

Delta Operations for Salmonids and Sturgeon (DOSS) Group
Conference call: 10/11/2016 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.

CDFW: Duane Linander, Ken Kundargi, Mike Eakin

DWR: Bryant Giorgi, Kevin Reece, Dan Yamanaka, Tracy Pettit

NMFS: Barbara Byrne, Kristin McCleery

Reclamation: Towns Burgess, Tom Patton

SWRCB: Chris Carr, Chris Kwan, Brittany Kammerer

USFWS: Matt Dekar, Craig Anderson

Agenda Items

1. Agenda review and introductions
2. Presentation on Delta Smelt monitoring program
3. RPA Implementation review (For the DOSS Dashboard, click on the "Triggers & Indices" tab at: www.baydeltalive.com/djfmfp)
4. Current Operations
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.

Presentation on Delta Smelt Monitoring Program

Matt Dekar (USFWS) provided an overview of the proposed "Proportional Entrainment Monitoring" for Delta smelt to the group.

This monitoring program aims to collect data that will yield estimates of abundance, survival, and proportional entrainment of Delta smelt with greater precision and less selection bias than estimates based on catches from existing surveys. The proposed high-frequency sampling is stratified by regions that, based on differences in hydrodynamics, differ in Delta Smelt density and risk of entrainment. USFWS will employ a stratified sampling design that includes multiple crews trawling concurrently at multiple sites in pre-defined density strata within the low- and/or high-risk zones of entrainment in the San Francisco Estuary. At a minimum, USFWS will sample each site with two tows. Employing a stopping rule, towing will cease if at least one Delta Smelt is captured in the cumulative total of the first two tows. Stopping rules may be developed for listed salmonids to minimize take. In general, the catch data (smelt and salmonids) will be available in near real time to partners, including the DOSS group as part of its risk assessment processes.

DOSS requested that salmonid catch data from this monitoring effort (which may start circa November 2016) be provided in a way that summarizes catch by subregion.

Agenda Item 3.

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 (10/4-10/2016, unless otherwise noted) conditions for:
 - Wilkins Slough flow: 5,784-6,688 cfs (range of mean daily flow)
 - Knights Landing temperature: 61-63°F (range of temperatures reported at the rotary screw traps during trap checks during the 10/4-10/16 period)
 - Mill Creek flow : 86-94 cfs (range of mean daily flow)
 - Deer Creek flow: 77-85 cfs (range of mean daily flow)

Action IV.1.2² (DCC gate operations):

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

Agenda Item 4.

Current Operations (10/11/16)

SWP		CVP	
Exports (cfs)			
Clifton Court Forebay	2,000	Jones Pumping Plant	4,200*
Reservoir Releases (cfs)			
Feather - Oroville	4,000	American - Nimbus	1,000
		Sacramento - Keswick	7,000
		Stanislaus - Goodwin	202
		Trinity - Lewiston	450
Reservoir Storage (in TAF)			
San Luis (SWP)	433	San Luis (CVP)	86
Oroville	1,575	Shasta	2,739
New Melones	528	Folsom	296

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.

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

Delta Operations			
DCC	Open	Sacramento River at Freeport (cfs)	11,431
Outflow Index (cfs)	4,300	San Joaquin River at Vernalis (cfs)	467
E:I	52.9% (3-day avg.)	X2	>81 km

*Decreasing to 3,000 cfs on Thursday, 10/13/16

Factor controlling Delta exports:

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

Agenda Item 5.

Fish Monitoring: Salvage

No species of management concern have been salvaged.

Agenda Item 6.

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 ^A	Sacramento Trawl ^A	Beach Seines ^A	Knights Landing RST ^B	Tisdale RST ^C	GCID RST	Mossdale Kodiak Trawl ^A
Sample Date	10/3-10/7	10/3-10/7	10/3-10/7	10/3-10/9	10/3-10/6	9/26-10/4	10/4-10/7
Total Catch							
FR Chinook						11 smolts	
WR Chinook			2	5	1	109 juveniles	
SR Chinook							
LFR Chinook							
Ad-Clipped Chinook							
Adult Chinook	3						
Delta Smelt							
Splittail							
Longfin Smelt	1						
Steelhead (ad-clip)							
Steelhead (wild)							
Green Sturgeon							

Flows (avg. cfs)				6298	6660	1002	
W. Temp. (avg. °F)				61.8	59	57.6	
Turbidity (avg. NTU)				6.9	13.1	8.2	

^ADue to the federal holiday on Monday, data were received from USFWS after the DOSS call.

^BKnights Landing RST sampling period was from 10/3 at 11:45 am to 10/9 at 9:15am.

^CTisdale RST sampling period was from 10/3 at 10:00 am to 10/6 at 10:15am.

^DGCID RST sampling period was from 10/3 at 1:00 pm to 10/10 at 9:00am. On 10/8/16 at 9:00 am, the cone was lowered to begin 24-hr sampling intervals.

Red Bluff Diversion Dam (RBDD)

USFWS biweekly report (9/23/16-10/6/16) 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 (BY2016)	110,633	275,350 (211,845-338,856)

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.

Location	Yet to Enter Delta (Upstream of Knights Landing)	In the Delta	Exited the Delta (Past Chippis Island)
<i>Wild young-of-year (YOY) winter-run Chinook salmon</i>	97-100% (last week: 98-100%)	0% - 3% (last week: 0-2%)	0% (last week: same)

Rationale for changes in distribution

Wild winter-run Chinook: Over the past week, 109 wild winter-run were observed at GCID, indicating that winter-run are moving downstream towards the Delta. Two winter-run were observed in the beach seines, and 5 at the Knights Landing RST, 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 Chippis Island until later in the season, and no young-of-year winter-run-sized fish have been observed exiting the Delta at Chippis Island.

Agenda Item 8.

DOSS Advice to WOMT and NMFS: None

Agenda Item 9.

Check-in on DOSS Annual Report

The final WY 2016 DOSS Annual Report is posted at:

http://www.westcoast.fisheries.noaa.gov/central_valley/water_operations/doss.html

Agenda Item 10.

Next Meeting: The next DOSS conference call will be on **10/18/16 at 9am.**