

Delta Operations for Salmonids and Sturgeon (DOSS) Group
Conference call: 10/28/2014 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.

DWR: Mike Ford, Aaron Miller, Kevin Reece, Dan Yamanaka
USFWS: Craig Anderson
NMFS: Barb Byrne
USBR: Russ Yaworsky, Josh Israel
CDFW: Ken Kundargi, Duane Linander

Agenda Items

1. Agenda review and introductions
2. Fish Monitoring
3. Current Operations
4. RPA implementation review and DOSS Advice

Agenda Item 2.

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	Chippis Is. Midwater Trawl	Sacramento Trawls	Mossdale Kodiak Trawl	GCID	Knights Landing RST	Tisdale RST	Beach Seines
Sample Date	10/20, 10/22, 10/24	10/20, 10/23, 10/24	10/20, 10/22, 10/24	10/21-10/27	10/21-10/27	10/21-10/27	10/20-10/24
Total Catch	0	0	0	79(42mm - 155mm)	2	0	0
FR Chinook				6			
WR Chinook				59	1 (47 mm)		
SR Chinook					1 (34 mm)		
LFR Chinook				14			
Ad-Clipped Chinook							
Delta Smelt							
Splittail							
Longfin							
Steelhead (ad-clip)							
Steelhead (wild)							
Green Sturgeon							

W. Temp. (avg. °F)				59.7	61.7	60.3	
Flows (avg. cfs)				832*	3,910	4,156	
Turbidity (avg. NTU)				4.3	3.2	9.6	

*Bypass flow

Red Bluff Diversion Dam RST:

USFWS biweekly report (10/8/14-10/21/14) for unmarked juvenile winter run Chinook salmon:

- Biweekly Total: 33,112
- Brood Year Total: 279,952

Salvage: No listed species have yet been observed during WY 2015 at the SWP or CVP fish collection facilities.

Agenda Item 3.

Current Operations (10/28/2014)

SWP		CVP	
Exports (cfs)			
Clifton Court Forebay	300	Jones Pumping Plant	800*
Reservoir Releases (cfs)			
Feather - Oroville	1,500	American - Nimbus	1,050
		Sacramento - Keswick	5,000
		Stanislaus - Goodwin	850**
Reservoir Storage (in TAF)			
San Luis (SWP)	201	San Luis (CVP)	197
Oroville	969	Shasta	1,109
New Melones	515	Folsom	308
Delta Operations			
DCC	Closing the morning of 10/28; will open the morning of 10/30	Sacramento River at Freeport (cfs)	~6,500
Outflow Index (cfs)	~ 5,200	San Joaquin River at Vernalis (cfs)	~ 1,200
Total Delta Inflow (cfs)	8,063	E/I (%)	10.1% (3-day avg. of inflow) 11.2% (14-day avg. of inflow)
X2 (km)	> 81		

*The cycling of CVP pumping between 800 cfs and 0 cfs has ended; CVP pumping anticipated to hold at 800 cfs until further notice.

**10/21/14 was the first day of the fall pulse flow on the Stanislaus; the last day of the three-peak pulse schedule is 11/10/14.

Water quality concerns (electrical conductivity and seasonal salinity management) are currently controlling export operations. The two-day Delta Cross Channel (DCC) closure is intended to help meet the Rio Vista flow standard. Because of recent precipitation and the increased inflow at Vernalis, interior delta water quality has improved. Given the forecasted precipitation this weekend, continuing fall pulse flows at Vernalis, and the neap tidal cycle, the trend towards improved water quality is expected to continue over the next week.

Agenda Item 4.

Delta RPA Actions in effect during October:

Action IV.1.1 (Alerts that indicate the Delta Cross Channel (DCC) gate operations may be triggered soon):¹

- Recent (10/21/14-10/27/14) conditions for:
 - Wilkins Slough flow: 3,708-4,183 cfs (range of mean daily flow)
 - Knights Landing temperature: 59-64°F (range of temperatures reported at the rotary screw traps during trap checks)
 - Mill Creek and Deer Creek flows (highlighted cells exceed the first component (95 cfs flow threshold) or second component (>50% flow change) in first alert):

Date	Mill Creek (MLM)		Deer Creek (DCV)	
	mean daily flow	% increase in mean daily flow	mean daily flow	% increase in mean daily flow
10/20/2014	80	--	68	--
10/21/2014	84	5.0%	75	9.7%
10/22/2014	82	-2.4%	74	-1.5%
10/23/2014	83	1.2%	72	-3.0%
10/24/2014	102	22.9%	80	11.5%
10/25/2014	97	-4.9%	82	3.3%
10/26/2014	139	43.3%	93	13.2%
10/27/2014	109	-21.6%	89	-5.0%

- The first alert has been triggered based on Mill Creek flows >95 cfs from 10/24-27/14.

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

Action IV.1.2² (DCC gate operations):

- Since 10/1/14, none of the criteria requiring DCC gate closure have been met.

DOSS Advice to WOMT and NMFS: None.

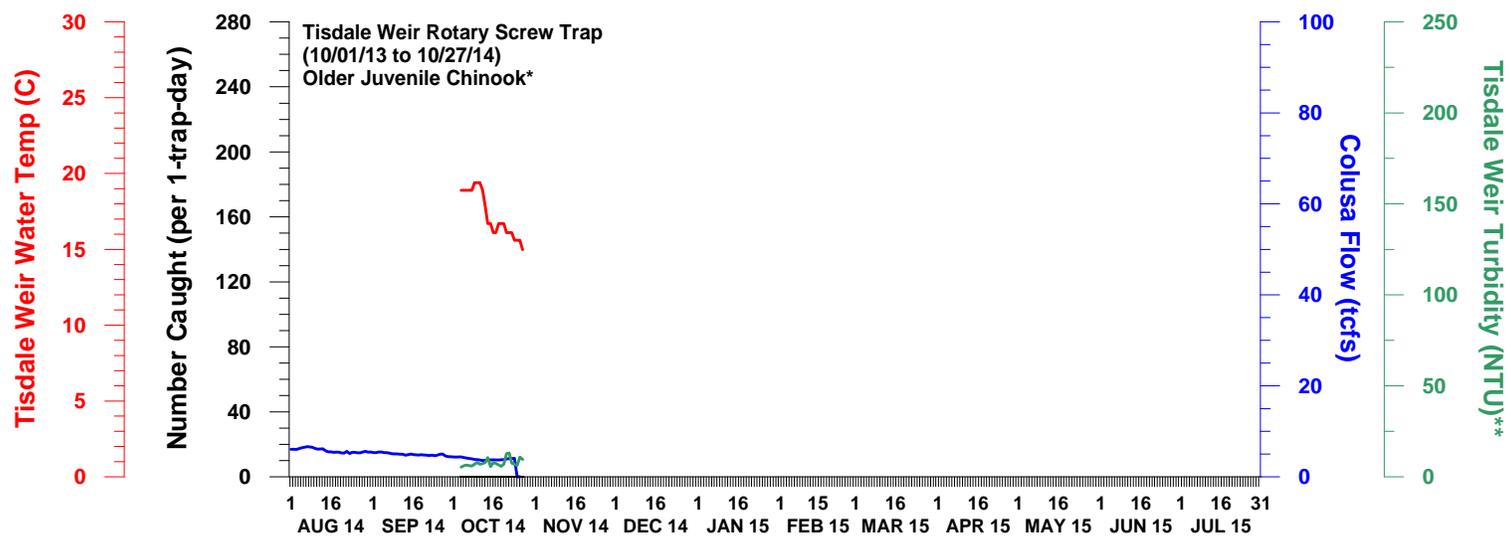
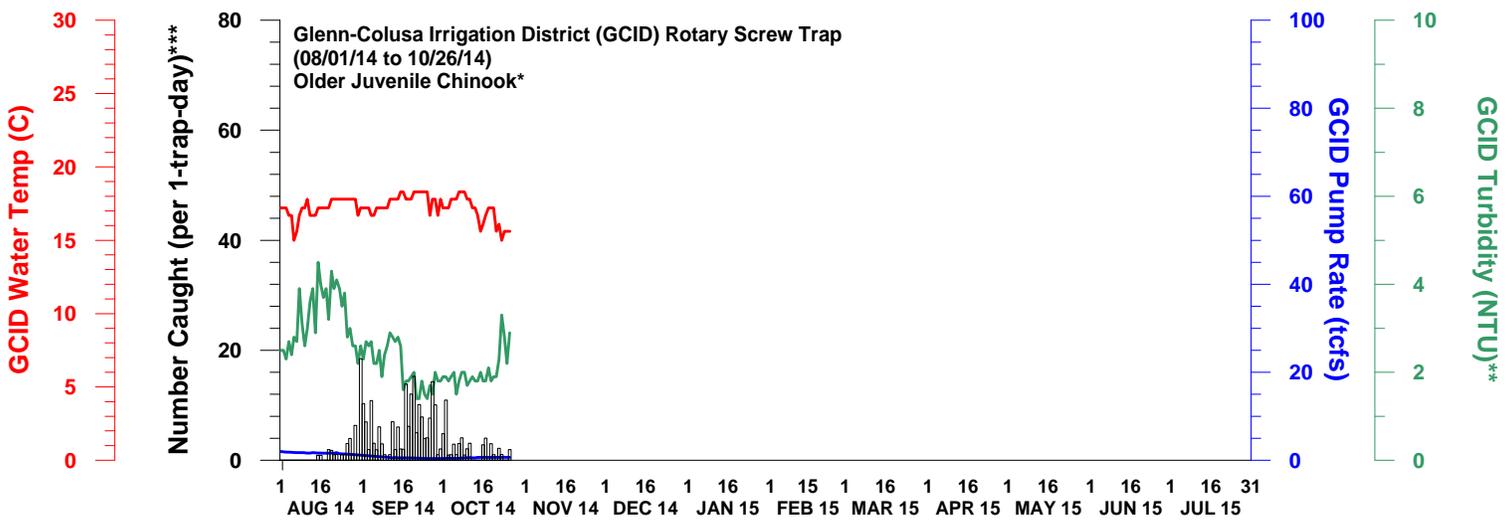
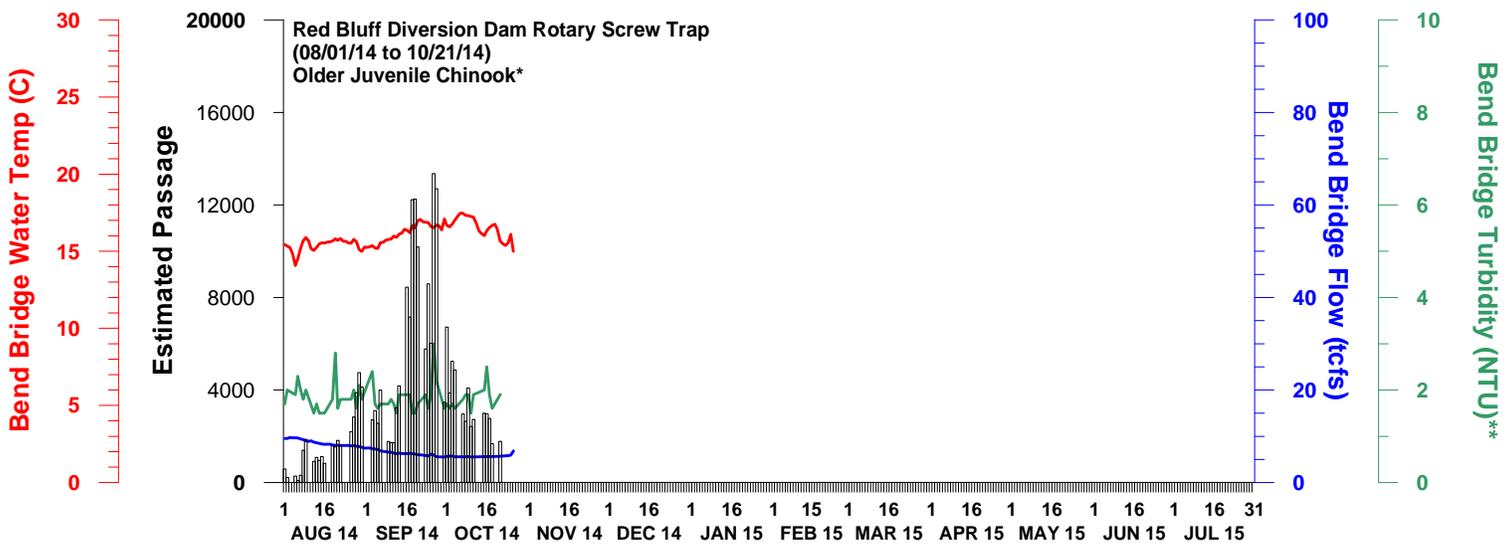
Next Meeting: The next DOSS conference call will be on 11/4/14 at 9am

The following graphs were provided 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>.

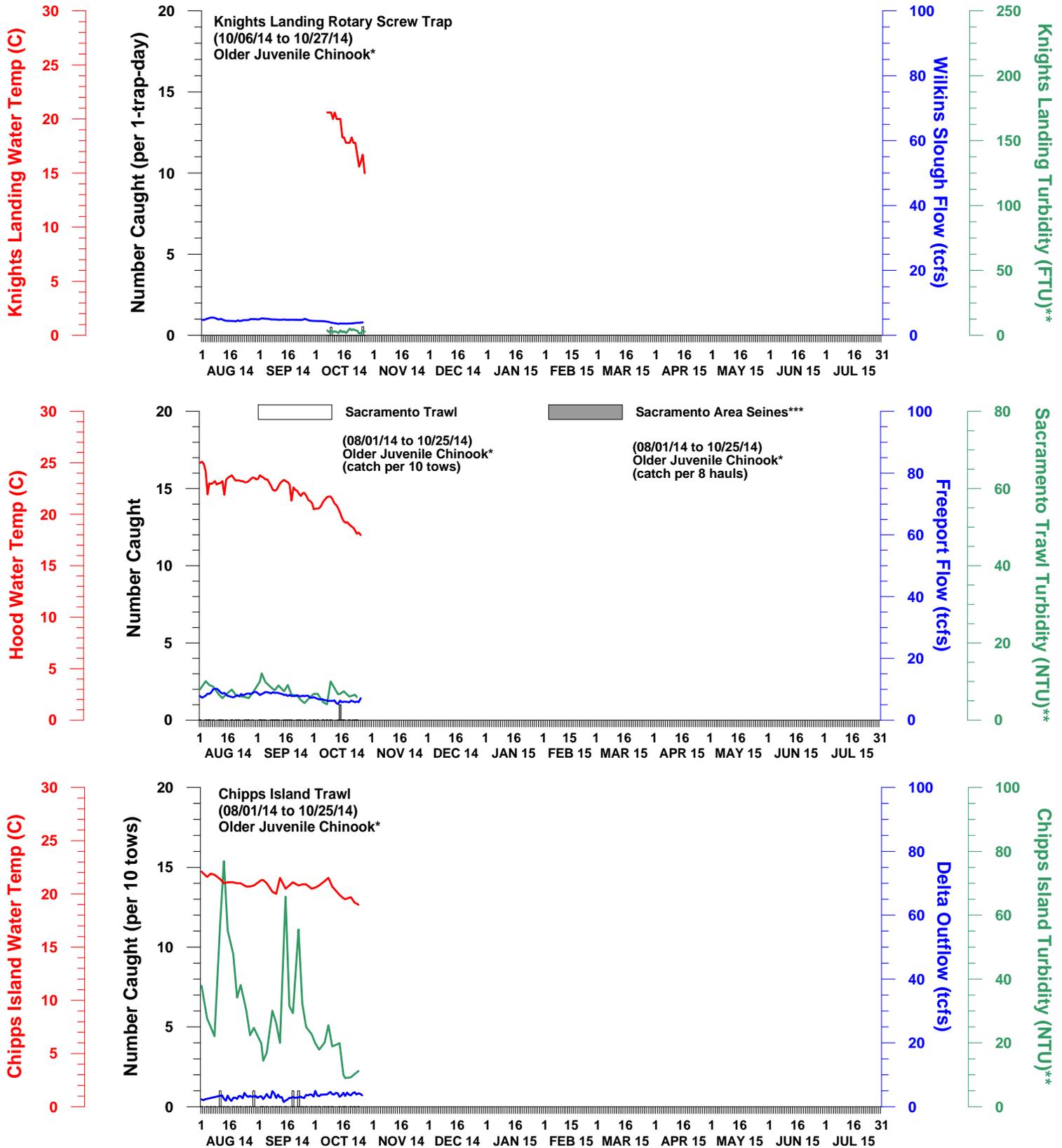
² For details, see pages 62-66 in Enclosure 2 of the 2011 Amendments to the 2009 RPA document at:
http://www.westcoast.fisheries.noaa.gov/publications/Central_Valley/Water%20Operations/Operations,%20Criteria%20and%20Plan/040711_ocap_opinion_2011_amendments.pdf

NUMBER OF UNMARKED OLDER JUVENILE CHINOOK MEASURED IN THE SACRAMENTO RIVER



DWR-DES 27 OCTOBER 2014
 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 unless data are missing for more than five days.

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



DWR-DES 27 OCTOBER 2014

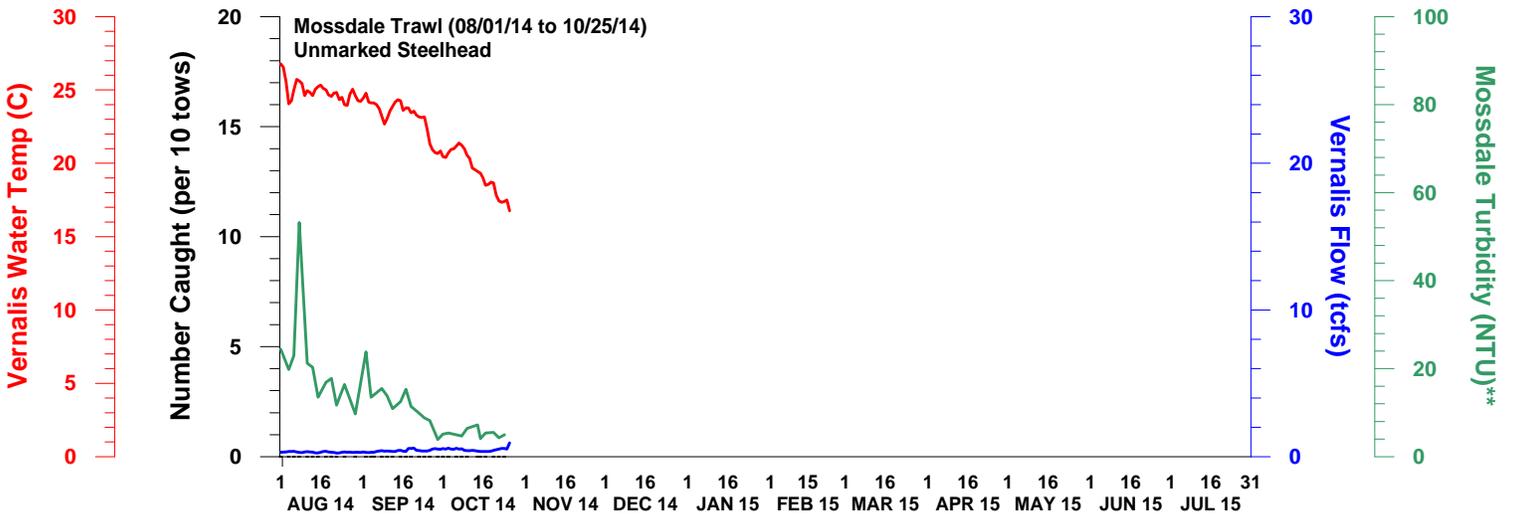
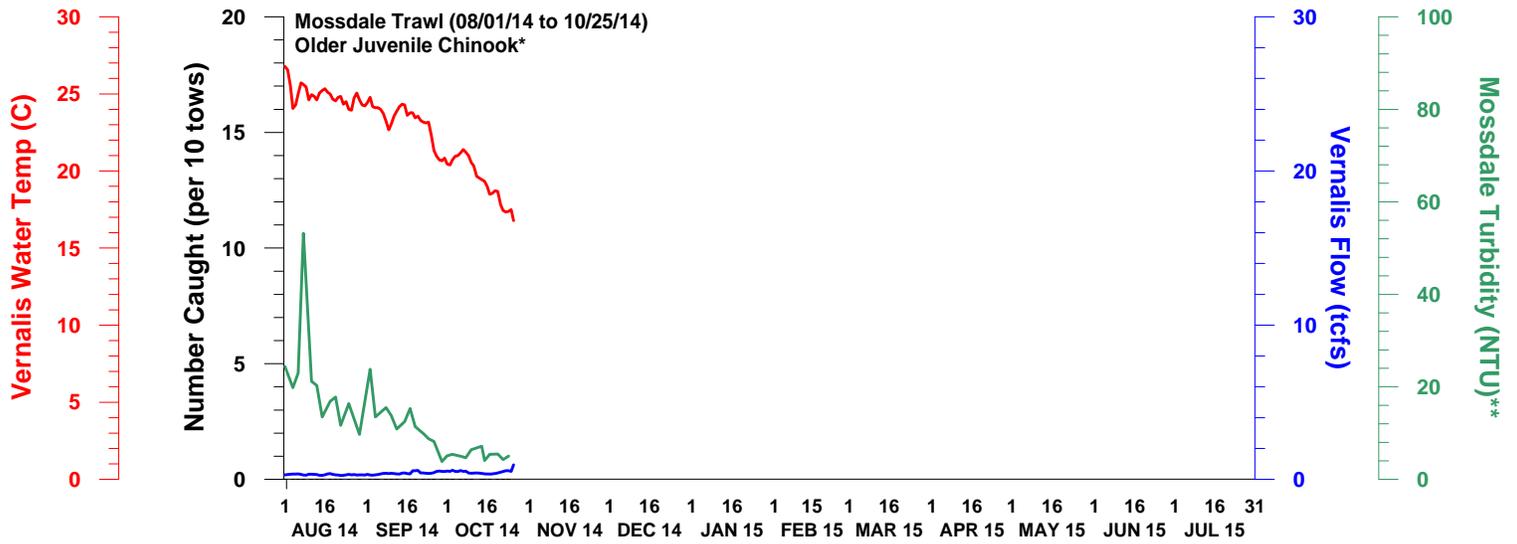
Preliminary data from DFW, FWS, and CDEC; subject to revision.

*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 unless data are missing for more than five days. 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

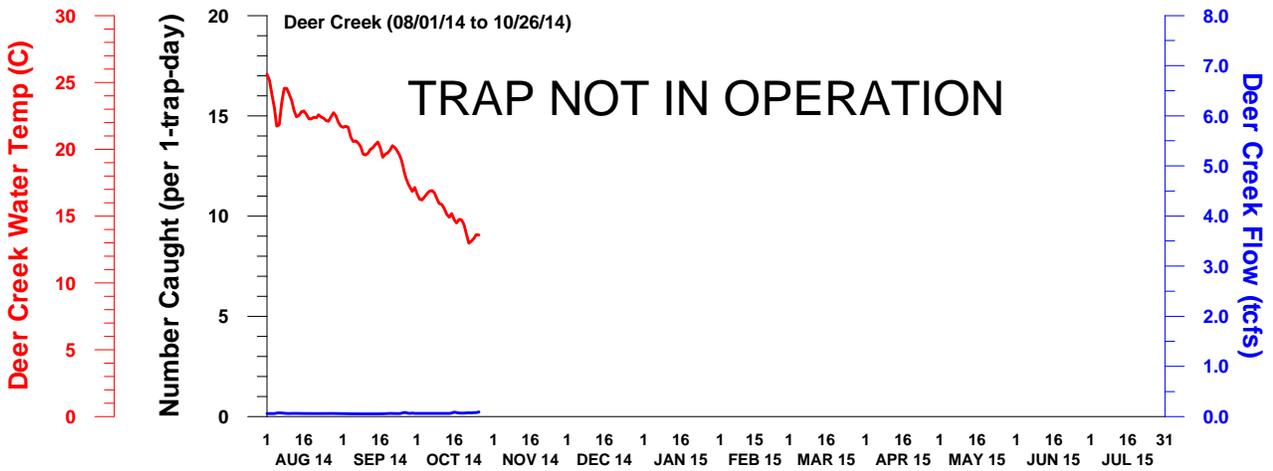
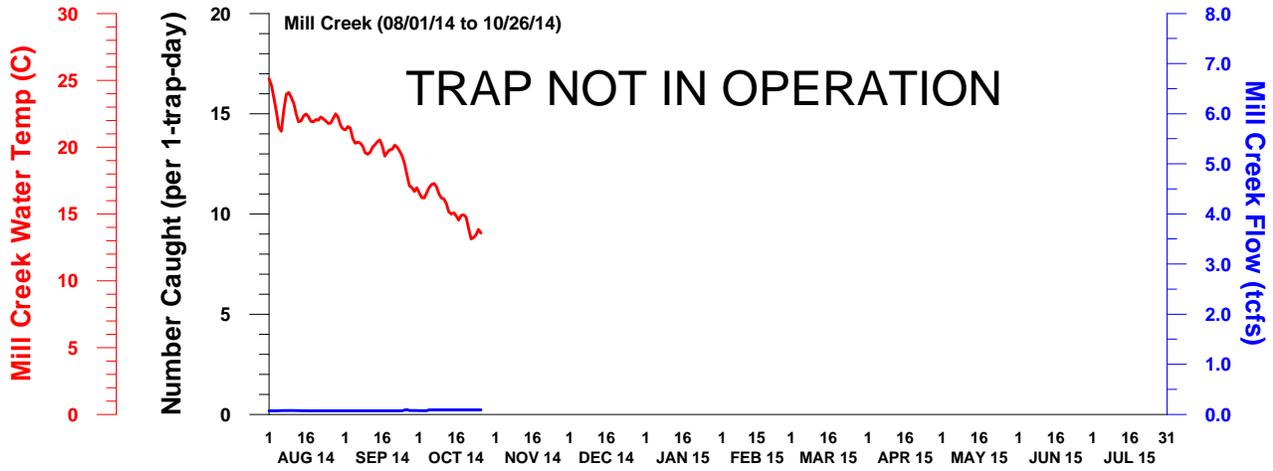


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Preliminary data from FWS and CDEC; subject to revision.

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WATER TEMPERATURE AND FLOW MEASURED AT MILL AND DEER CREEK



Data Acquisition:

All data are preliminary and subject to revision.

The estimated passage data for the Red Bluff Diversion Dam were obtained directly from the US Fish and Wildlife Service (FWS), Red Bluff Fish and Wildlife Office (http://www.fws.gov/redbluff/rbdd_biweekly.aspx).

The catch data for Glenn-Colusa Irrigation District (GCID) were obtained directly from GCID.

The catch data for Tisdale Weir and Knights Landing were obtained directly from the California Department of Fish and Wildlife (DFW)¹, North Central Region.

Sacramento River Trawl, Sacramento Area Beach Seine, and Chipps Island Trawl data were obtained directly from FWS, Stockton Fish and Wildlife Office (<http://www.fws.gov/stockton/ifmp/>).

Mossdale Trawl data were either obtained directly from FWS, Stockton Fish and Wildlife Office or from DFW (Region 4).

The hydrology data were either downloaded from the California Data Exchange Center (CDEC) (<http://cdec.water.ca.gov>) or obtained directly from the California Department of Water Resources, Operations Control Office.

¹ Formerly known as the California Department of Fish and Game (DFG).