Delta Operations for Salmonids and Sturgeon (DOSS) Group
Conference call: 1/10/12 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 coordinate the work of other technical teams. DOSS notes and advice can be found at: http://www.swr.noaa.gov/ocap/doss.htm

DWR: Mike Ford, Edmund Yu, Kevin Reece, Andy Chu, James Gleim, Dan Yamanaka
FWS: Roger Guinee, Craig Anderson
NMFS: Barbara Rocco, Bruce Oppenheim, Barb Byrne, Jeff Stuart, Garwin Yip
Reclamation: Russ Yaworsky, Josh Israel
DFG: Bob Fujimura, Robert Vincik
EPA, **SWRCB:** not present

Agenda
1. Fish monitoring
2. Current operations
3. Annual review comments
4. Preliminary JPE

Action Item [11/15/11]
Evaluate the data from Mill and Deer Creek RSTs, Tisdale, and Knights Landing RSTs and compare the timing of spring-run Chinook salmon migration captured by each data set. **Carry until we get Mill and Deer Creek data overview from DFG**.

Action Item [1/3/12]: Review the DOSS section of the annual review report and provide comments regarding implementation of suggestions. **Carry**

Fish Monitoring: The following table presents fish monitoring data 1/3/12 through 1/9/12. Unless otherwise noted, reported sizes are fork length. See: http://www.water.ca.gov/swp/operationscontrol/calfed/calfedmonitoring.cfm.

Location	Chipps Is. Midwater Trawl	Sacramento Kodiak Trawl	Mossdale Kodiak Trawl	Beach Seines	Knights Landing RST	Tisdale Weir RST
Sample Date	1/3, 5, 6	1/3, 5, 6	1/3, 4, 6	1/4–1/5/12	1/4, 6, 9	1/4, 6, 9
Total Catch	**69**	**1**	**0**	**23**	**5**	**7**
FR		1		15		2
WR				1 (Elkhorn on 1/4/12)	2	2
SR				7		
LFR					2	

Ad-Clipped Chinook	2				1	3
DS	55					
Splittail	1					
Longfin	11					
SH (ad-clip)						
SH (wild)						
W. Temp. (avg. °F)	48.7	48.4	49.1	48.2	49.3	48.0
Flows (avg. cfs)					4900.5	5143
Turbidity (avg. NTU)					17.1	11.2
WR/LFR Avg. CPUE					0.33	0.11
FR/SR Avg. CPUE					0	0.14

Key: FR = Fall run; LFR = Late-fall run; SR = Spring run; WR = Winter run; SH = Steelhead; DS = Delta smelt; LFS = Longfin smelt; SPTL = Splittail, CPUE = catch per unit of effort, ACT = acoustical tag

Generally, flows continue to drop at all monitoring locations; water temperatures are a bit higher at Knights Landing. We should begin to see more ad-clipped fish soon because of the Coleman National Fish Hatchery late-fall-run production and surrogate releases on 12/16, 12/23, and 1/3. The second spring-run surrogate release of 80,000 late-fall-run Chinook is scheduled for Friday, 1/13/12 at Battle Creek; those fish are expected to show up at Tisdale and Knights Landing within the next week or two. The delta smelt take in the Chipps Island Trawl has been high enough recently that FWS (Stockton Office) is considering a reduction in sampling effort throughout the year in order to avoid exceeding the delta smelt take limit. FWS would like information from DOSS on the most important periods for Chipps Island sampling for salmonids and any thoughts about the relative benefits of more intense vs. more frequent sampling during those key periods. For example, should FWS sample the usual 3 days/week through winter and spring and reduce sampling frequency in the summer? During any period of reduced sampling, should FWS reduce the number of trawls per day or the number of sampling days per week? FWS would like feedback by Thursday, 1/12/12.

DOSS' advice to FWS is that they reduce the number of sampling days per week and keep the number of trawls/day the same for consistency with past data. NMFS will review recent Chipps Island data to assess the timing of salmonids in the trawls.

Action Item: Byrne (NMFS) will send this information to the group.

Fish Salvage Data (1/3/12–1/8/12)
Historically, juvenile salmon start showing up at the fish salvage facilities during this time of year; however, with the dry conditions, very few are being seen right now.

Chinook salmon: One non-clipped late-fall-run Chinook was salvaged at the CVP (weekly expanded salvage = 4), but not at the SWP. No other runs of Chinook salmon have been

salvaged at either facility this water year (10/01/2011 to present). The seasonal salvage totals of all races of Chinook salmon at the CVP are zero adipose clipped (loss = 0) and 19 non-clipped (loss = 13). No Chinook salmon have been salvaged at the SWP since the current water year began on October 1, 2011.

This report is also posted at: ftp://ftp.delta.dfg.ca.gov/salvage and you can locate the table under folder "DOSS salvage tables" (you can also try http://www.dfg.ca.gov/delta/apps/salvage/Default.aspx and click on "salvage FTP site").

Steelhead: One steelhead (non-clipped; 230 mm) was salvaged at the SWP (weekly expanded salvage = 4), but not at the CVP. The seasonal salvage totals of steelhead at the SWP are zero clipped and 8 non-clipped. No steelhead have been salvaged at the CVP this water year.

Delta smelt: No delta smelt have been salvaged at either facility this water year.

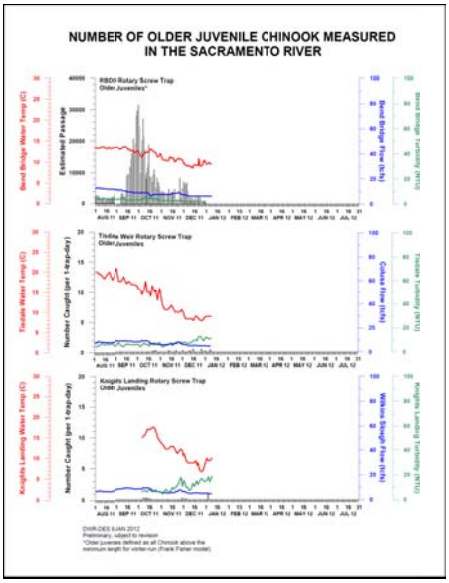
Longfin smelt: No longfin smelt have been salvaged at either facility this water year.

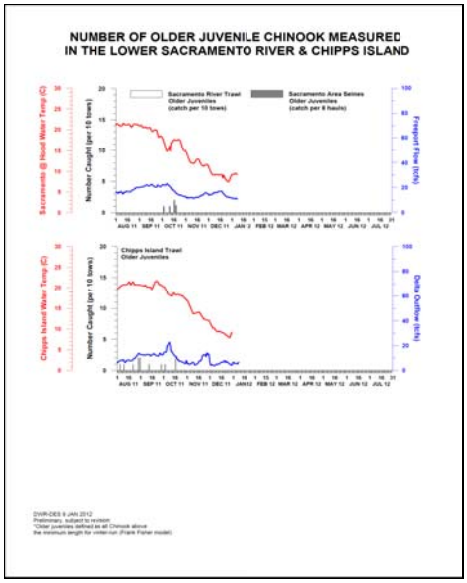
Splittail: Splittail were salvaged at the SWP (weekly expanded salvage = 20), but not at the CVP. The seasonal salvage total of splittail at the CVP is 178; the water-year salvage total of splittail at the SWP is 3,727.

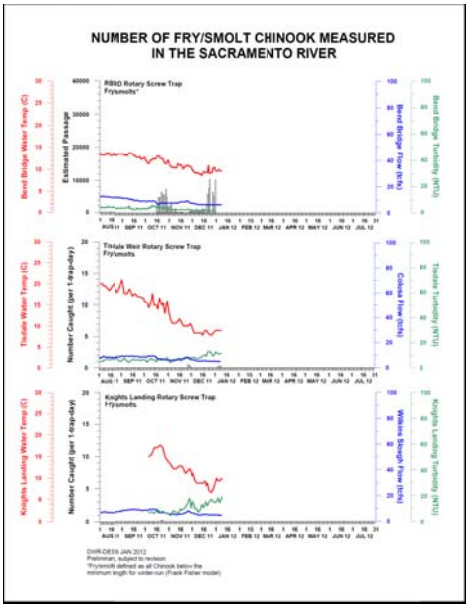
White sturgeon: No white sturgeon were salvaged at either facility. The salvage total of white sturgeon at the CVP this water year is 60; no white sturgeon have been salvaged at the SWP.

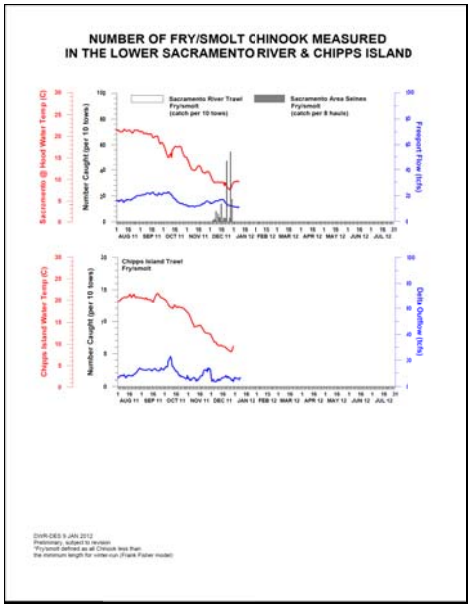
Green sturgeon: No green sturgeon have been salvaged at either facility this water year.

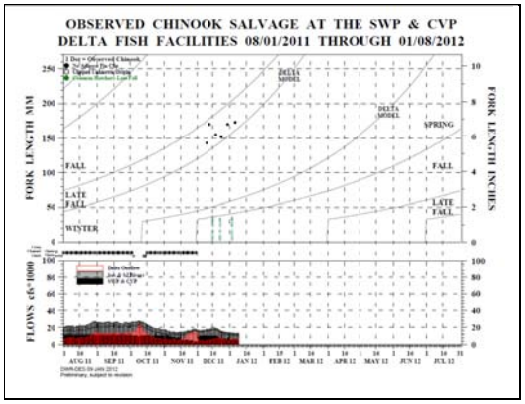
Below are the graphs prepared by DWR (Llaban) for the capture of older juvenile salmon in the Sacramento River and Chipps Island trawls. Also included are graphs of the number of fry/smolts measured at all locations.











Operations (1/10/12)

SWP		CVP	
Exports (cfs)			
Clifton Court Forebay	3,500	Jones Pumping Plant	1,900 (to meet system demands)
Reservoir Releases (cfs)			
Feather - Oroville	1,750	American - Nimbus	1,750 (We might reduce to 1700 depending on sac river index)
		Sacramento - Keswick	4,800 (cutting 100 cfs/day; target 4500 by Friday. With dry conditions, might have add'l cuts below 4,500)
		Stanislaus - Goodwin	600
Reservoir Storage (in TAF, % of capacity)			
San Luis ((SWP)	980	San Luis (CVP)	969 (full)
Oroville	2,518	Shasta	3,061
		Folsom	404
		New Melones	

Delta Operations			
DCC	Closed (since 12/1/11)	Sacramento River at Freeport (cfs)	11,043
Outflow Index (cfs)	6,500	San Joaquin River (cfs) at Vernalis	1,728
Total Delta Inflow (cfs)	13,374	OMR (daily) (CDEC) (cfs)	-4,400
Water Temperature (°F)		OMR 5 day (CDEC) (cfs)	-4,962
X2 (km)	>81	OMR 14 day (CDEC) (cfs)	Begin on 1/15/12
E/I (%)	40.8		

Delta Conditions: Balanced

Weather Forecast: Still dry; weather pattern might change around January 19 or 20 but nothing for sure.

Independent Review Panel Recommendations: There are questions from DOSS to the panel on pages 25–27 of the independent review panel report with their recommendations immediately following each question. DOSS was asked to review each question and subsequent recommendations and present its suggestions for response to be included in the response letter that the Federal agencies (i.e., NMFS, Reclamation, FWS) will send back to the review panel.

Some of the recommendations were discussed during this call; however, there was no consensus on what to report back to the panel at this point. DOSS needs to provide feedback within the next month and respond with specific comments about what would and would not be implemented and why. For example, can we implement any or all of the three question responses? NMFS is hoping that each technical group will take a look at each of these recommendations and pass comments along to the three agencies for them to present a more detailed response.

Israel (Reclamation) can comment on the planned acoustic telemetry studies. The NMFS SWR Science Center has an acoustic telemetry study and could help us if they are aware of the panel's recommendation because they are collecting data already.

Are there real-time observations DOSS can make of fish released at certain times that are more or as effective for RPA actions such as OMR criteria? We are headed in the right direction for proposed acoustic studies in the Delta this year. We have a good start on implementing the recommendations.

Israel, Oppenheim (NMFS), and Stuart (NMFS) volunteered to be a DOSS subgroup to discuss the recommendations and suggestions. The DOSS subgroup should report out next week on progress and status so that Garwin Yip (NMFS) can coordinate with his counterparts at the other two agencies to come up with their responses as well.

It was suggested that some of the references cited in the panel's report be available to the group. Anyone wanting any references should contact Garwin (NMFS) with a list and he will get the documents.

JPE: NMFS is awaiting the final notes from the Winter-run Project Work Team (PWT) before issuing an official letter to Reclamation with a final JPE and JPE-based incidental take limit for the projects. Using the preliminary JPE, the 2% incidental take limit of natural winter-run for the projects is between 1,300 and 3,000 fish. An additional survival factor was added by the PWT to include the time (3 months) that winter-run Chinook are actually rearing in the Delta. Regardless of the changes made to the JPE this year, it is anticipated that the JPE-based density triggers in the NMFS BO for Old and Middle River flow management will most likely be less than the minimum 2.5 fish/TAF. The RPA set the minimum fish density trigger at 2.5 fish/TAF to avoid a trigger each time a single fish is salvaged. The first stage JPE-based trigger under RPA Action IV.2.3 for Old and Middle River flows is equal to 2% of JPE divided by 2,000, with a minimum of 2.5 fish/TAF. This action takes effect on January 1 of each year. Until the official letter identifying the JPE and JPE-based incidental take limit for the projects is issued, DOSS is advising that the projects use the minimum (2.5 fish/TAF) fish density trigger in RPA Action IV.2.3.

Action Item: Garwin Yip (NMFS) agreed to bring up the forecasted low incidental take limit at the five-agency meeting and the Implementing Management Team meeting to alert them of the low fish density trigger.

The PWT also used a model developed by Cramer Fish Science (CFS) to calculate the JPE. The CFS model uses very similar biological data; this year's JPE estimate falls within the confidence levels and standard errors of the CFS model. This year's JPE with the added in-delta survival factor matches up with the CFS model estimate for dry and critical year hydrology. Given that the inflows to Shasta Reservoir are 50% of average, it is a fairly accurate estimate right now. There are some concerns that the triggers in place won't be protective enough to avoid exceeding the take limit. The projects could potentially not trigger the minimum 2.5 fish/TAF level and still exceed the take limit.

DWR is currently tagging and releasing fish during high flow or the first storm event to track them through the Delta and Georgiana Slough. DOSS could get additional information about fish movement in the Central Valley if we had information about what tags were being used for various studies, and could get in-season information about the movement of tagged fish. Do we need to set up another subgroup to deal with this issue? Other suggestions from the group regarding making the most of current experiments included the need to develop tools for data analysis and management, and the potential benefits of putting more receivers in the Delta so that more information can be gathered from each release group of fish.

A joint stipulation will most likely be filed in Federal court in Fresno on 1/12/12 that will change the implementation of RPA Action IV.2.1 this year. A date for a technical workshop will be scheduled by the planning committee after the joint stipulation is filed. There would be a day-long discussion on acoustic telemetry as well.

Smelt Working Group (SWG): No meeting yesterday. If it stays dry, the SWG will most likely not meet.

DOSS advice to WOMT and NMFS: Implement the minimum 2.5 fish/TAF density trigger in Action IV.2.3 until we have a finalized JPE. Advise of projected low take limit for winter-run

this year and that the take limit could be reached or exceeded, even without meeting the density triggers.

Agenda items for next week: Update from DOSS subgroup on panel recommendations and check DOSS' responsibilities regarding the joint stipulation.

Next Meeting: January 17, 2012, at 9:00 a.m.