

Delta Operations for Salmonids and Sturgeon (DOSS) Group

Conference call: 11/19/13 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.

Attendees

DWR: Mike Ford, Kevin Reece, Farida Islam, Aaron Miller, Andy Chu, Dan Yamanaka

FWS: Leigh Bartoo

NMFS: Barbara Rocco, Jeff Stuart, Barb Byrne

Reclamation: Russ Yaworsky, Josh Israel

DFW: Chris McKibbin, Colin Purdy, Bob Fujimura

EPA: Erin Foresman

SWRCB, USGS: not present

Agenda

1. Fish monitoring
2. Current ops
3. Check-in on current and upcoming RPA actions
4. DOSS advice

Fish Monitoring: The following table presents fish monitoring data. Unless otherwise noted, reported sizes are fork length. See also:

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

Location	Chipps Is. Midwater Trawl	Sacramento Trawls	Mossdale Kodiak Trawl	GCID	Knights Landing RST	Tisdale RST	Beach Seines
Sample Date	11/12, 13, 15	11/12, 13, 15	11/12, 13, 15	11/12-18	11/12-18	11/12-18	11/12-15
Total Catch	2	0	0	240	0	0	1
FR							
WR				236			
SR							1 (38 mm; Sherwood Harbor on 11/14)
LFR				4 (2 juv; 2 smolts)			
Ad-Clipped Chinook							
DS							
Splittail							
Longfin	2 (72 & 91						

	mm)						
SH (ad-clip)							
SH (wild)							
W. Temp. (avg. °F)	58.8	55.6	57.7	60.0	56.0	54.7	13.8
Flows (avg. cfs)					4,662	4,583	
Turbidity (avg. NTU)	19.6	6.7	7.2	1.7	2.8	6.1	11.4
WR/LFR Avg. CPUE				1.54			
FR/SR Avg. CPUE							

CPUE = catch per unit of effort reported as the average fish/hour over reported sampling dates; ACT = acoustic tag; GCID = Glenn-Colusa Irrigation District; RST = rotary screw trap

¹Flows at GCID are Bypass flows (in cfs) not Sacramento River flows.

²Note that FTU is used at Knight's Landing in place of NTU.

Glenn-Colusa Irrigation District (GCID): Pumping is stable at 200 cfs. A clarification of the length-at-date criteria used to identify the juvenile vs. smolt late-fall run Chinook reported this week was requested.

Given the discussion, the following action item was developed:

Purdy (DFW) or Byrne (NMFS) will follow up with GCID on which classifications it is using.

Beach Seines: A DOSS member expressed surprise at the 38-mm spring-run Chinook salmon that was reported at Sherwood Harbor on 11/14, because spring-run Chinook salmon are not usually seen in the Delta this time of year. It was noted that spring-run-sized Chinook salmon juveniles were first reported at GCID on 10/23, although it was also noted that GCID is still a long way from Sherwood Harbor, especially for a <40-mm fish. It's possible that the spring-run-sized fish is a genetic winter-run fish that fell below the length-at-date band for the winter-run classification; the cutoff for winter-run size is 41 mm and both winter-run spawning and spring-run spawning in the tributaries were late this year (so individuals may be a bit "smaller-at-date" than usual).

Knights Landing: Moved back to sampling 24 hours/day on 11/12 with two trap checks/day.

Fish Salvage: Fujimura (DFW) reported data for 11/11 through 11/17. No listed species were salvaged at either CVP or SWP. The preliminary report for 11/18 shows no salvage of listed species.

Operations (11/19/13)

SWP		CVP	
Exports (cfs)			
Clifton Court Forebay	2,000 (will decrease to 1,500 on 11/20 and 1,000 on 11/22)	Jones Pumping Plant	2,000 (targeting 1,000 on 11/20; Delta outflow controlling)
Reservoir Releases (cfs)			
Feather - Oroville	1,250 (decreased from 1,750 to conserve reservoir)	American - Nimbus	1,300 (will remain through December)

	storage)		
		Sacramento - Keswick	3,750
		Stanislaus - Goodwin	250 (currently scheduled to decrease to 200 on 11/22)
Reservoir Storage (in TAF, % of capacity)			
San Luis (SWP)	220 (21)	San Luis (CVP)	283 (29)
Oroville	1,423 (40)	Shasta	1,689 (37)
New Melones	1,031 (43)	Folsom	253 (26)
Delta Operations			
DCC	Closed (closed on 11/18 but might reopen on 11/22; still driven by Rio Vista standard)	Sacramento River at Freeport (cfs)	8,283
Outflow Index (cfs)	3,800	San Joaquin River (cfs) at Vernalis	1,071
Total Delta Inflow (cfs)	~9,791	OMR (daily) (cfs)	
Water Temperature (°F)		OMR 5-day avg (cfs)	
X2 (km)	>81	OMR 14-day avg (cfs)	
E/I (%)	40.2 (3-d avg)		

New Graphs of Operations: During the call, Byrne (NMFS) forwarded to DOSS graphics on reservoir storage and flows prepared by Stuart (NMFS). Those figures are presented at the end of the notes. DOSS was asked to review this information and provide input to Byrne and Rocco (NMFS) on whether it would be helpful for this information to be provided to DOSS and included in the notes each week. DOSS will decide this on the next call.

Delta Cross Channel (DCC): During their operations update, DWR and Reclamation raised a concern about meeting water quality (WQ) standards in December once Action IV.1.2 enters a phase (in effect 12/1–12/14) that calls for DCC gate closure as the default action. Action IV.1.2 does include two exceptions:

1. When WQ standards are not being met and the Sacramento Catch Index and Knights Landing Catch Index are <3 fish/day, the DCC may be opened.
2. When WQ standards are not being met and the Sacramento Catch Index and Knights Landing Catch Index are >3 fish/day, DOSS reviews monitoring data and makes a recommendation to WOMT.

Ford (DWR) asked for written clarification about what flexibility the RPA action provides; other operators agreed that the flexibility on DCC operations allowed by the RPA action should be on record. Byrne responded that the RPA action explicitly states that an exception is triggered when a standard is not met, not when the buffer is encroached.

The operators expressed a concern that they will exceed a WQ standard if the DCC is closed as of December 1, and are asking for flexibility (particularly in early December) to trigger the “may open the DCC” exception when they enter their operating buffer rather than when they exceed the standard.

DOSS discussed the following factors (not necessarily related to the RPA) that might be considered in managing DCC gate operations:

- Rio Vista flow standard in D-1641 (a closed DCC helps meet this standard)
- Contra Costa chloride standard in D-1641 (an open DCC helps meet this standard)
- WQ standards in the North Delta Water Agency contract
- Other operational “knobs” available in addition to/instead of the DCC to meet different standards of concern
- Tidal conditions expected in December
- Typical fish migration timing past DCC
- Boater use of DCC

Given the discussion, the following action items were developed:

1. Chu (DWR) will convene a WOMT call this week to raise this issue, rather than wait until next week, when people might be gone because of the holiday.
2. On the next DOSS call (11/26), the operators (Chu and Yaworsky [Reclamation]) will summarize (a) the WQ standards (D-1641 and those under contract with the North Delta Water Agency) of concern; (b) the concern levels used by the operators to manage the buffer for those standards; and (c) the “knobs” (e.g., DCC operations, reservoir releases, export levels) that can be used to manage to those standards.

Weather: Chu provided the forecast that, after the storm coming this week (possibly tomorrow), there is no chance of rain for 7–10 days. As of today, January through November 2013 has been one of the driest for this period on record and is worse than during the 1977 drought.

RPA Actions:

- IV.1.1: No alerts tripped in the past week.
- IV.1.2: No triggers exceeded in the past week.
- IV.3: In effect as of 11/1; no triggers exceeded yet.

Smelt Working Group (SWG): The first SWG meeting water-year 2014 is scheduled for 11/25. The call is expected to focus on SWG membership and process, not on RPA implementation or risk assessment. Previous SWG meeting notes are available at: http://www.fws.gov/sfbaydelta/cvp-swp/smelt_working_group.cfm.

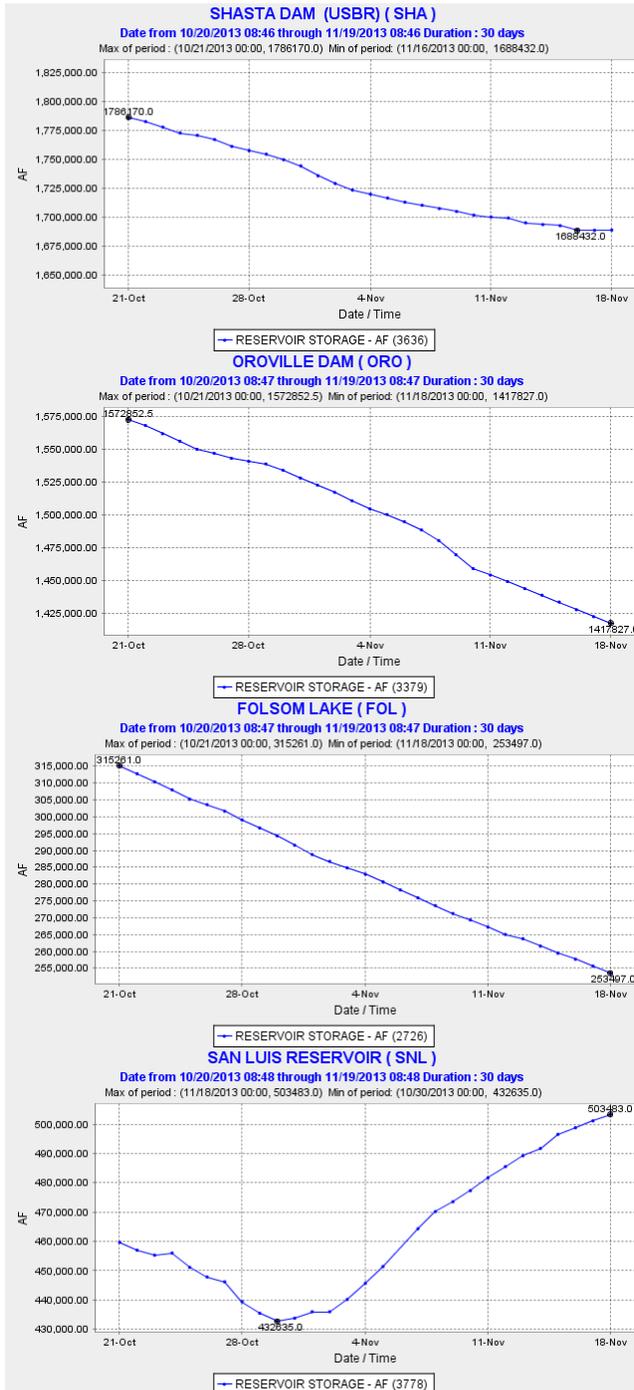
DOSS Elevation of December Operations Issue to WOMT: DOSS suggested that a WOMT meeting be convened this week to discuss the concerns about meeting WQ standards in December and the request for additional flexibility in DCC gate operations, because a request for expanded RPA flexibility was beyond the scope of DOSS.

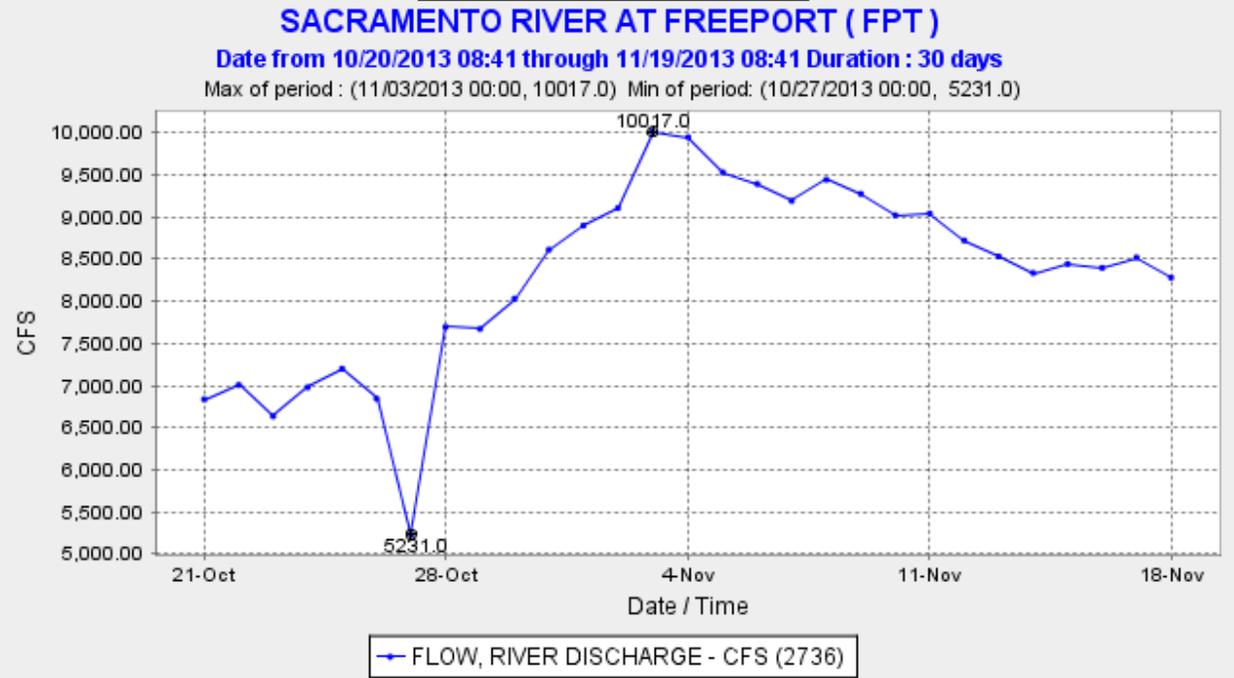
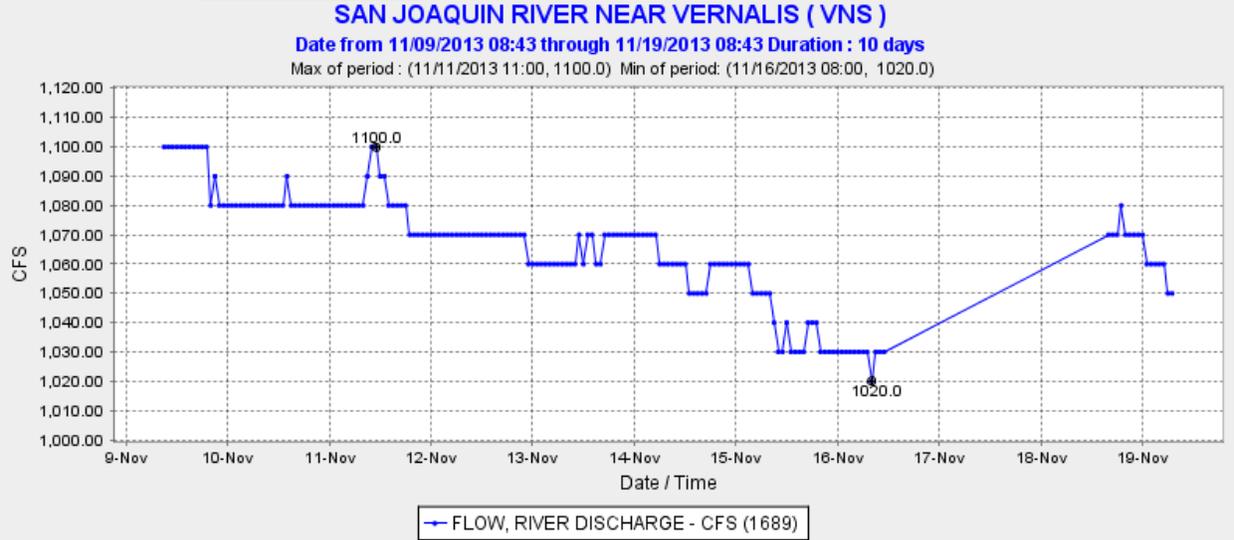
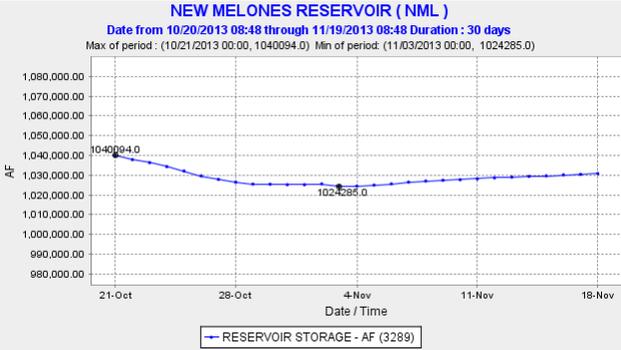
DOSS Advice to WOMT and NMFS: None.

Next Meeting: The next DOSS conference call will be on 11/26 at 9:00 a.m.

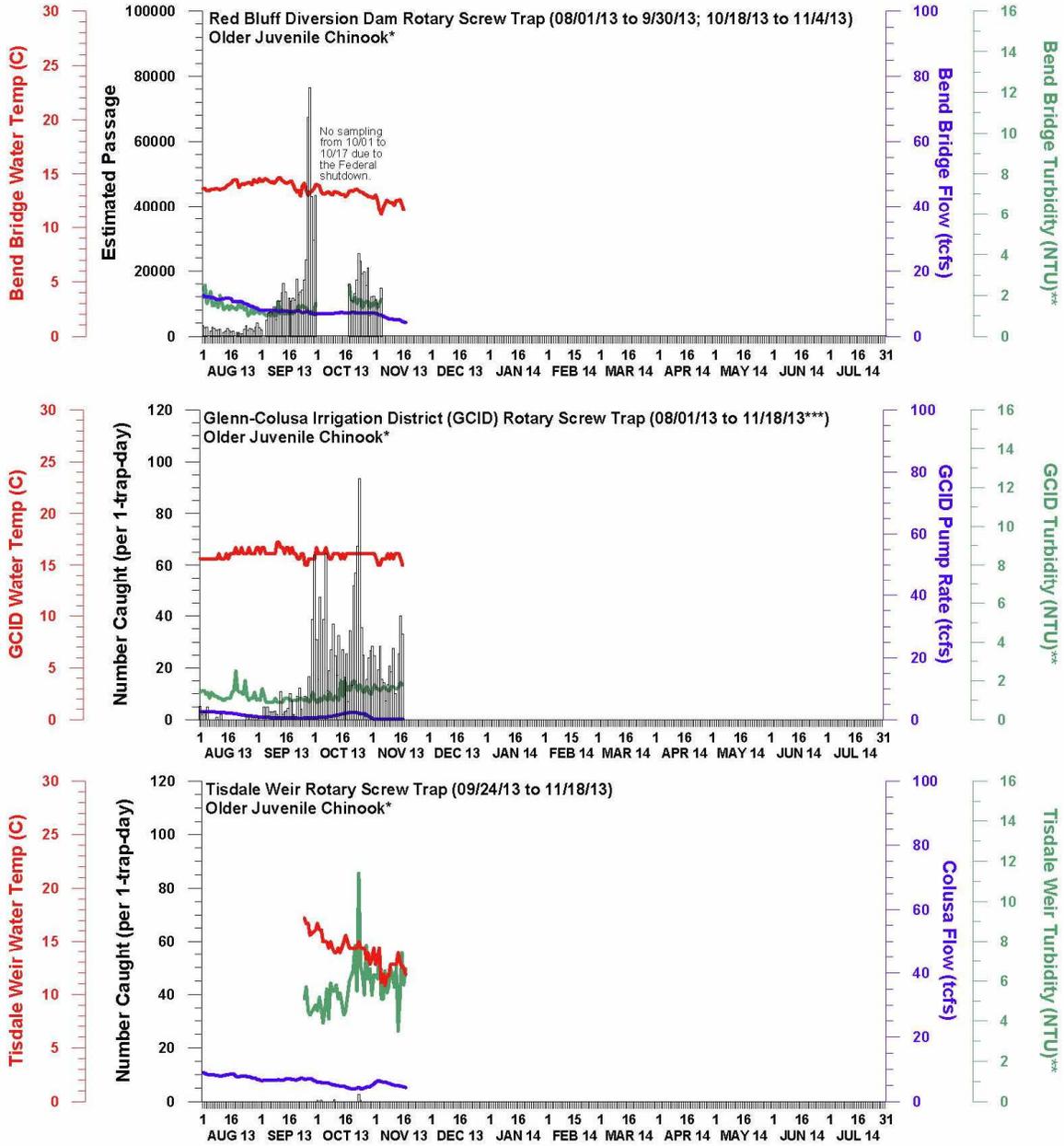
Below are graphs provided by NMFS for reservoir storage and flows, and by DWR for Chinook salmon and steelhead observed at monitoring locations in the Sacramento and San Joaquin rivers and Delta. For additional graphs, please visit the DWR website at:

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





NUMBER OF UNMARKED OLDER JUVENILE CHINOOK MEASURED IN THE SACRAMENTO RIVER



DWR-DES 18 NOV 2013 (UPDATED)

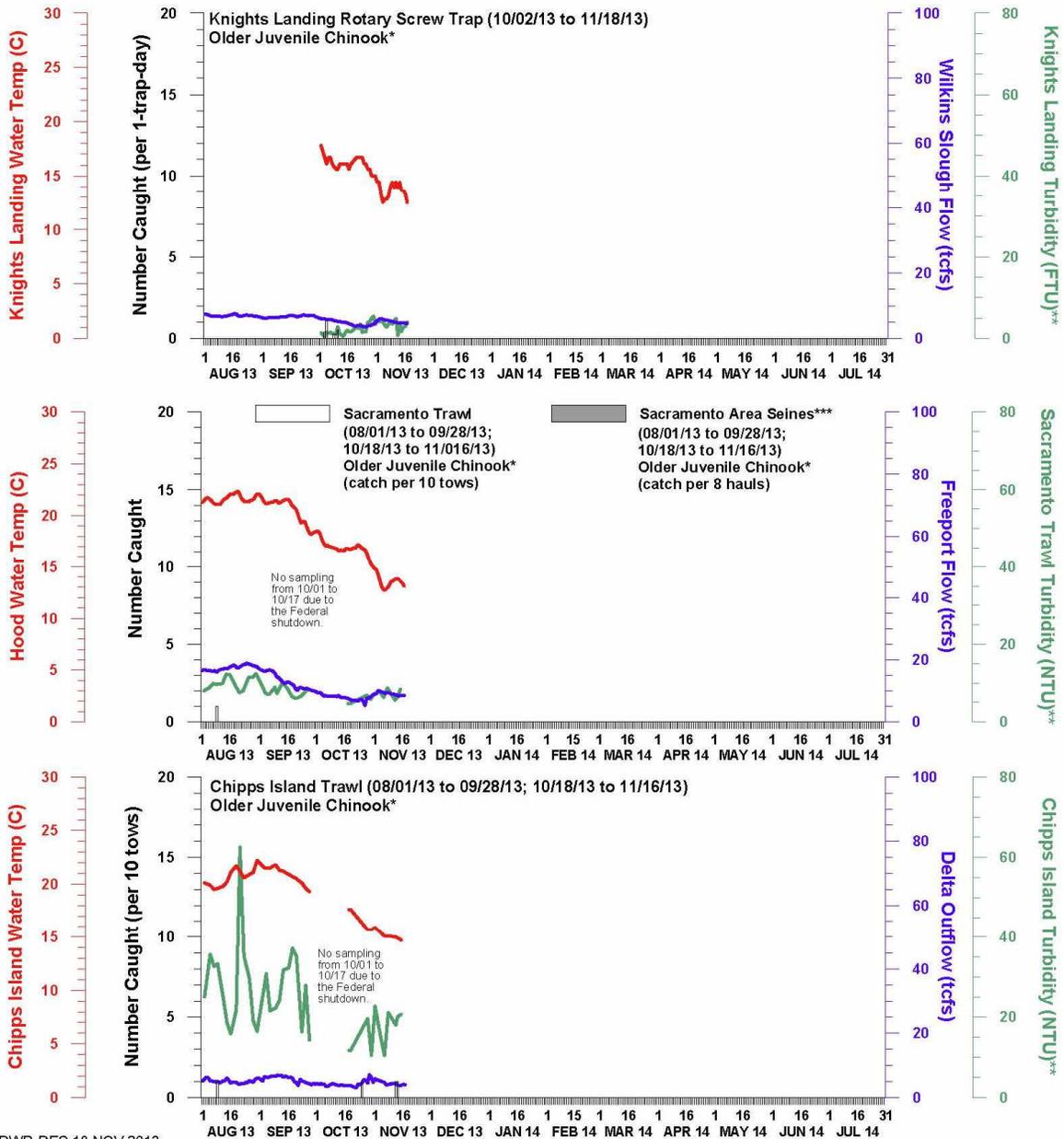
Preliminary data from DFW, FWS, GCID, and CDEC; subject to revision.

*Older juvenile Chinook defined as all Chinook greater than or equal to the minimum winter run length-at-date criteria and less than the maximum size included in the length-at-date criteria (Frank Fisher model) for which a race is assigned on a given sampling date.

**Turbidity is a discrete measurement and is not measured continuously. Therefore, data are interpolated on days when turbidity was not measured.

***GCID: Five older juveniles caught on 9/25, 9 older juveniles caught on 9/27, 57 older juveniles caught on 10/5 and 23 older juveniles caught on 11/14. However, catch could not be standardized to 1-trap day since hours fished could not be calculated due to problems with the revolution counter.

NUMBER OF UNMARKED OLDER JUVENILE CHINOOK MEASURED IN THE LOWER SACRAMENTO RIVER AND CHIPPS ISLAND



DWR-DES 18 NOV 2013

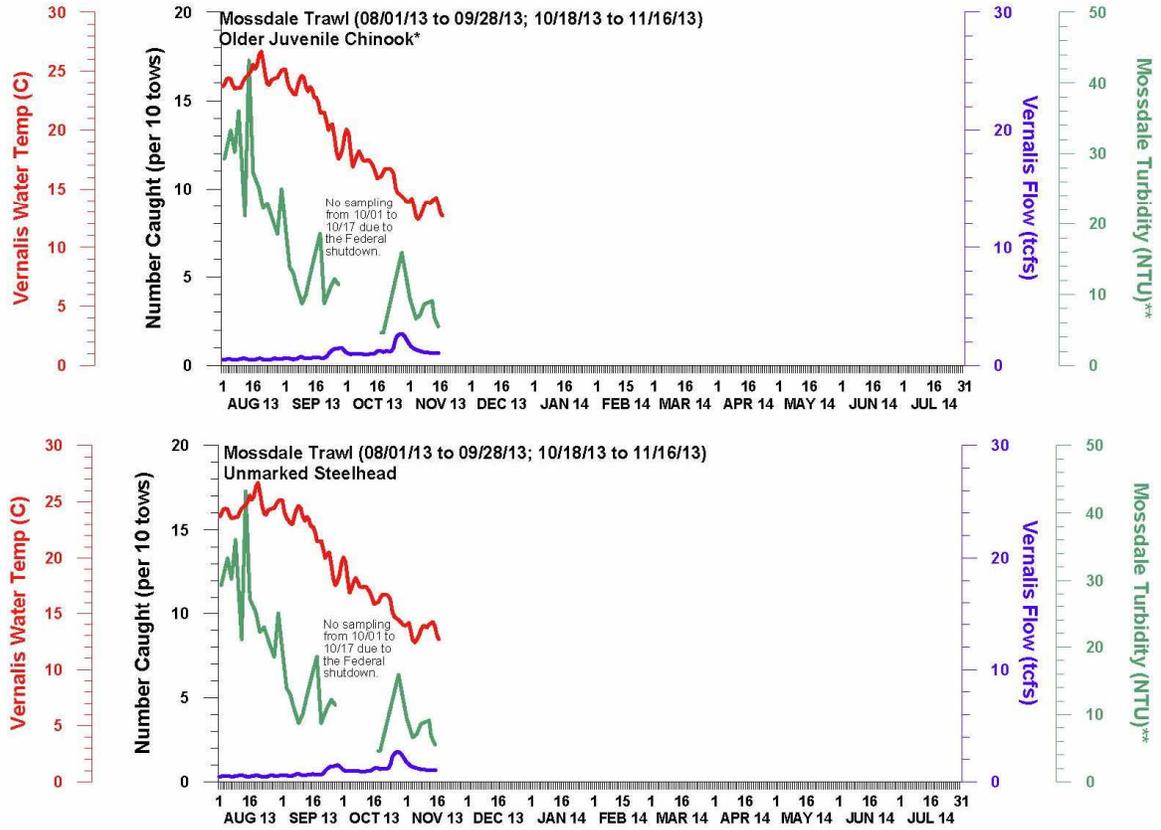
Preliminary data from DFW, FWS, and CDEC; subject to revision.

*Older Juvenile Chinook defined as all Chinook greater than or equal to the minimum winter run length-at-date criteria and less than the maximum size included in the length-at-date criteria (Frank Fisher Model) for which a race is assigned on a given sampling date.

**Turbidity is a discrete measurement and is not measured continuously. Therefore, data are interpolated on days when turbidity was not measured. Knights Landing turbidity measured in FTU, which should be roughly equivalent to NTU.

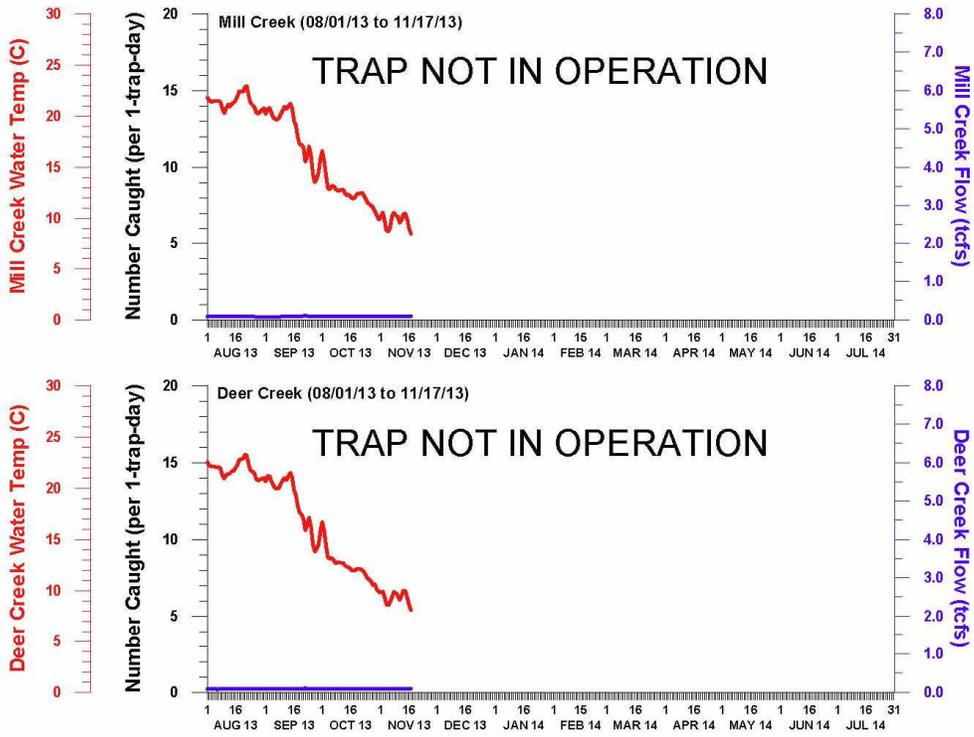
***Sacramento area seine route consists of the following seine sites: Verona, Elkhorn, Sand Cove, Discovery Park, American River, Miller Park, Sherwood Harbor, and Garcia Bend. Bars are stacked if Chinook caught from the trawl and seines are from the same day.

NUMBER OF UNMARKED OLDER JUVENILE CHINOOK AND STEELHEAD MEASURED IN THE SAN JOAQUIN RIVER



DWR-DES 18 NOV 2013
 Preliminary data from FWS and CDEC; subject to revision.
 *Older juvenile Chinook defined as all Chinook greater than or equal to the minimum winter run length-at-date criteria and less than the maximum size included in the length-at-date criteria (Frank Fisher model) for which a race is assigned on a given sampling date.
 **Turbidity is a discrete measurement and is not measured continuously. Therefore, data are interpolated on days when turbidity was not measured.

WATER TEMPERATURE AND FLOW MEASURED AT MILL AND DEER CREEK



DWR-DES 18 NOV 2013
 Preliminary data from CDEC; subject to revision.