

**Delta Operations for Salmonids and Sturgeon (DOSS) Group**  
**Conference call: 10/18/2016 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](http://www.westcoast.fisheries.noaa.gov/central_valley/water_operations/doss.html).

**CDFW:** Duane Linander, Ken Kundargi, Bob Fujimura  
**DWR:** Bryant Giorgi, Kevin Reece, Tracy Pettit, Mike Ford  
**NMFS:** Barbara Byrne, Kristin McCleery  
**Reclamation:** Towns Burgess, Tom Patton  
**SWRCB:** Chris Kwan  
**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/djfmj](http://www.baydeltalive.com/djfmj))
3. Current Operations
4. Fish Monitoring: Salvage
5. Fish Monitoring: RSTs/trawls/seines
6. DOSS Estimates of Fish Distribution
7. DOSS advice
8. 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)<sup>1</sup>:**

- Recent (10/11/16-10/17/16, unless otherwise noted) conditions for:
  - Wilkins Slough flow: 5,327-5,930 cfs (range of mean daily flow)
  - Knights Landing temperature: 63-64°F (range of temperatures reported at the rotary screw traps during trap checks during the 10/11-10/16 period)
  - Mill Creek and Deer Creek flows [highlighted cells exceed the first component (95 cfs flow threshold) or second component (>50% flow change) in first alert]:

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<sup>1</sup> 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](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.

Date	Mill Creek (MLM)		Deer Creek (DCV)	
	mean daily flow (cfs)	change in mean daily flow	mean daily flow (cfs)	change in mean daily flow
10/11/2016	86	0%	77	-0.1%
10/12/2016	86	0%	77	-0.1%
10/13/2016	86	0%	78	0.4%
10/14/2016	182	112%	117	50.8%
10/15/2016	163	-10%	151	29.5%
10/16/2016	179	10%	145	-4.4%
10/17/2016	198	11%	136	-6.3%

- The first alert (triggered if either component is met) was triggered based on Mill Creek and Deer Creek flows >95 cfs (either or both creeks; see table above for details) on 10/14/16 through 10/17/16, and by an increase in flow of over 50% on 10/14/16.
- The second alert (triggered only if both components are met) has not been triggered since the start of the water year on 10/1/16.

**Action IV.1.2<sup>2</sup> (DCC gate operations):**

- Since 10/1/16, none of the criteria requiring DCC gate closure have been met.

DOSS reviewed the fish catch and water quality thresholds in the DCC operations table in Action IV.1.2 and it was clarified that the DCC operations flexibility granted in December 2015<sup>3</sup> was no longer in effect.

**Agenda Item 3.**

**Current Operations (10/18/16)**

SWP		CVP	
<b>Exports (cfs)</b>			
Clifton Court Forebay	2,000	Jones Pumping Plant	3,200
<b>Reservoir Releases (cfs)</b>			
Feather - Oroville	2,450	American - Nimbus	1,000
		Sacramento - Keswick	6,750
		Stanislaus - Goodwin	950*
		Trinity - Lewiston	300
<b>Reservoir Storage (in TAF)</b>			
San Luis (SWP)	412	San Luis (CVP)	94
Oroville	1,551	Shasta	2,709
New Melones	526	Folsom	310
<b>Delta Operations</b>			

<sup>2</sup> 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](http://www.westcoast.fisheries.noaa.gov/publications/Central_Valley/Water%20Operations/Operations,%20Criteria%20and%20Plan/040711_ocap_opinion_2011_amendments.pdf)

<sup>3</sup> The 12/2/15 request from Reclamation and the 12/4/15 response from NMFS are posted under “Biological Opinion Actions” at: [http://www.westcoast.fisheries.noaa.gov/central\\_valley/water\\_operations/](http://www.westcoast.fisheries.noaa.gov/central_valley/water_operations/)

DCC	Open	Sacramento River at Freeport (cfs)	12,180
Outflow Index (cfs)	17,000	San Joaquin River at Vernalis (cfs)	1,449
E:I	44.6% (3-day avg.)	X2	>81 km

\*Flow will decrease and increase during the second pulse next week.

Factor controlling Delta exports:

**10/1/16-10/18/16:** Seasonal salinity management

**Agenda Item 4.**

**Fish Monitoring: Salvage**

No species of management concern have been salvaged.

**Agenda Item 5.**

**Fish Monitoring:** The following table presents fish monitoring data summarized over the identified sampling dates. Unless otherwise noted, reported sizes are fork length.

Location	Chippis Is. Midwater Trawl <sup>A</sup>	Sacramento Trawl <sup>A</sup>	Beach Seines <sup>A</sup>	Knights Landing RST <sup>B</sup>	Tisdale RST <sup>C</sup>	GCID RST	Mossdale Kodiak Trawl <sup>A</sup>
Sample Date	10/11-10/15	10/11-10/15	10/11-10/14	10/9-10/16	10/6-10/16	10/10-10/16	10/11-10/14
Total Catch							
FR Chinook						8 smolts	
WR Chinook				3	7	75 juveniles	
SR Chinook							
LFR Chinook						4 juveniles 1 smolt	
Ad-Clipped Chinook							
Delta Smelt							
Splittail			1				
Longfin Smelt							
Steelhead (ad-clip)							
Steelhead (wild)							
Green Sturgeon							
Flows (avg. cfs)				5593	5974	1032	

<b>W. Temp. (avg. °F)</b>				63	60	59	
<b>Turbidity (avg. NTU)</b>				6.33	14.2	11.8	

<sup>A</sup>Data reported in the 10/9 to 10/15 DJFMP sampling summary.

<sup>B</sup>Knights Landing RST Sampling period was from 10/9 at 9:15 am to 10/16 at 10:30 am.

<sup>C</sup>Tisdale RST sampling period was from 10/6 at 10:15 am to 10/16 at 9 am.

<sup>D</sup>GCID RST sampling period was from 10/10 at 8:00 am to 10/16 at 12 am. From 10/14 to 10/16 4-hr sampling periods occurred due to increased flow and heavy debris. Due to excessive debris sampling was suspended on 10/16 and will resume when debris becomes manageable.

### **Agenda Item 6.**

#### **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.

<b>Location</b>	<b>Yet to Enter Delta (Upstream of Knights Landing)</b>	<b>In the Delta</b>	<b>Exited the Delta (Past Chippis Island)</b>
<i>Wild young-of-year (YOY) winter-run Chinook salmon</i>	96-99% (Last week: 97-100%)	1% - 4% (Last week: 0-3%)	0% (Last week: same)

#### **Rationale for changes in distribution**

**Wild winter-run Chinook:** Over the past week, 75 wild winter-run were observed at GCID, indicating that winter-run are moving downstream towards the Delta. Three wild winter-run were observed at the Knights Landing RST and 7 at Tisdale, which DOSS interpreted as indication that another incremental fraction of the winter-run population moved into the Delta. Winter-run are not expected to exit the Delta at Chipps Island until later in the season, and no young-of-year winter-run-sized fish have been observed exiting the Delta at Chipps Island.

### **Agenda Item 7.**

**DOSS Advice to WOMT and NMFS:** None

### **Agenda Item 8.**

**Next Meeting:** The next DOSS conference call will be on **10/25/16 at 9am.**