

**DRAFT Data Assessment Team (DAT) Conference Call Notes
05/07/2015 at 11:00 a.m.**

Participants: Geir Aasen (DFW), Rhiannon Mulligan, Loi Tran and Farida Islam (DWR) ,RG Fernando (MWD)

Sacramento River Fish Monitoring

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_jsmp.html

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	4/23/2015-5/06/2015	5/5/2015	4/25/2015-5/06/2015	4/30/2015-5/05/2015
CHNF	156,025	113	12	8
CHNLF	925	1		
CHNW	624	0		
CHNS	27,242	16	3	5
Ad-Clipped CHN	Not Reported			
SH	2,584	0	0	
Ad-Clipped SH	Not Reported		5	
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.				

Josh Gruber(FWS) also reported that as of 5/6/15, 280 larval sturgeon have been sampled at RBDD since their first occurrence on 4/15/15.

GCID trap has been resumed since 5/5/15.

The water temperature at Tisdale and Knights landing are rising slowly.

Delta Fish Monitoring

Preliminary FWS Trawl and Seine Catch Report from 04/26/2015-05/02/2015				
Species*	Beach Seines	Mossdale Trawl*	Sacramento Trawl	Chippis Island Trawl
CHNF	4		9	59
CHNLF				
CHNW				
CHNS			7	72
Ad-Clipped CHN			1	39
SH				
Ad-Clipped SH				
DSM				
LFS				
SPLT	4			2

*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.

* Mossdale Trawls (CDFW), 5 RBTC (acoustic tagged) & no other species of management concern

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

Salvage Monitoring

Preliminary DFW Salvage Report for Salmonids from 04/27/2015-05/03/2015								
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			12	9	41	180	4	17
CHNLF								
Total to Date	72	55			64	285	6	26
CHNW								
Total to Date	16	11	36	31	46	203	17	75
CHNS	4	3	4	3			4	20
Total to Date	8	7	38.5	32			6	30
CHNU								
Total to Date								
SH	4						4	
Total to Date	116		4		407		35	

Notes:

- 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 10/1/13 (the start of water year 2014).
- Data subject to revision.

Preliminary DFW Salvage Report for Smelt and Other Species from 04/27/2015-05/03/2015				
Species	CVP		SWP	
	Salvage	Total to Date	Salvage	Total to Date
DSM		64		4
LFS	4	24	48	68
SPLT		12		637
GST				
WST				

Notes:

- at CVP on 5/4 there was a salvage of 4 delta smelt. 3 delta smelt were observed on 4/29 during an experiment, but not counted toward salvage. Between 4/23-4/30 at the SWP a Delta Smelt larval less than 20 mm was observed.
- 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 10/1/13 (the start of water year 2014).
- Data subject to revision.

Smelt Monitoring

Rhiannon Mulligan(DWR) provided the following update taken from the 5/4/15 SWG meeting notes: 20-mm Survey #4 was in the field last week. Processing is 20% complete. So far a total of three Delta Smelt were collected, all from station 719 (15 to 23 mm).

20-mm Survey #3 was in the field the week of April 13. Processing is ongoing. A total of 20 Delta Smelt were collected at stations 719 (18, 12-23mm) and 723 (2, 18mm).

Spring Kodiak Trawl #5 is in the field this week.

<http://www.dfg.ca.gov/delta/projects.asp?ProjectID=20mm>.

Smelt Working Group

The following update is provided from the 5/4/15 SWG meeting notes :

The Working Group agreed that given present distribution, current salvage, entrainment risk and Delta conditions, there was no indication that the projected combined exports of approximately 1100 cfs for today and 300 cfs for tomorrow (potentially resulting in daily average OMR flows of approximately -1400 cfs) can be modified for the protection of Delta Smelt adults and larvae. 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 also agreed that given their present distribution, existing constraining conditions were sufficient to protect longfin smelt from entrainment in the southern Delta.

The Working Group will continue to monitor Delta Smelt survey and salvage data and Delta conditions and will meet again Monday, May 11, 2015 at 10 am.

The Smelt Working Group notes and FWS determinations are posted at http://www.fws.gov/sfbaydelta/cvp-swp/smelt_working_group.cfm.

Delta Operations for Salmonids and Sturgeon (DOSS) Working Group

Barb Byrne(NMFS) provided the following update via DAT reflector:

NMFS update for 5/7/15 DAT

Highlights from the 5/5/15 DOSS call are provided below.

DOSS Advice to WOMT and NMFS: None.

Special Topic: CWT recoveries in Delta Juvenile Fish Monitoring Program (DJFMP) & RST monitoring

DOSS discussed the value of CWT information from CWT recoveries in DJFMP & RST monitoring, and there was general agreement that the CWT information is valuable for both in-season information on distribution and migration timing, and retrospective analyses of the long-term datasets.

Delta RPA Actions affecting operations during May:

Action IV.1.2 (DCC gate operations):

- Default DCC gate closure.

Action IV.2.3 (OMR Flow Management)

- The OMR limit of no more negative than -5,000 cfs is in effect.

Action IV.2.1 (I:E ratio)

- Currently, the Critical year 1:1 ratio (of San Joaquin inflow at Vernalis to combined CVP/SWP exports) is in effect. This action restricts combined exports to 100% of Vernalis flow, or 1,500 cfs, whichever is greater.

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. The table below reflects current distribution.

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 (naturally produced)</i>	>99% out of Delta; Generally done migrating with the exception of a few stragglers. (Last week: >95% out of Delta)		
<i>YOY winter-run Chinook salmon (hatchery-produced)</i>	>99% out of Delta; Generally done migrating with the exception of a few stragglers. (Last week: >95% out of Delta)		
<i>YOY spring-run Chinook salmon^A</i>	Few stragglers (last week: Few stragglers only to 5%)	20% (last week: 20% - 30%)	80% (last week: 70% - 80%)
<i>Yearling spring-run Chinook salmon^B</i>	>99% out of Delta; Generally done migrating with the exception of a few stragglers. (last week: >95% out of Delta)		
<i>Hatchery steelhead^C</i>	>95% out of Delta;		

	Generally done migrating with the exception of a few stragglers. (Last week: same)		
<i>Sacramento River steelhead (naturally-produced)</i>	Limited catch data		
<i>San Joaquin River steelhead^D</i>	<5% (last week: 5%)	10% (last week: 10% - 15%)	85% - 90% (last week: 80% - 85%)

^A Chipp Island Trawl data of spring-run is difficult to interpret now that the 75% unmarked fall-run productions are likely masking the wild spring-run Chinook catch.

^B No yearling spring-run Chinook salmon have been caught in 2014 monitoring. In general, very few yearling spring-run Chinook salmon are observed because of their relatively large size and strong swimming (and associated gear avoidance) abilities.

^C Difficult to assess now that all hatchery releases are in the system (CNFH, Feather River Fish Hatchery, and Mokelumne Fish Hatchery released as usual; Nimbus Hatchery released their steelhead in the spring of 2014 because of expected unsuitable hatchery water temperatures during the summer of 2014). Percentages are intended to capture distribution of steelhead that migrate out; not those that may residualize.

^D Have observed a few juvenile steelhead in monitoring data. Distribution estimates are also based on 10 years of historical data from Mossdale Trawls (on the San Joaquin River) and RST data from Caswell Park (on the Stanislaus River), as well as on recent flow and water temperature conditions.

DOSS Feedback on Entrainment Risk

Entrainment risk of fish from the Sacramento River into the Interior Delta (same as last week except for tidal conditions):

DOSS noted that generally, there is an increased risk of entrainment into the interior Delta during spring tides, compared to during neap tides, at any OMR level. During a spring tide, tidal conditions extend further upstream and may, for example, create conditions at Georgiana Slough (e.g., reverse flows) that are associated with routing into Georgiana Slough, a route to the interior Delta. Currently, the Delta is in a spring tide.

Entrainment risk of fish in the Interior Delta into the CVP/SWP facilities (same as last week):

DOSS assessed the current risk of entrainment for listed salmonids. For listed salmonids in the Delta, the current risk of entrainment for each OMR flow range was characterized as follows:

- -1,200 to -2,000 cfs has a medium risk of entrainment
- -2,000 to -3,500 cfs has a medium to high risk of entrainment
- -3,500 to -5,000 cfs has a high risk of entrainment

DOSS notes and related documents are posted at

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

Operations: Loi Tran(DWR-OCO) provided the following update:

Preliminary Summary for 5/7/2015			
SWP		CVP	
Clifton Court Inflow (cfs)	300	Jones Pumping Plant (cfs)	230
SWP San Luis Reservoir Share (TAF) as of Midnight	871	CVP San Luis Reservoir Share (TAF) as of Midnight	366
San Luis Reservoir Total (TAF) as of Midnight	1,237	American – Nimbus Reservoir Releases (cfs)	1,250
Feather – Oroville Reservoir Releases (cfs)	3,000	Sacramento – Keswick Reservoir Releases (cfs)	7,500
		Stanislaus – Goodwin Reservoir Releases (cfs)	150
DELTA OPERATIONS			
Outflow (cfs)	~5,100	Delta Cross Channel (DCC) Gates	Closed
Total Delta Inflow (cfs)	~7,878	OMR (cfs)	-1289
X2 (km)	>81	5-day average (cfs)	-1199
Export/Inflow (%)	7.8%(3-day avg)	14-day OMR (cfs)	-1604

RG Fernando(MWD) asked if Feather river releases are to be changed soon. Loi Tran stated that the outflow target is 4,000-45,000 cfs, and the last few days have been greater than 4,000 cfs, so the releases are adequate for now and expected to remain the same.

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

Next Conference Call: DAT will convene next week on 5/14/15.