

Stanislaus Watershed Team

10:00 AM – 12:00 PM Conference Line: 1 (773) 231-9226; Meeting ID: 148 869 4090 WebEx: https://meetings.ringcentral.com/j/1488694090

Wednesday, June 17, 2020

- 1. Action Items
 - Barbara Byrne
 - Extend the time frame shown for Goodwin Canyon flow data to include flows back to January 2020.
 - Draft a slide deck for the SWT Integration Workshop and send to USBR for review by Friday, June 26.
 - J.D. Wikert
 - Coordinate SWT Integration Workshop agenda item regarding opportunities/interests
 - Kearns & West
 - Collaborate with Zarela Guerrero to coordinate the transition to Microsoft Teams for July SWT.
 - Circulate a Doodle Poll with potential dates and times for SWT Integration Workshop. **(DONE)**
 - Update next July's agenda with the following other items:
 - COVID-19 impacts on SWT's functions
 - Review draft annual report outline
 - Thuy Washburn
 - Arrange for a guest speaker from Tri-Dam for a future SWT meeting
 - USBR
 - Develop draft annual report outline to share at July SWT meeting

• Prepare a standard tracking template for Proposed Action Items (e.g., gravel) to be added to and updated in monthly meeting handouts.

2. Introductions

- USBR: Luke Davis, Matthew Di Loreto, Zarela Guerrero, Levi Johnson, Liz Kiteck, Sarah Perrin, Suzanne Manugian & Thuy Washburn
- NMFS: Barbara Byrne & Monica Gutierrez
- USFWS: Craig Anderson & J.D. Wikert
- CDFW: Ryan Kok, Duane Linander, Gretchen Murphey, Paige Uttley & Jonathan Williams
- SWRCB: Lauren Adams & Timothy Nelson
- DWR: Krissy Atkinson
- WAPA: Mike Prowatzke & Gerry Robbins
- Kearns & West: Rafael Silberblatt & Kai Walcott

3. Announcements

- J.D. Wikert is working with the CVPIA (b)(1) other program to begin preparing a manual on the restoration of non-target species and extended an invitation for members to provide input on species of interest.
- J.D. Wikert extended an invitation for members to help develop video content for the Salmon Festival.

4. Operations Update and Forecasts/Hydrology

- Recent and Upcoming Operations
 - Reservoir Conditions: New Melones is at 1.77 MAF storage.
- Flow
 - New Melones:
 - Releases are currently 1,500 cfs and have been reduced to 800 cfs on the weekend for public safety.
 - Inflows are beginning to settle down to 800-1,000 cfs but are anticipated to be higher in July and August reaching approximately 1,000 cfs.
 - Dry year type flow minimums per the Stepped Release Plan (SRP) are 200 cfs. The higher-than-SRP flows of 1,500 cfs are needed to meet the Vernalis objective of 1,420 cfs for June.
 - Last month, it was anticipated that the Vernalis objective would be met but was not.
 - It is expected that releases can be lowered to 1,400 cfs next week and ramp down further to 600 cfs for the following weekend.

- For July, since there is no Vernalis requirement, it is expected that flows will ramp down to the minimum of 200 cfs and remain at the minimum.
- Rafters have appreciated the ramping down of releases to 800 cfs during the weekend, though they expressed a preference for a reduction to 600 cfs.
- The current Joint and South Main deliveries are typical for June.
 - Joint Main deliveries are typically 1,000 cfs, and are currently just below this, likely due to cooler temperatures, but is expected to increase further in August.
 - South Main projections for June are 500 cfs, and they are also just below this likely due to cooler temperatures.

5. Temperature Updates

- Water temperatures by location
 - Goodwin Canyon:
 - A request was made that the Goodwin flow plots be extended to show the record of the season from January to present.
 - Barbara Byrne will extend the flow data in the Goodwin plot to start from the beginning of the calendar year.
 - The Temperature Suitability Subgroup reconvened to discuss the temperature threshold.
 - It was decided to use the thresholds mentioned in the incidental take statement of the 2019 NMFS LTO BiOp.
 - Two life stages were included namely, the juvenile life stage with the threshold of 68 °F, and the eggs/alevins life stages with the threshold of 54 °F.
 - These thresholds have been provided with the caveat that many of the temperature figures provide sub-daily information or information at locations other than Orange Blossom Bridge and thus do not reflect the specific metrics for take in 2019 NMFS LTO BiOp.
 - Figures are intended to serve only as a guide to the group, not to document take.
 - The temperature reference lines are shown only for the months referenced for each threshold in the 2019 NMFS LTO BiOp.
 - Though there are currently no Chinook thresholds shown on the water temperature figures, the Subgroup will discuss adding them, closer to the time period in which they expect to see Chinook redds (Fall).
 - Orange Blossom Bridge (OBB):
 - Water temperatures at OBB are increasing (see Figure 3 in handout).

- There was a spike in temperatures in early May followed by a decrease as a result of relatively high flows (1,500 cfs) during that period.
- OBB is the down-stream extent of most of the spawning seen in the river.
- SacPAS data indicates that the current water year is slightly cool for OBB, relative to 2015.

• Ripon

- As Ripon is located further down-stream temperatures there (during the spring through fall) are warmer than OBB (see Figure 4 in handout).
- Though the eggs/alevins threshold was added to the graph, spawning is expected to occur very rarely in this area.
- Like OBB, temperatures here decreased in mid-May due to increases in flow. However, water temperatures are now increasing into the 60s °F.
- The SacPAS graphic shows that Ripon is significantly warmer than OBB

• Vernalis

- The egg/alevins threshold line was not added to the Vernalis graph because spawning is not expected in this area.
- The steelhead juvenile threshold was added to the graph, and current conditions are expected to be challenging for juveniles during out-migration.
- The SacPAS graph for Vernalis shows temperature even warmer than at Ripon. Only the threshold line for juveniles was added to this graph because it is out of range for egg/alevins.

6. Flow Planning

• There were no flow planning updates for fish management purposes. Flow planning is expected to resume in the fall when SWT discusses the fall pulse flow shaping.

7. Stanislaus River Forum (SRF) Call Review

 The Stanislaus River Forum was held via conference call on June 16, 2020. Barbara Byrne (NMFS), Zarela Guerrero (USBR), Karna Harrigfeld (Stockton East Water District), Ryan Kok (CDFW), Sarah Perrin (USBR), Thuy Washburn (USBR), and Tim Wasiewski (OID) were in attendance. Operations, temperature and fish monitoring data were reviewed. A question was raised regarding the date of the SWT Integration Workshop. USBR stated that Kearns and West would be handing the logistics of the workshop and that they would soon be contacted to finalize the date.

8. Fish Monitoring and Studies

• At Mossdale Trawl, sampling is still suspended due to COVID-19 concerns, but USFWS is hoping to re-initiate the Mossdale Trawl in mid-July pending agency approval.

- A discussion was had around the status of activities and limitations of operations resulting from COVID-19 concerns, and it was recommended that the topic be further discussed during July's meeting and potentially added to the Annual Report.
 - Kearns & West will add this item to discuss COVID-19 impacts on SWT's operations to July's agenda.
- The Oakdale Rotary Screw Trap (RST) information was pulled from last week's FISHBIO update (see Figures 9 & 10 in handout).
 - It is still unclear if FISHBIO has completed sampling for this out migration season, but it is anticipated that sampling will soon be suspended.
 - Based on the sample, fish are increasing in size.
- Caswell RST provided its final update for the season, and sampling is now suspended
 - A discussion was had regarding the different fish responses to pulse flows in the February to April timeframe. It was suggested that bimodal out migration strategies be considered when managing flow, as has been done by SWT and SOG in the current and recent years (see Figure 11 in handout).

9. Restoration Project Updates

- Work continues on the gravel augmentation in Goodwin Canyon, which is expected to start on August 3 and continue for a period of 3 weeks.
- To this end:
 - USBR has collaborated with a contractor to inspect the gravel to ensure its suitability for salmonid spawning habitat. A sample of the gravel mix was collected and is undergoing gradation analysis.
 - USBR has also visited the site and discussed gravel placement strategies.
 - The bridge was inspected by a structural engineer and it was determined that it is suitable for the gravel project, though alternative gravel placement strategies were provided by the contractor.
- Work has also continued on the migratory corridor project, but there are no updates.

10. Progress Toward BiOp Requirements (Proposed Action Elements)

- The purpose of this agenda item is to track the progress of gravel augmentation and restoration activities to help meet targets.
 - USBR will prepare a standard tracking template to be added to and updated in monthly meeting handouts.
- Per May's action item, USBR shared the Annual Report Schedule, created based on the last two water years.
- There is still opportunity to adjust the timeframe for the Schedule because the timeline in the current BA/BiOp is less constrained than under the 2009 BiOp. Further discussion will be had on this topic during July's meeting.
- As per May's meeting action item, USBR will prepare a global SWT activities schedule.

11. Other Discussion Items

- SWT Integration
 - Per the current BA commitment for stakeholder participation, an SWT Integration workshop is being planned for late June/early July.
 - Current SWT members and local Water Districts (namely, OID, South San Joaquin, Stockton East and Central), are the stakeholders invited to participate in the workshop.
 - A discussion was had regarding the potential integration of other stakeholders, and further conversation will be had on this topic.
 - Workshop logistics, including the draft agenda, presenters, and scheduling, were also discussed.
 - Kearns & West will circulate a Doodle Poll with potential dates and times.
 - J.D. Wikert and team will draft discussion points for some sections to share with USBR for review.
 - Barbara Byrne will draft a slide deck for her short section by Friday, June 26, to share with USBR for review.
- Facilitation housekeeping
 - Future SWT conference calls will be held on the Microsoft Teams platform instead of RingCentral.
 - Draft SWT meeting notes will be available on Microsoft Teams for review and collaborative editing.
 - Kearns & West and Zarela Guerrero will coordinate the transition to Microsoft Teams.
 - The SWT Integration Workshop will still be held using RingCentral.



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Agenda

- 1. Introductions
- 2. Announcements
- 3. Operations Update and Forecasts/Hydrology
- 4. Temperature Updates
- 5. Flow Planning
- 6. Stanislaus River Forum (SRF) Call Review
- 7. Fish Monitoring and Studies
- 8. Restoration Project Updates
- 9. Progress Toward BiOp Requirements (Proposed Action Elements)
- 10. Other Discussion Items
 - a. SWT Integration
 - b. Facilitation housekeeping
- 11. Review Action Items
- 12. Next Meeting
 - a. Wednesday, July 15, 2020 (10am-12pm)



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UNITED STATES DEPARTMENT OF THE INTERIOR U.S. BUREAU OF RECLAMATION-CENTRAL VALLEY PROJECT-CALIFORNIA NEW MELONES LAKE DAILY OPERATIONS

RUN DATE: June 15, 2020

DAY	ELEV	ELEV STORAGE 1000 C ACRE-FEET IN LAKE CHANGE		COMPUTED INFLOW C.F.S.	POWER	ELEASE - C.F.S. SPILL	OUTLET	EVAPO C.F.S.	ORATION INCHES	PRECIP INCHES
		1,835.4								
1	1,036.72	1,832.4	-3.0	1,002	2,455	0	0	81	.24	.00
2	1,036.29	1,827.9	-4.5	1,019	3,191	0	0	102	.30	.00
3	1,035.99	1,824.7	-3.1	1,018	2,480	0	0	125	.37	.00
4	1,035.57	1,820.3	-4.4	1,001	3,085	0	0	129	.38	.00
5	1,035.10	1,815.4	-4.9	809	3,137	0	0	149	.44	.00
6	1,034.76	1,811.9	-3.5	753	2,405	0	0	135	.40	.00
7	1,034.45	1,808.7	-3.2	734	2,220	0	0	142	.42	.00
8	1,034.04	1,804.4	-4.3	751	2,793	0	0	111	.33	.00
9	1,033.71	1,801.0	-3.4	962	2,559	0	0	131	.39	.00
10	1,033.29	1,796.6	-4.4	870	2,937	0	0	131	.39	.00
11	1,032.84	1,791.9	-4.7	808	3,026	0	0	134	.40	.00
12	1,032.29	1,786.2	-5.7	693	3,411	0	0	150	.45	.00
13	1,031.94	1,782.6	-3.6	715	2,429	0	0	110	.33	.00
14	1,031.56	1,778.7	-3.9	711	2,599	0	0	87	.26	.00
TOTALS -56.6		11,846	38,727	0	0	1,717	5.10	.00		
ACRE-FEET -56,60		-56,600	23,497	76,815	0	0	3,406			

COMMENTS:

JUNE 2020

COMPUTED INFLOW IS THE SUM OF CHANGE IN STORAGE, RELEASES AND EVAPORATION.

SUMMARY

	RELEASE ACRE-FEET	PRECIPITA	PRECIPITATION		
POWER	76,815	0	THIS MONTH	.00	
SPILL	OUTLET 0	76,815	JULY 1, 2019 TO DATE	22.59	
	TOTAL		OCT 1, 2019 TO DATE	22.35	

OAKDALE IRRIGATION DISTRICT SOUTH SAN JOAQUIN IRRIGATION DISTRICT TRI DAMS PROJECT-CALIFORNIA

GOODWIN RESERVOIR DAILY OPERATIONS

RUN DATE: June 15, 2020

					PIVE	RELEASE - C.F.S CANALS				
DAY	ELEV		ORAGE RE-FEET CHANGE	TULLOCH RELEASE	OUTLET	SPILL	JOINT MAIN	SOUTH MAIN		
		573								
1	360.51	573	+0	2,801	0	1,510	864	335		
2	360.51	573	+0	2,898	0	1,503	907	401		
3	360.49	571	-2	2,885	0	1,500	880	406		
4	360.51	573	+2	2,899	0	1,502	875	405		
5	360.42	566	-7	2,879	0	1,471	905	405		
6	360.14	547	-19	2,269	0	875	875	402		
7	360.39	564	+17	2,237	0	854	875	361		
8	360.52	573	+9	2,780	0	1,502	851	330		
9	360.52	573	+0	2,807	0	1,506	876	367		
10	360.52	573	+0	3,000	0	1,502	982	450		
11	360.52	573	+0	2,992	0	1,502	962	426		
12	360.42	566	-7	2,988	0	1,476	962	426		
13	360.15	548	-18	2,413	0	874	959	427		
14	360.39	564	+16	2,266	0	858	888	392		
TOTAL	e		-9	38,114	0	18,435	12,661	5,533		
ACRE-FEET			-	•	-	,		•		
ACRE-F			-9	75,599	0	36,566	25,113	10,975		

JOINT MAIN OPERATED BY SSJID AND OID.

	SUMMARY					
	RELEASE ACRE-FEET					
JOINT MAIN CANAL	25,113	OUTLE	0			
SOUTH MAIN CANAL	10,975	T SPILL	36,566			
		TOTAL	72,654			

JUNE 2020

June 2020 Stanislaus River Update

Water Year Type

San Joaquin Basin "60-20-20" water year type (based on the May 75% exceedance forecast): **Dry**

Water year type changed from "Critical" based on the March forecast.

Flows

After the spring pulse flow, through the summer until the fall pulse flow begins, the Dry year type SRP flow schedule requires minimum instream base flows of 200 cfs. Goodwin releases since mid-May are shown in Figure 1, with reduced flows on weekends for public safety.

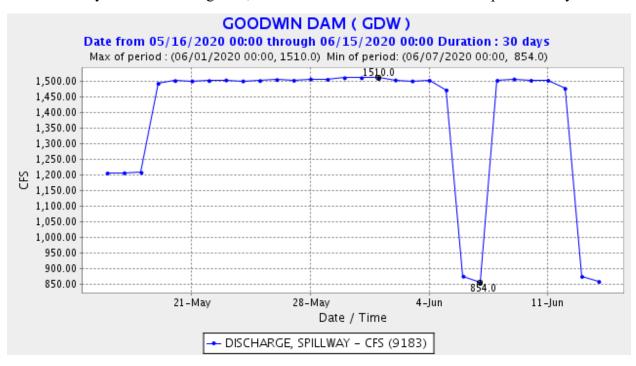


Figure 1. Goodwin (daily) releases to the Stanislaus River since May 16, 2020. Data from GDW station on CDEC.

Water Temperature

The temperature thresholds included in Figures 2-8, below, are the thresholds used in the 2019 NMFS LTO BiOp¹ (see Incidental Take Statement on p. 807) to define the extent of take anticipated from water temperature effects in the Stanislaus River. *It is important to note that many of the temperature figures provide subdaily information or information at locations other than Orange Blossom Bridge and thus don't reflect the specific metrics for take in the 2019 NMFS LTO BiOp.* Temperature thresholds have been added to all figures at the request of

¹ The 2019 NMFS LTO BiOp is available online at: <u>https://www.fisheries.noaa.gov/resource/document/biological-opinion-reinitiation-consultation-long-term-operation-central-valley</u>

Stanislaus Watershed Team members to provide a general reference of water temperature suitability.

Water temperatures in the Stanislaus River since January 2020 are shown below at Goodwin Canyon (Figure 2), Orange Blossom Bridge (Figure 3), and at Ripon (Figure 4). Water temperatures in the San Joaquin River since January 2020 are shown below at Vernalis (Figure 5). Current-year water temperatures are plotted along with historical temperatures for Orange Blossom Bridge (Figure 6), Ripon (Figure 7), and Vernalis (Figure 8).

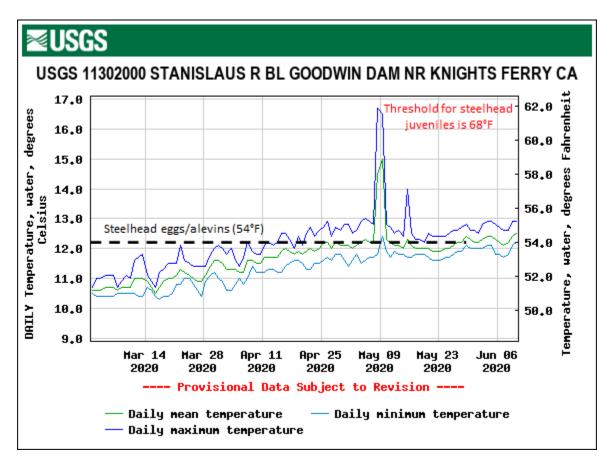


Figure 2. Daily water temperatures on the Stanislaus River upstream of Knights Ferry since March 1, 2020. Data from USGS gage 11302000 on NWIS; temperature threshold reference lines added by SWT.

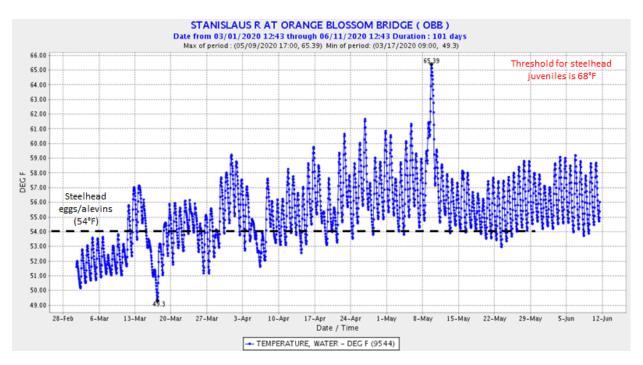


Figure 3. Stanislaus (hourly) water temperatures at Orange Blossom Bridge since March 1, 2020. Data from OBB station on CDEC; temperature threshold reference lines added by SWT.

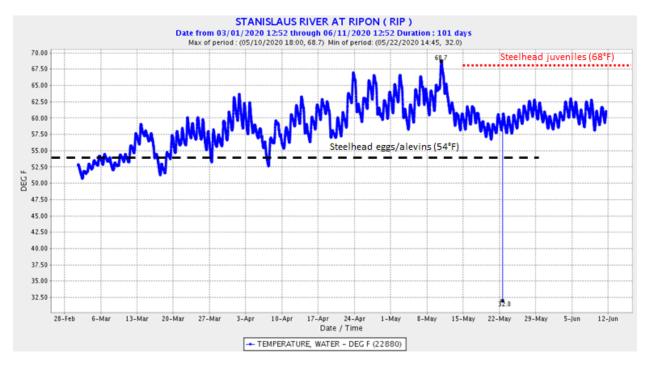


Figure 4. Stanislaus (15-minute) water temperatures at Ripon since March 1, 2020. Data from RIP station on CDEC; temperature threshold reference lines added by SWT.

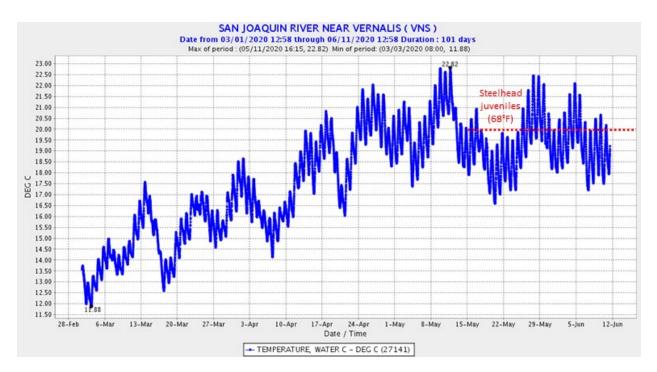
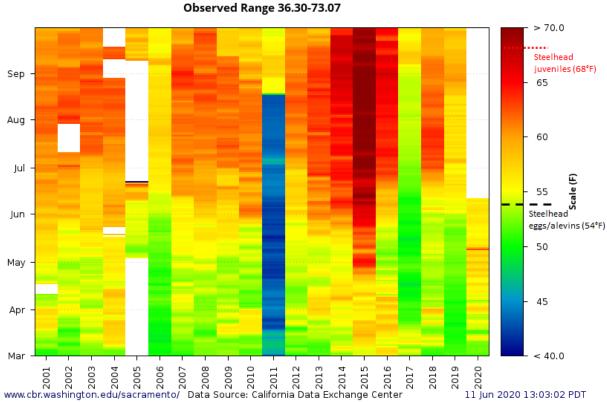


Figure 5. San Joaquin River (15-minute) water temperatures at Vernalis since March 1, 2020. Data from VNS station on CDEC; temperature threshold reference line added by SWT. Note that, unlike in the previous figures, temperature is reported in degrees Celsius. $10^{\circ}C=50^{\circ}F$; $12^{\circ}C=53.6^{\circ}F$; $14^{\circ}C=57.2^{\circ}F$; $16^{\circ}C=60.8^{\circ}F$; $18^{\circ}C=64.4^{\circ}F$; $20^{\circ}C=68.0^{\circ}F$; $22^{\circ}C=71.6^{\circ}F$.



WY 2001-2020 OBB Stanislaus R at Orange Blossom Bridge Daily Average Water Temperature (F) Observed Range 36.30-73.07

Figure 6. Stanislaus River water temperatures at Orange Blossom Bridge for March through September from 2001 to present. Data from SacPAS; temperature threshold reference lines added by SWT. <u>http://www.cbr.washington.edu/sacramento/data/query_river_allyears.html</u>

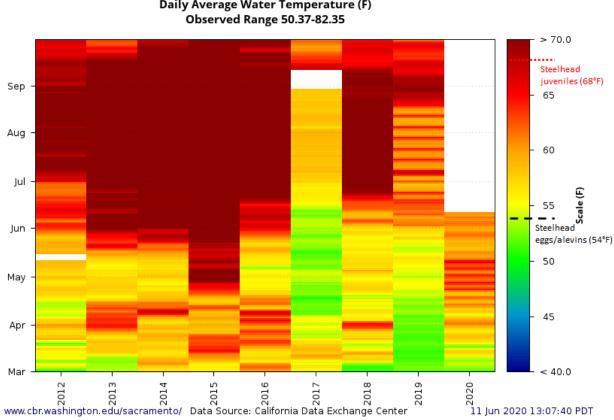
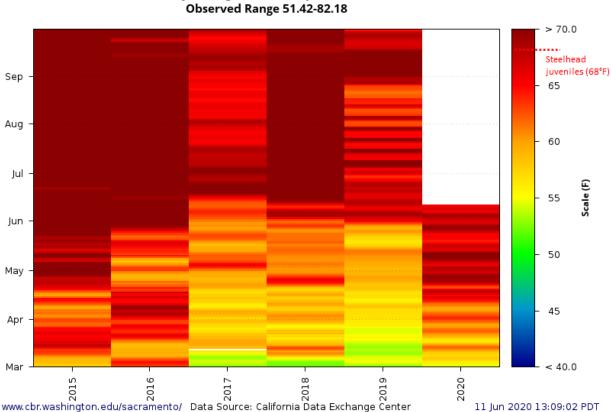


Figure 7. Stanislaus River water temperatures at Ripon for March through September from 2012 to present. Data from SacPAS; temperature threshold reference lines added by SWT. http://www.cbr.washington.edu/sacramento/data/query_river_allyears.html



WY 2015-2020 VNS San Joaquin R near Vernalis Daily Average Water Temperature (F) Observed Range 51.42-82.18

Figure 8. San Joaquin River water temperatures at Vernalis for March through September from 2015 to present. Data from SacPAS; temperature threshold reference line added by SWT. http://www.cbr.washington.edu/sacramento/data/query_river_allyears.html

Update on Fish Monitoring

Rotary screw trapping at Oakdale (conducted by FISHBIO) and Caswell [conducted by the Pacific States Marine Fisheries Commission (PSMFC)] for the 2020 outmigration season (for monitoring of outmigrating juvenile salmonids) began in late December (at Oakdale) and early January (at Caswell). Both FISHBIO and PSMFC suspended sampling in mid-March due to COVID-19 concerns. PSMFC resumed sampling in late March and FISHBIO resumed sampling in early April. PSMFC concluded sampling for the 2020 outmigration season on May 22, 2020. Chinook catch and fork lengths from each location are summarized in Figures 9 and 10 (Oakdale) and Figures 11 and 12 (Caswell).

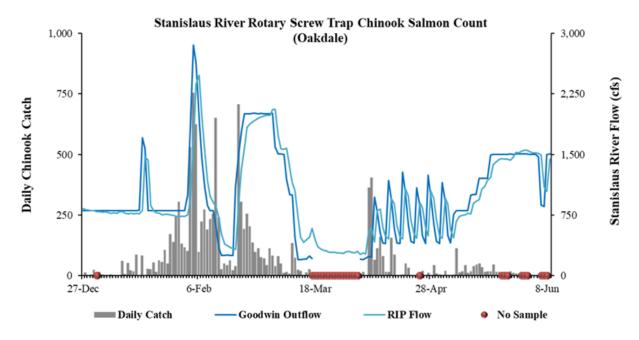


Figure 9. Juvenile Chinook catch through June 9, 2020, at the rotary crew trap near Oakdale. Figure provided by FISHBIO in their 6/10/20 San Joaquin Basin Update.

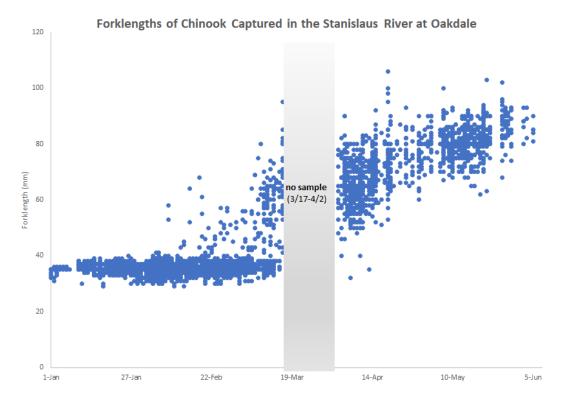


Figure 10. Fork lengths of juvenile Chinook catch through June 5, 2020, at the rotary crew trap near Oakdale. Data provided by FISHBIO.

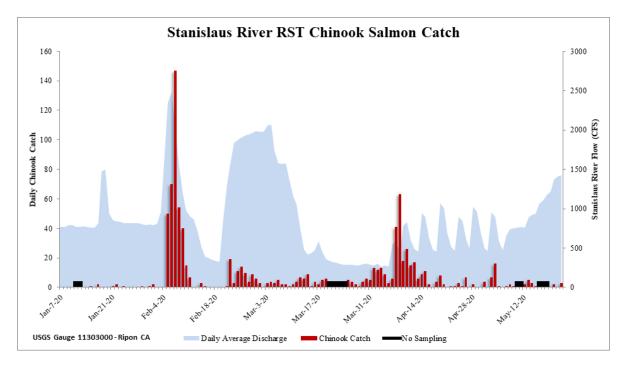


Figure 11. Juvenile Chinook catch through May 22, 2020, at the rotary crew trap near Caswell State Park. Data provided by PSMFC.

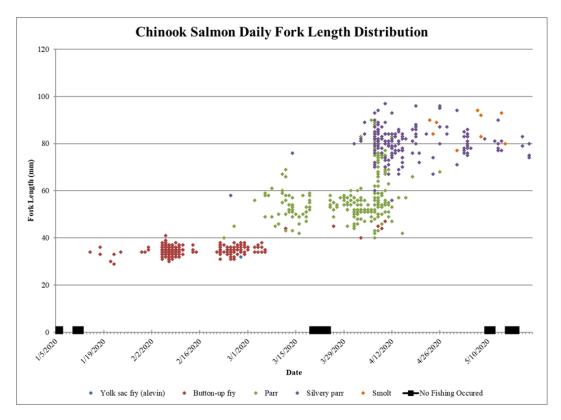


Figure 12. Fork lengths of juvenile Chinook catch through May 22, 2020, at the rotary crew trap near Caswell State Park. Data provided by PSMFC.

USFWS conducts the Mossdale Trawl on the mainstem San Joaquin River for much of the year. Since the start of the water year (October 1, 2019) through March 20, 2010, four Chinook salmon (one ad-clipped) and no *O. mykiss* have been reported at that monitoring location (based on data from Bay Delta Live: <u>https://www.baydeltalive.com/fish/djfmp-highlights</u>). USFWS suspended sampling at Mossdale in late March due to COVID-19 concerns. CDFW, which normally takes over the Mossdale Trawl in April, is not sampling due to COVID-19 concerns.