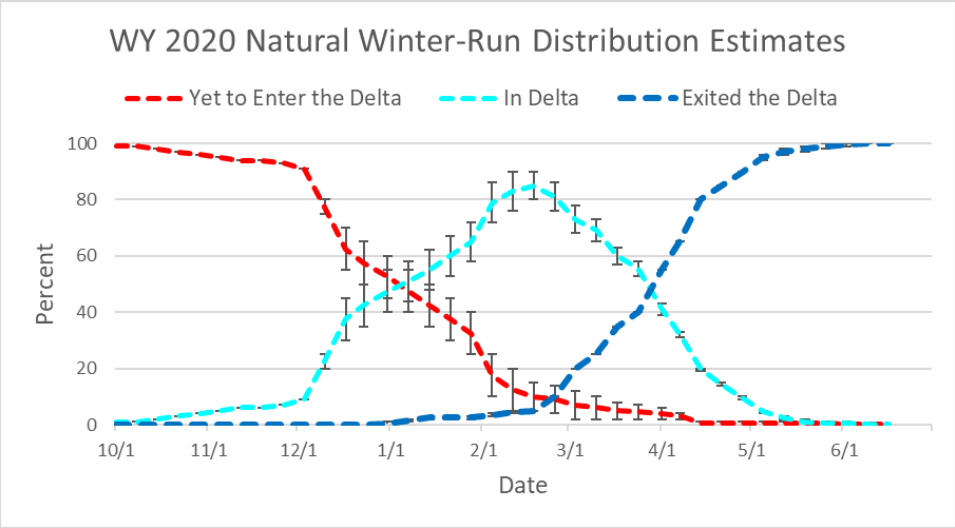
SaMT Estimates of Fish Distribution
SaMT estimates of the current distribution of listed salmonids, as a percentage of the population, are based on recent monitoring data and historical migration timing patterns.

Location	Yet to Enter Delta (Upstream of Knights Landing)	In the Delta	Exited the Delta (Past Chipps Island)
Young-of-year (YOY) winter-run Chinook salmon	0% Last week: 0%	0% Last week: 0%	100% Last week: 100%
YOY spring-run Chinook salmon	0% Last week: 0%	0-5% Last week: 5-10%	95-100% Last week: 90-95%
YOY hatchery winter-run Chinook salmon	0% Last week: 0%	0% Last week: 0%	100% Last week: 100%
Natural origin steelhead	0-1% Last week: 0-2%	10-30% Last week: 13-35%	70-89% Last week: 65-85%

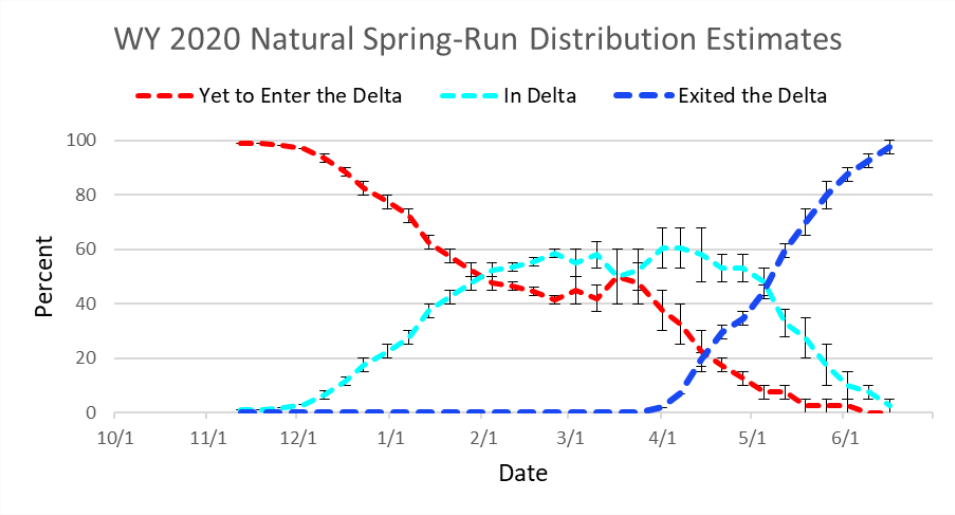
Rationale for changes in distribution

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 6.
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 – Modelling 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 on Friday afternoon. The most recent draft Assessment distributed was on 6/12/20 prior to the 6/16/20 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 6/16/20 and will be posted to the WOMT web page.

Agenda Item 7.

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: Medium
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 -3,000 cfs:	Winter-run Chinook salmon: N/A** Spring-run Chinook salmon: Low
OMR -3,600 cfs:	Winter-run Chinook salmon: N/A** Spring-run Chinook salmon: Medium
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 -3,000 cfs:	Winter-run Chinook salmon: N/A** Spring-run Chinook salmon: Low
OMR -3,600 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.

SaMT discussed the annual report for the SaMT meetings, noting the LTO coordination group will be setting the outline and reporting items for the report and which is expected to be available by early July.

Agenda Item 8.
Considerations for WOMT

- One juvenile green sturgeon was observed at the CVP fish facility on 6/9/20. Current juvenile green sturgeon salvage (4 fish) remains well below the cumulative salvage threshold of 74 fish. This is the first green sturgeon salvaged at either facility since 2017.
- Natural steelhead off ramp to end OMR Flow Management occurred by calendar date on 6/15/20.
- SaMT does not have any recommendations for changes to Delta operations.

Agenda Item 9.
Next SaMT Meeting is scheduled for Tuesday, 6/23/20 at 9:00 a.m.