

Delta Operations for Salmonids and Sturgeon (DOSS) Group
Conference call: 10/3/2017 at 9:00 a.m.

Objective: Provide advice to the Water Operations Management Team (WOMT) and National Marine Fisheries Service (NMFS) on measures to reduce adverse effects from Delta operations of the Central Valley Project and the State Water Project on salmonids and green sturgeon. DOSS will work with other technical teams. DOSS notes and advice can be found at: http://www.westcoast.fisheries.noaa.gov/central_valley/water_operations/doss.html.

CDFW: Ken Kundargi, Bob Fujimura, Jason Julienne, Jerry Morinaka

DWR: Farida Islam, Norman Lee

NMFS: Jeff Stuart, Kristin McCleery

Reclamation: Towns Burgess, Tom Patton, Mike Hendrick, Elissa Buttermore

SWRCB: Chris Kwan, Chris Carr

USFWS: Craig Anderson

Agenda Items

1. Agenda review and introductions
2. RPA Implementation review (For the DOSS Dashboard, click on the "Triggers & Indices" tab at: www.baydeltalive.com/djtmp)
3. Current Operations
4. Smelt Working Group
5. Fish Monitoring: Salvage
6. Fish Monitoring: RSTs/trawls/seines
7. DOSS Estimates of Fish Distribution
8. DOSS advice
9. Check-in on DOSS Annual Report
10. Next DOSS meeting

Agenda Item 2.

RPA Implementation Review

Delta RPA Actions affecting operations during October:

Action IV.1.1 (Alerts that indicate the Delta Cross Channel (DCC) gate operations may be triggered soon)¹:

- Recent (10/1-10/2, unless otherwise noted) conditions for:
 - Wilkins Slough flow: 8,001-8,068 cfs (range of mean daily flow)
 - Knights Landing temperature: 61°F (temperatures reported at the rotary screw traps during trap check on 10/1)
 - Mill Creek flow : 130 cfs (mean daily flow)

¹ For details, see pages 60-61 in Enclosure 2 of the 2011 Amendments to the 2009 RPA document at: http://www.westcoast.fisheries.noaa.gov/publications/Central_Valley/Water%20Operations/Operations,%20Criteria%20and%20Plan/040711_ocap_opinion_2011_amendments.pdf. Note that in October 2014, NMFS approved a modification of the first component of the first alert to a 95 cfs mean daily flow threshold in either Mill Creek or Deer Creek in lieu of operating the Mill and Deer Creek rotary screw traps.

- Deer Creek flow: 122 cfs (station DCV) on 9/27 - last reported flow on CDEC
- The first alert (triggered if either component is met) has been triggered based on Mill Creek flows >95 cfs (130 cfs) on 10/1-2/2017. However, flows have been continuously high (greater than 95 cfs this summer) due to wet hydrology over this past year, therefore the baseline summer flow has been high and no substantial flow increases have been observed. The flow criteria at Wilkins Slough has been exceeded (> 7,500 cfs), however the temperature criteria (< 13.5°C; < 56.3°F) has not been met. Both criteria must be met to trigger the second alert.

Action IV.1.2² (DCC gate operations):

- Since 10/1/17, none of the criteria requiring DCC gate closure have been met.

Agenda Item 3.

Current Operations (10/3/17)

SWP		CVP	
Exports (cfs)			
Clifton Court Forebay	5,000	Jones Pumping Plant	4,400
Reservoir Releases (cfs)			
Feather - Oroville	6,750	American - Nimbus	3,200*
		Sacramento - Keswick	8,000
		Stanislaus - Goodwin	400**
		Trinity - Lewiston	450
Reservoir Storage (in TAF)			
San Luis (SWP)	1,044	San Luis (CVP)	706
Oroville	1,321	Shasta	3,362
New Melones	2,023	Folsom	654
Delta Operations			
DCC	Closed***	Sacramento River at Freeport (cfs)	19,739
Outflow Index (cfs)	9,993	San Joaquin River at Vernalis (cfs)	2,215
E:I	46% (3-day avg.)	X2	~77 km

*Decreasing to 3,000 cfs on Wednesday, 10/4.

**Pulse flow begins on Friday, 10/6.

***DCC gates are closed on Monday's and opened on Friday's through next week, unless extended per CDFW request for protecting Sacramento River fall-run Chinook salmon from straying during their upstream migration.

Factors controlling Delta exports:

- 10/1-3/17: Seasonal salinity management (Fall X2)

² For details, see pages 62-66 in Enclosure 2 of the 2011 Amendments to the 2009 RPA document at: http://www.westcoast.fisheries.noaa.gov/publications/Central_Valley/Water%20Operations/Operations,%20Criteria%20and%20Plan/040711_ocap_opinion_2011_amendments.pdf

Agenda Item 4.

Smelt Working Group

The Smelt Working Group has not yet started meeting for the 2018 water year.

Agenda Item 5.

Fish Monitoring: Salvage

Fujimura (CDFW) provided a salvage summary. Most Chinook salmon were salvaged by the end of June, however some sporadic recoveries of juvenile Chinook salmon (fall-run) continued through the end of August (8/18/17). The last Central Valley steelhead observed in salvage during WY2017 occurred on June 16, 2017. A single green sturgeon was observed in salvage during WY2017 on June 19, 2017. Since the beginning of September, no salmonids or green sturgeon have been observed in salvage. CDFW is working to upgrade its reporting routines of coded wire tagged fish for daily and weekly salvage updates.

Agenda Item 6.

Fish Monitoring: The following table presents fish monitoring data summarized over the past week. Unless otherwise noted, reported sizes are fork length.

Location	Chippis Is. Midwater Trawl ^A	Sacramento Trawl ^A	Beach Seines ^A	Knights Landing RST ^B	Tisdale RST ^C	GCID RST ^D	Mossdale Kodiak Trawl ^A
Sample Date	9/25, 9/27	9/25, 9/27, 9/29	9/25-9/26	9/24-10/1	9/25-10/1	9/26-10/2	9/26-9/27
Chinook				1			
FR Chinook							
SR Chinook							
WR Chinook				1	1	34 Juveniles	
LFR Chinook							
Ad-Clipped Chinook							
Steelhead (ad-clip)							
Steelhead (wild)							
Green Sturgeon							
Flows (avg. cfs)				8139	8212	1127	
W. Temp. (avg. °F)				61.7	62.2	58.6	
Turbidity (avg. NTU)				8.2	12.4	4.8	

^A Data reported in the 9/24-9/30 DJFMP sampling summary.

^B Knights Landing RST sampling period was from 9/24 at 10:15 am to 10/1 at 9:15 am.

^C Tisdale RST sampling period was from 9/25 at 8:00 am to 10/1 at 11:00 am.

Red Bluff Diversion Dam (RBDD)

USFWS biweekly report (9/10-23/17) for preliminary estimates of passage by brood-year and run for unmarked juvenile Chinook salmon captured by rotary screw traps at RBDD included:

Run and Species	Biweekly Total	Brood Year Total (90% CI)
Winter-run Chinook (BY2017)	62,042	124,187 (92,042-156,332)

Agenda Item 7.

DOSS Estimates of Fish Distribution

DOSS estimates of the current distribution of listed Chinook and steelhead, as a percentage of the population, are based on recent monitoring data and historical migration timing patterns. Since sampling began on 8/24/17, through 10/1/17, 4 WR-sized Chinook and 4 older juveniles have been caught at the Knights Landing RST. Since sampling began on 8/15/17, through 9/29/17, 1 WR-sized Chinook has been caught at the Tisdale RST.

Location	Yet to Enter Delta (Upstream of Knights Landing)	In the Delta	Exited the Delta (Past Chipps Island)
<i>Young-of-year (YOY) winter-run Chinook salmon</i>	98-100%	0-2%	0%

Rationale for distribution

Wild winter-run Chinook: Over the past week, 1 wild winter-run was observed at Knights Landing, 1 at Tisdale, and 34 at GCID, indicating that most winter-run are still upstream of the Delta. This is consistent with past years. Migration of juvenile wild winter-run Chinook salmon past RBDD is not expected to peak until mid-October, and they are not expected to begin migration into the Delta until several weeks later (late November through December) when precipitation events and flow increases stimulate movement. During this interim period, juvenile wild winter-run are expected to be rearing in the Sacramento River upstream of the Delta.

Agenda Item 8.

DOSS Advice to WOMT and NMFS: None

Agenda Item 9.

Check-in on DOSS Annual Report

The group was informed the draft DOSS Annual Report will be distributed soon.

Agenda Item 10.

Next Meeting: The next DOSS conference call will be on **10/10/17 at 9am.**