

**DRAFT Data Assessment Team (DAT) Conference Call Notes
04/14/2016 at 11:00 a.m.**

Participants: Norman Lee (DWR) RG Fernando and Owen Liu (MWD), Geir Aasen (DFW), and Melih Ozbilgin (SCVWD)

Sacramento River Fish Monitoring update provided by Rhiannon Mulligan (DWR):

Preliminary Rotary Screw Trap (RST) Report*				
Species*	FWS Red Bluff Diversion Dam RST (Estimated Passage)	Glenn-Colusa Irrigation District (GCID) RST (Catch)	DFW Tisdale Weir RST (Catch)	DFW Knights Landing RST (Catch)
Date	03/25/2016-04/07/2016	04/06/2016-04/09/2016**	04/07/2016-04/14/2016	04/07/2016-04/14/2016
CHNF	197,306	944	706	140
CHNLF	1,311			
CHNW	1,990	1		
CHNS	87,062	521	382	137
Ad-Clipped CHN	Not Reported	483	284	61
SH	199	1		
Ad-Clipped SH	Not Reported			1
GST	Not Reported		Not Reported	Not Reported

*Chinook race based on length (Frank Fisher model); CHNF=Fall run, CHNLF=Late-fall run, CHNW=Winter run, CHNS= Spring run, SH = Steelhead, GST= Green Sturgeon. Species are unmarked unless noted as adipose-fin clipped (ad-clipped). Data subject to revision.

*Data added after the meeting.

**GCID- sampling for 4/8 and 4/9 during this reporting period. On 4/9 the cone was pulled to prevent mortalities from high number of hatchery released fish debris in the live box.

Graphical summaries of the monitoring data collected at the Sacramento River and at other locations can be found at <http://www.water.ca.gov/swp/operationscontrol/calfed/calfedmonitoring.cfm>. In addition, the biweekly passage reports of juvenile salmonids sampled at the Red Bluff Diversion Dam are available at http://www.fws.gov/redbluff/rbdd_biweekly.aspx.

Hatchery update: Provided by Rhiannon Mulligan after the DAT call (DWR)

On April 12, 2015 the U.S. Fish and Wildlife Service will release approximately 2,436,000 brood year 2015 fall Chinook salmon from the Coleman National Fish Hatchery into Battle Creek. The release will include approximately 25% marked (adipose fin clip and CWT) and 75% unmarked fish.

Delta Fish Monitoring update provided by Jon Speegle via the DAT reflector (FWS):

Preliminary FWS Trawl and Seine Catch Report from 04/03/16 to 04/09/16				
Species*	Beach Seines	Mossdale Trawl*	Sacramento Trawl	Chippis Island Trawl
CHNF	129		26	
CHNLF	10			
CHNW				29
CHNS	4		36	154
Ad-Clipped CHN	2		13	80
SH				
Ad-Clipped SH			1	1
DSM				
LFS				
SPLT	149			1

*Chinook race based on length (Frank Fisher model); CHNF=Fall run, CHNLF=Late-fall run, CHNW=Winter run, CHNS= Spring run, SH = Steelhead, DSM=Delta Smelt, LFS=Longfin Smelt, SPLT = Splittail. Species are unmarked unless noted as adipose-fin clipped (ad-clipped). Data subject to revision.

*No data yet received from CDFW (region 4)

Note: Early warning survey trawls are not being conducted at this time and Mossdale trawls have been taken over by CDFW for the months of April, May and June.

Information about the Delta fish monitoring data from FWS can be found at <http://www.fws.gov/stockton/jfmp/>.

Salvage Monitoring update provided by Geir Aasen (DFW):

Preliminary DFW Salvage Report for Salmonids from 04/04/16 to 04/10/16								
Species	Central Valley Project (CVP)				State Water Project (SWP)			
	Adipose-Fin Clipped (Ad-Clipped)		Non-Adipose Fin Clipped (Non-Clipped)		Adipose-Fin Clipped (Ad-Clipped)		Non-Adipose Fin Clipped (Non-Clipped)	
	Salvage	Loss	Salvage	Loss	Salvage	Loss	Salvage	Loss
CHNF								
Total to Date	4	3	72	50	1	4	10	43
CHNLF								
Total to Date	32	26	8	7	61	272	36	159
CHNW								
Total to Date	90	70	28	21	123	558	8	35
CHNS	12	9						
Total to Date	616	413	52	33	34	147	18	77
CHNU								
Total to Date								
SH			4		2			
Total to Date	573.7		60		706		52	

-Chinook race based on length (Delta model); CHNF=Fall run, CHNLF=Late-fall run, CHNW=Winter run, CHNS=Spring run, CHNU= Unknown race (Chinook greater than the length-at-date criteria or fork length not measured), SH =Steelhead.
 -Salvage and loss estimates are rounded to the nearest whole fish.
 -Documentation on how to calculate salvage and Chinook loss can be found at <ftp://ftp.delta.dfg.ca.gov/salvage/Salmon%20Loss%20Estimation/>.
 -Steelhead loss: SWP steelhead loss = salvage x 4.33 and CVP steelhead loss = salvage x 0.68.
 -Total to date is the total since 10/1/15 (the start of water year 2015).
 -Data subject to revision.

Preliminary DFW Salvage Report for Smelt and Other Species from 04/04/16 to 04/10/16				
Species	CVP		SWP	
	Salvage	Total to Date	Salvage	Total to Date
DSM		8		4
LFS		8		2
SPLT	13	89	2	247
GST		4		
WST				

-DSM=Delta Smelt, LFS=Longfin Smelt, SPLT=Splittail, GST=Green Sturgeon, WST=White Sturgeon.
 -Salvage estimates are rounded to the nearest whole fish.
 -Total to date is the total since 10/1/15 (the start of water year 2015).
 -Data subject to revision.

Smelt Monitoring Update provided by Lauren Damon via the DAT reflector (DFW):

Table 1. Spring Kodiak Trawl Delta Smelt catch for Survey 4, 2016.

Station	# of delta smelt	Range of FL (mm)	# of pre-spawn females	# of ripe females	# of spent females	# of fail-to-spawn females	# of pre-spawn males	# of ripe males	# of spent males	Sex undetermined	Larvae/ Juveniles	
340	0											
405	0											
411	0											
418	0											
501	0											
504	0											
519	0											
602	0											
606	0											
609	0											
610	0											
508	0											
513	0											
520	0											
801	0											
804	0											
704	0											
706	0											
707	0											
711	0											
712	0											
713	0											
715	0											
716	0											
719	13	66-78		2	10				1			
724	0											
809	0											
812	0											
815	0											
902	0											
906	0											
910	0											
912	0											
914	0											
915	0											
919	0											
920	0											
921	0											
922	0											
923	0											
Total:	13											

Table 1. Delta smelt catch per station from 2016 20-mm Survey, Survey 2.
(These data are preliminary and subject to change)

Year	Survey	Station	Date	# Tows Processed	Species	Total Catch	Min Length	Max Length	Avg Length	
2016	2	323	30-Mar-16	3	No Delta Smelt Catch	0				Suisun Bay & West
2016	2	340		0	Not Yet Processed	0				
2016	2	342		0	Not Yet Processed	0				
2016	2	343		0	Not Yet Processed	0				
2016	2	344		0	Not Yet Processed	0				
2016	2	345		0	Not Yet Processed	0				
2016	2	346		0	Not Yet Processed	0				
2016	2	405	31-Mar-16	3	No Delta Smelt Catch	0				
2016	2	411	29-Mar-16	3	No Delta Smelt Catch	0				
2016	2	418	31-Mar-16	3	No Delta Smelt Catch	0				
2016	2	501	29-Mar-16	3	No Delta Smelt Catch	0				
2016	2	504	29-Mar-16	3	No Delta Smelt Catch	0				
2016	2	519	29-Mar-16	3	No Delta Smelt Catch	0				
2016	2	602	31-Mar-16	3	No Delta Smelt Catch	0				
2016	2	606	31-Mar-16	3	No Delta Smelt Catch	0				
2016	2	609	31-Mar-16	3	No Delta Smelt Catch	0				
2016	2	610	31-Mar-16	3	No Delta Smelt Catch	0				
2016	2	508	29-Mar-16	3	No Delta Smelt Catch	0			Confluence	
2016	2	513	28-Mar-16	3	No Delta Smelt Catch	0				
2016	2	520	29-Mar-16	3	No Delta Smelt Catch	0				
2016	2	801	28-Mar-16	3	No Delta Smelt Catch	0				
2016	2	804	29-Mar-16	3	No Delta Smelt Catch	0				
2016	2	703	29-Mar-16	3	No Delta Smelt Catch	0			Sac. River System	
2016	2	704	28-Mar-16	3	No Delta Smelt Catch	0				
2016	2	705	28-Mar-16	3	No Delta Smelt Catch	0				
2016	2	706	28-Mar-16	3	Delta Smelt	1	13	13		13
2016	2	707	28-Mar-16	3	No Delta Smelt Catch	0				
2016	2	711	28-Mar-16	3	No Delta Smelt Catch	0				
2016	2	716	30-Mar-16	3	No Delta Smelt Catch	0				
2016	2	718	30-Mar-16	3	No Delta Smelt Catch	0				
2016	2	719	30-Mar-16	3	Delta Smelt	2	13	22		17.5
2016	2	720	30-Mar-16	3	No Delta Smelt Catch	0				
2016	2	723	30-Mar-16	3	Delta Smelt	1	14	14	14	
2016	2	724	30-Mar-16	1	Delta Smelt	1	12	12	12	
2016	2	726	30-Mar-16	3	No Delta Smelt Catch	0				
2016	2	809	29-Mar-16	3	No Delta Smelt Catch	0			Central & South Delta	
2016	2	812	29-Mar-16	3	No Delta Smelt Catch	0				
2016	2	815	29-Mar-16	3	No Delta Smelt Catch	0				
2016	2	901	28-Mar-16	3	No Delta Smelt Catch	0				
2016	2	902	28-Mar-16	3	No Delta Smelt Catch	0				
2016	2	906	29-Mar-16	3	No Delta Smelt Catch	0				
2016	2	910	28-Mar-16	2	No Delta Smelt Catch	0				
2016	2	912	28-Mar-16	3	No Delta Smelt Catch	0				
2016	2	914	28-Mar-16	3	No Delta Smelt Catch	0				
2016	2	915	28-Mar-16	3	No Delta Smelt Catch	0				
2016	2	918	28-Mar-16	3	No Delta Smelt Catch	0				
2016	2	919	29-Mar-16	3	No Delta Smelt Catch	0				

Processing is complete through 4/8/2016

<https://www.wildlife.ca.gov/Conservation/Delta/>

Smelt Working Group update provided by Leigh Bartoo via the DAT reflector (FWS):

The Working Group agreed that given present distribution, current salvage, and Delta conditions, there was no indication that the projected combined exports of approximately 1500 cfs for the week (potentially resulting in daily average OMR flows of approximately -1800 cfs) need to be modified for the protection of Delta Smelt adults and larvae.

This entrainment risk assessment would change should exports levels increase from what was reported for the week (1500 cfs resulting in -1800 cfs OMR).

The Working Group is following guidance for entrainment protections from both Action 2 (adult Delta Smelt) and Action 3 (juvenile Delta Smelt). The Working Group will continue to monitor Delta Smelt survey and salvage data and Delta conditions, and will meet again on Monday, April 18, 2016 at 10 am. http://www.fws.gov/sfbaydelta/cvp-swp/smelt_working_group.cfm.

Delta Operations for Salmonids and Sturgeon (DOSS) Working Group Update provided by Jeff Stuart via the DAT reflector (NMFS)

New since Tuesday's call:

- An increase in the number of spring-run and fall-run sized wild fish in the Knights Landing, and Tisdale RSTs over last 3 days– most likely due to “large” FRCS in the CNFH releases on 4/7 and 4/8. Approximately 5.6 million fish were released last week. Average size of release group slightly less than minimum size of SRCS by size at date. Seeing a concurrent increase in clipped fish along with the unclipped fish.
 - Knights landing: 68 FRCS, 81 SRCS, 37 cICS
 - Tisdale: 609 FRCS, 330 SRCS, 246 cICS
- Only 1 new salvaged Chinook (1 unclipped SRCS sized fish @ CVP) since 4/10/16.
- 2 wild steelhead and 2 Clipped Steelhead since 4/10/16; both at the CVP.

DOSS update (4/12/16):

- DOSS met Tuesday morning, (4/12/16) and provided no advice.
- DOSS notes are posted at:http://www.westcoast.fisheries.noaa.gov/central_valley/water_operations/ocapwy2016.html

RPA Implementation

- IV.1.2 (DCC ops): DCC gates have been closed since 12/15/15
- IV.2.3 (OMR management):
 - No triggers exceeded over past week
 - OMR limit of -5,000 cfs is in effect for NMFS' species
- IV.2.1 San Joaquin River I:E ratio: Started 4/1/16. Currently 2:1 ratio of Vernalis flows to exports (per Dry water year classification) with a minimum of 1,500 cfs exports for human health and safety.

Factors controlling exports:

- As of 4/1/16, the exports are limited by NMFS' RPA IV.2.1; the SJR I:E ratio.
- FWS' 3/25/16 determination to protect Delta smelt larvae is still in effect but is not controlling.

Fish Monitoring Highlights (as of 4/11/16)

- Seeing continued catch of fall-run and spring-run sized fish (unclipped) in all monitoring efforts in the Sacramento River and north Delta for the previous week's sampling, including 129 FRCS, 4 SRCS, and 10 LFRCS in the beach seines, 59 FRCS and 76 SRCS in the Knights Landing monitoring, 80 FRCS and 26 SRCS in the Tisdale RST, and 26 FRCS and 36 SRCS in the Sacramento Trawls. Most of these fish are likely from the Coleman National Fish Hatchery releases of production FRCS in mid-March and last week (a total of approximately 8 million fish released). Average size of fish released were close to the minimum size at date for SRCS
- Also uptick of clipped Chinook salmon catch as well; (fish may be from Coleman Hatchery release of FRCS production of nearly 8 million fish (25% clipped) over last month and SRCS from the Feather River Hatchery release (1 million fish – all clipped) on March 24, 2016.

Salvage (as of 4/11/16):

- No Salvage of wild CS for the week prior to 4/11, overall trend of wild fish salvage has decreased over the past week.
- Wild Steelhead were captured, but trend has decreased over past week.
- Still observing clipped SR Chinook salmon from the SJRRP releases (12 fish) at the facilities, mainly at the CVP. Trend is declining over the past week.
- Salvage of hatchery steelhead is declining over past week.

Fish Distribution Estimates (all distributions updated since last week)

- Estimate of young-of-year **winter-run Chinook** distribution: <1% upstream, 15-30% in the Delta, 70-85% exited the Delta
- Estimate of young-of-year **spring-run Chinook** distribution: <5% upstream, 20-30% in the Delta, 65-75 % exited the Delta
- Estimate of young-of-year **hatchery winter-run Chinook** distribution: <1% upstream, <10% in the Delta, >90% exited the Delta

Entrainment risks (primarily to Winter-run and Spring-run Chinook)

- Overall Entrainment into **Interior Delta: LOW** (last week same)
- Overall Entrainment into **CVP/SWP Export Facilities:**
- OMR -2,500 cfs to -3,500 cfs: **LOW** (last week same)
- OMR -3,500 cfs to -5,000 cfs: **LOW** (last week same)
 - Low to medium if steelhead start to be observed in the Mossdale trawls (last week same).

Full DOSS notes posted at:

http://www.westcoast.fisheries.noaa.gov/central_valley/water_operations/ocapwy2016.html

Operations update provided by Norman Lee (DWR)

SWP		CVP	
Feather River Releases	1050 cfs	Nimbus Releases on American River	3000 cfs
Clifton Court Pumping	520 cfs	Jones Pumping	1000 cfs
Delta Outflow	26900 cfs	Keswick on Sacramento River	5000 cfs
Delta Cross Channel Status	0.00%	Goodwin release	400 cfs
% Inflow diverted	6.4% (3-day avg)	San Luis Storage (CVP share)	395 TAF
	5.5% (14-day avg)		
X2 Position	= 63 km		
OMR Daily	-1,882 cfs		
OMR 5-day avg	-1,874 cfs		
OMR 14-day avg	-1,949 cfs		
San Luis Storage (SWP share)	632 TAF		
Total San Luis Storage	1028 TAF		

A summary of daily operations can also be viewed at <http://www.water.ca.gov/swp/operationscontrol/docs/delta/deltaops.pdf>.

Next Conference Call:

The next DAT call scheduled for April 21st, 2016 was cancelled due to the 9 Interagency Ecological program (IEP) Conference.

<http://www.water.ca.gov/swp/operationscontrol/calfed/calfeddat.cfm>