



— BUREAU OF —  
RECLAMATION

## Stanislaus Watershed Team

10:00 AM – 12:00 PM

[Stanislaus Watershed Team Notes](#)

Wednesday, June 16, 2021

### Notes

#### 1. Actions

- All – reach out to Peggy Manza for updated forecast numbers after 6/16/21 as desired.
- All – reach out to Elissa Buttermore if you'd like to participate in weekly coordination calls related to real-time operations in the context of drought planning.
- Elissa Buttermore - Share USBR drought one-pager with SWT
- Barb Byrne – modify scaling on temperature graphs to improve resolution above 70° per request of the Stanislaus River Forum.
- Kearns & West - Switch meeting invite to MS Outlook to solve updating issues with MS Teams.
- Kearns & West - Follow-up with Erin Foresman regarding July functional flows presentation, including extending meeting from 9:30am-12:00pm.

#### 2. Introductions

- USBR: Peggy Manza, Spencer Marshall, Levi Johnson, Luke Davis, Elissa Buttermore, Liz Kiteck
- NMFS: Barb Byrne
- USFW: Craig Anderson
- CDFW: Crystal Rigby, Gretchen Murphey, Steve Tsao
- SWRCB: Erin Foresman, Michael George, Yongxuan Gao, Chris Carr
- OID: Steve Knell
- SEWD: Lilliana Freeman

- DWR: Vinh Giang
  - Kearns & West: Rafi Silberblatt, Susan Ellsworth
3. Ground Rules
- The facilitator reminded meeting participants of the ground rules as listed in the agenda footnotes.
4. Announcements
- There were no announcements
5. Operations Update and Forecasts/Hydrology
- New Melones:
    - Current storage is 1.3 MAF.
    - Accumulated inflow is 291 TAF. Inflow has stopped and draw-down has begun.
      - a. Total adjusted inflow is forecasted at 305 TAF for this water year.
      - b. Total precipitation for the year is 16.78” or 62% of average.
    - Storage estimates for the end September are between 0.9- 1.1 MAF.
    - Releases may need to remain elevated for August and September to support dissolved oxygen (DO) requirements at Ripon (DO needs to remain at 7.0).
    - New Melones is in the best relative condition in terms of storage among major reservoirs at 88% of historic average, or 50% of storage capacity.
    - May was the second driest on record. Looking at potentially the driest May-Sept ever.
  - Goodwin Reservoir:
    - Current releases from New Melones are generating 1500 cfs below Goodwin.
    - July releases are anticipated to be 1000-1500 cfs.
  - See meeting handout for more details

#### Questions/Comments

- USBR noted that commercial river rafters have pulled rafts due to increased flows and are not currently anticipating any useable flows for rafting on the Stanislaus.
  - The group noted concerns about members of the general public trying to run on increased flows and the need for enhanced safety measures and outreach.
- CDFW asked if USBR is anticipating any releases above 1500 cfs over the next few months.

- USBR indicated that its preference is not to exceed 1500 cfs unless absolutely necessary due to potential crop impacts from seepage on farms adjacent to the river.
- NMFS asked if seepage from higher flows might be welcome in a dry year.
  - USBR indicated that determining this would likely require contacting farmers that border the river.

## 6. Temperature Updates

- Rising temperatures this summer are likely to begin exceeding reference lines; however, in most cases, they are not expected to exceed temperature-related take thresholds.
- The Stanislaus is in relatively better shape than other rivers in terms of experiencing temperature-related issues.
- NMFS noted a request from the Stanislaus River Forum to modify scaling on temperature graphs to improve resolution above 70°F, which it will undertake for July.
- See meeting handout for details

### Questions/Comments

- OID noted that releasing water to meet regulatory requirements can potentially lead to temperature issues as in 2015, when all of the water left in the reservoir belonged to the Irrigation District because USBR had drained all its water.
  - NMFS noted that New Melones is looking better now than it did at the same time in 2015, but agreed that circumstances might look different next year.
- NMFS noted that protecting cold water storage at Shasta for winter-run Chinook salmon is a top priority.

## 7. Flow Planning

- USBR provided an overview of its planned drought activities.
- USBR noted the advent of a new weekly coordination call on Wednesday mornings to go over real time operations. [ACTION] Reach out to Elissa Buttermore if you'd like to know more.
- See meeting handout for details.
- [ACTION] Elissa Buttermore to share drought one pager with Kearns & West to distribute to SWT.

### Questions/Comments:

- SWRCB noted water quality improvements in the southern delta and asked the SWT if there were theories as to why and if additional monitoring might enable better correlations between operations and water quality going forward.
  - SWRCB noted that it has been tracking favorable salinity in the southern delta.
  - USBSR indicated that similar water quality improvements and low salinity at Vernalis occurred during the last drought as well. This is likely a reflection of very limited allocations, little to no irrigation and related runoff into San Joaquin and reduced pumping.
  - NMFS noted a possible relationship to differences in refuge operations whereby held water was released earlier to take advantage of higher flows.

#### 8. Stanislaus River Forum (SRF) Call Review

- Stanislaus River Forum was held via Teams on 6/15/2021. Barbara Byrne (NMFS), Denise Barnard (EBMUD), Shiloh Foust (Sunshine Rafting), Sarah Perrin (USBR), Chrissy Sonke (FishBio), Levi Johnson (USBR), Peggy Manza (USBR), Spencer Marshall (USBR), Gretchen Murphy (CDFW), Cory Starr (PSMFC), Steve Tsao (CDFW) and Logan Day (PSMFC) were in attendance. Updates on operations, temperature and fish monitoring were provided. Several questions about current and future operations were raised and answered.

#### 9. Fish Monitoring and Studies

- NMFS provided an update on the RST data from Fishbio and PSMFC, noting that Mossdale sampling has been reduced from five days per week to three.
- Stanislaus Steelhead redd survey ended 4/30/21
- See meeting handout for details.

#### 10. Restoration Project Updates

- Plans are underway to inject gravel below Goodwin Dam in the float tube pool area and table crossing beginning the second week of August. A contractor has been hired and a site visit has been scheduled for next week. Work will likely take three weeks to complete and should be done by the first week of September.

#### Questions/Comments:

- OID noted that the Wakefield Habitat Improvement Project for the City of Oakdale was approved by the planning commission on 6/2/21, thereby enabling project planning and the CEQA process to advance.

#### 11. Progress Update on Proposed Action Elements

- No updates were provided.

#### 12. Other Discussion Items

- Items to elevate to WOMT
  - No items to elevate to WOMT
- Future presentations
  - A presentation on Functional Flows will be provided in July's SWT meeting. The SWT call will be extended by a half hour – starting at 9:30am - to accommodate.
  - **[Action Item]** Kearns & West to check in with Erin Foresman on presentation details AND extend July meeting by half hour.

#### 13. Housekeeping

- Updates to MS Teams calendar invites for monthly SWT calls don't seem to be working.
- **[Action Item]** Kearns & West will recreate the SWT monthly calendar invite in Outlook including information from MS Teams and re-circulate to the SWT.

#### 14. Next Meeting

- Wednesday, July 21, 2021 (9:30am-12pm)



— BUREAU OF —  
RECLAMATION

## Stanislaus Watershed Team

10:00 AM – 12:00 PM

Conference Line: 1 (321) 209-6143; Meeting ID: 297 240 723#

MS Teams [webinar](#)

[Stanislaus Watershed Team Notes](#)

**Wednesday, June 16, 2021**

### Agenda

1. Introductions
2. Ground Rules<sup>1</sup>
3. Announcements
4. Operations Update and Forecasts/Hydrology
5. Temperature Updates
6. Flow Planning
  - o Drought Planning
7. Stanislaus River Forum (SRF) Call Review
8. Fish Monitoring and Studies
9. Restoration Project Updates
10. Progress Update on Proposed Action Elements

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<sup>1</sup> The Stanislaus Watershed Team's Ground Rules are as follows:

1. Seek to understand and respect opposing views and suggestions for change (w/in the parameters of the Guidance Document).
2. Seek to leverage collective expertise (including from agencies' & stakeholders' consultants).
3. Hold questions/discussion at the discretion of the presenter.
4. Honor time limits - keep comments and discussion succinct and focused on meeting objectives as needed.
5. Make constructive proposals and suggestions to seek mutually agreeable solutions for all parties.
6. Keep a record of discussion and dialogue.
7. One speaker at a time
8. Take space/make space.

11. Other Discussion Items

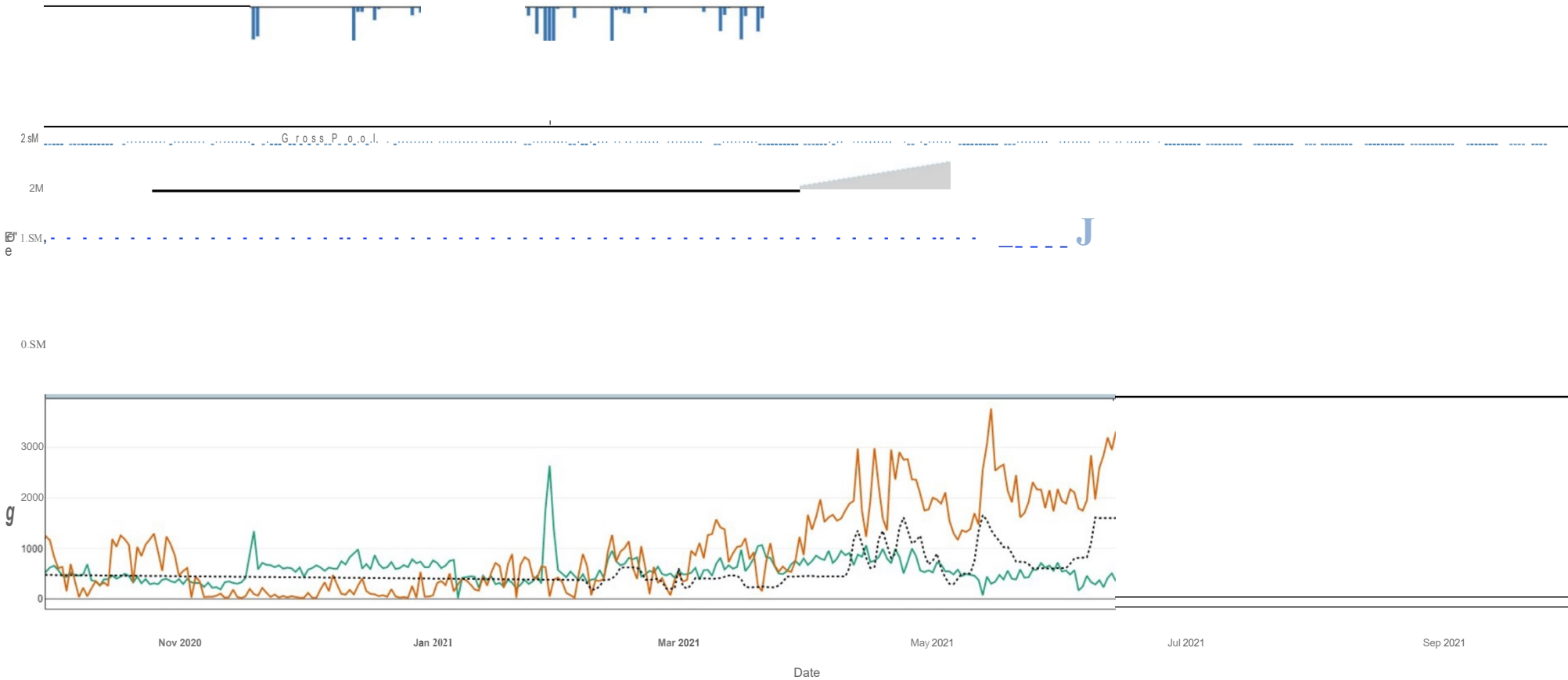
- Items to elevate to WOMT
- Future presentations (Functional Flows in July)

12. Review Action Items

13. Next Meeting

- Wednesday, July 21, 2021 (9:30am-12pm)

New Melones Dam & Lake - Stanislaus River Basin  
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- Top of Conservation-Early Refill (ac-ft) --- Inflow (cfs) ■ Precip @ Dam (in)
- Top of Conservation-Late Refill (ac-ft) --- Outflow (cfs)
- Storage (ac-ft) --- Oranoe Blossom Br (cfs)
- Gross Pool



United States Department of the Interior  
Bureau of Reclamation, Central Valley Project-California

Daily CVP Water Supply Report, June 13, 2021; Run Date: June 14, 2021  
(Reservoir Releases in Cubic Feet/Second)

Reservoir	Dam	WY 2020	WY 2021	15-Year Median
Trinity	Lewiston	820	478	1,131
Sacramento	Keswick	11,917	7,571	10,275
Feather	Oroville (SWP)	3,300	2,550	2,550
American	Nimbus	2,766	1,865	3,014
Stanislaus	Goodwin	874	1,504	501
San Joaquin	Friant	370	238	352

Storage in Major Reservoirs in Thousands of Acre-Feet

Reservoir	Capacity	15-Year Avg	WY 2020	WY 2021	% O 15 Yr Avg
Trinity	2,448	1,733	1,822	1,219	70
Shasta	4,552	3,442	3,399	1,880	55
Folsom	977	763	783	336	44
New Melones	2,420	1,478	1,783	1,307	88
Fed. San Luis	966	461	353	226	49
Total North CVP	11,363	7,877	8,140	4,968	63
Millerton	520	383	447	268	70
Oroville (SWP)	3,538	2,485	2,336	1,262	51

Accumulated Inflow for Water Year to Date in Thousands of Acre-Feet

Reservoir	Current WY 2020	WY 2020	WY 1977	WY 1983	15 Yr Avg
Trinity	325	183	2,313	936	35
Shasta	1,937	1,909	9,529	4,027	48
Folsom	678	290	5,352	2,018	34
New Melones	291	----	2,006	744	39
Millerton	416	153	2,990	980	42

Accumulated Precipitation for Water Year to Date in Inches

<b>Reservoir</b>	<b>Current Water Year 2021</b>	<b>WY 1977</b>	<b>WY 1983</b>	<b>AVG (N Yrs)</b>	<b>% of Avg</b>	<b>Last 24 Hours</b>
Trinity at Fish Hatchery	16.21	12.76	54.65	30.59 (59)	53	0.00
Sacramento at Shasta Dam	23.52	17.24	112.33	59.78 (64)	39	0.00
American at Blue Canyon	31.59	15.64	103.88	64.64 (46)	49	0.00
Stanislaus at New Melones	16.78	----	45.33	26.85 (43)	62	0.00
San Joaquin at Huntington LK	17.68	17.20	81.40	40.31 (46)	44	0.00

## **Current Releases**

Goodwin Reservoir's Daily Operations for the month of June can be found at this website:

<https://www.usbr.gov/mp/cvo/vungvari/gdwdop0621.pdf>

New Melones' Lake Daily Operations for the month of June can be found at this website:

<https://www.usbr.gov/mp/cvo/vungvari/nmldop0621.pdf>

Tulloch Reservoir's Daily Operations for the month of June can be found at this website:

<https://www.usbr.gov/mp/cvo/vungvari/tuldop0621.pdf>

## **Last Month's Releases:**

Goodwin Reservoir's Daily Operations for the month of May can be found at this website:

<https://www.usbr.gov/mp/cvo/vungvari/gdwdop0521.pdf>

New Melones' Lake Daily Operations for the month of May can be found at this website:

<https://www.usbr.gov/mp/cvo/vungvari/nmldop0521.pdf>

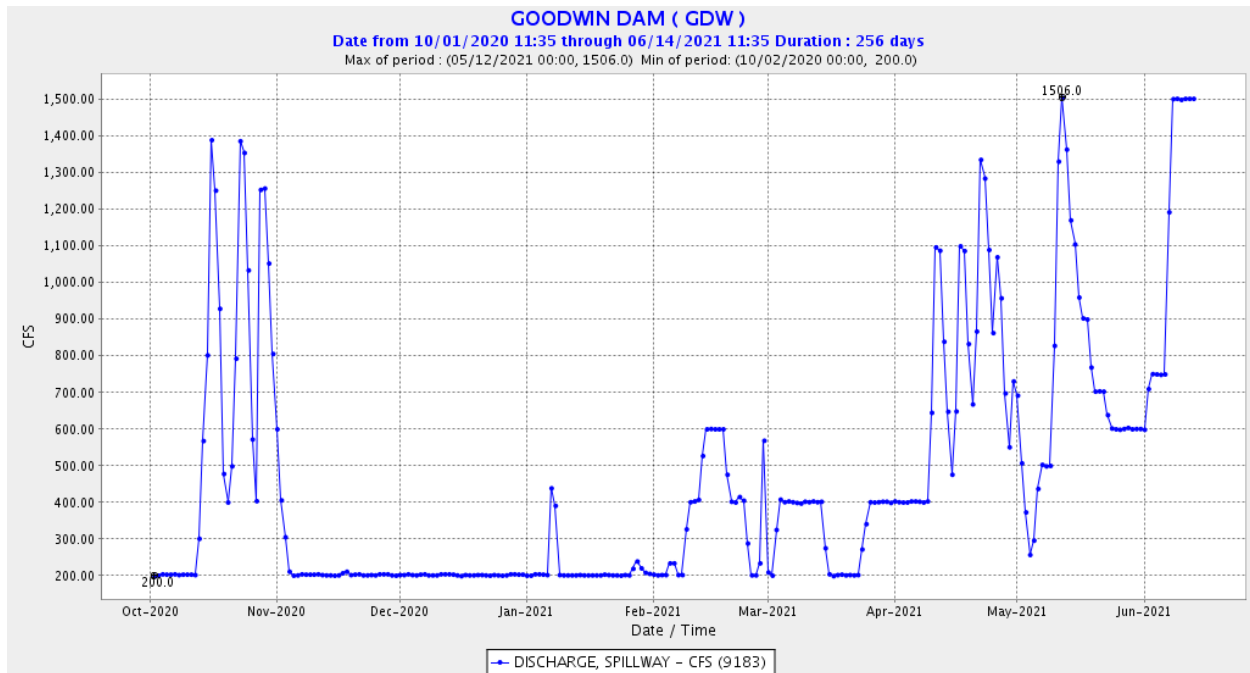
Tulloch Reservoir's Daily Operations for the month of May can be found at this website:

<https://www.usbr.gov/mp/cvo/vungvari/tuldop0521.pdf>

## June 2021 Water Temperature and Fish Monitoring Update

### Year-to-Date Flows

After the spring pulse flow, the SRP flow schedule for Critical years requires 150 cfs through the summer; recent releases have been higher than the SRP minimum flow for Delta needs. Goodwin releases since October 1, 2020 are shown in Figure 1.



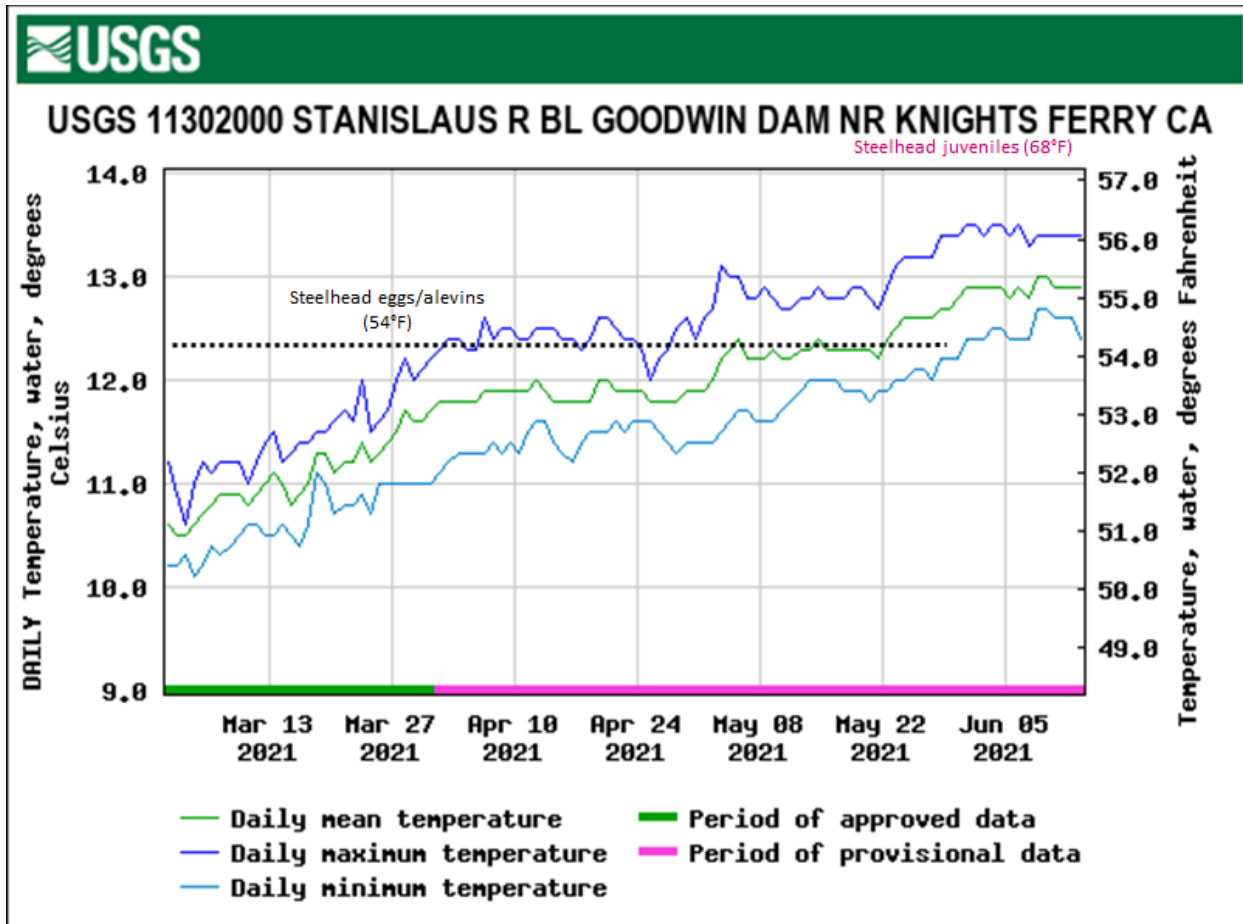
**Figure 1.** Goodwin (daily) releases to the Stanislaus River since October 1, 2020. Data from GDW station on CDEC.

### Water Temperature

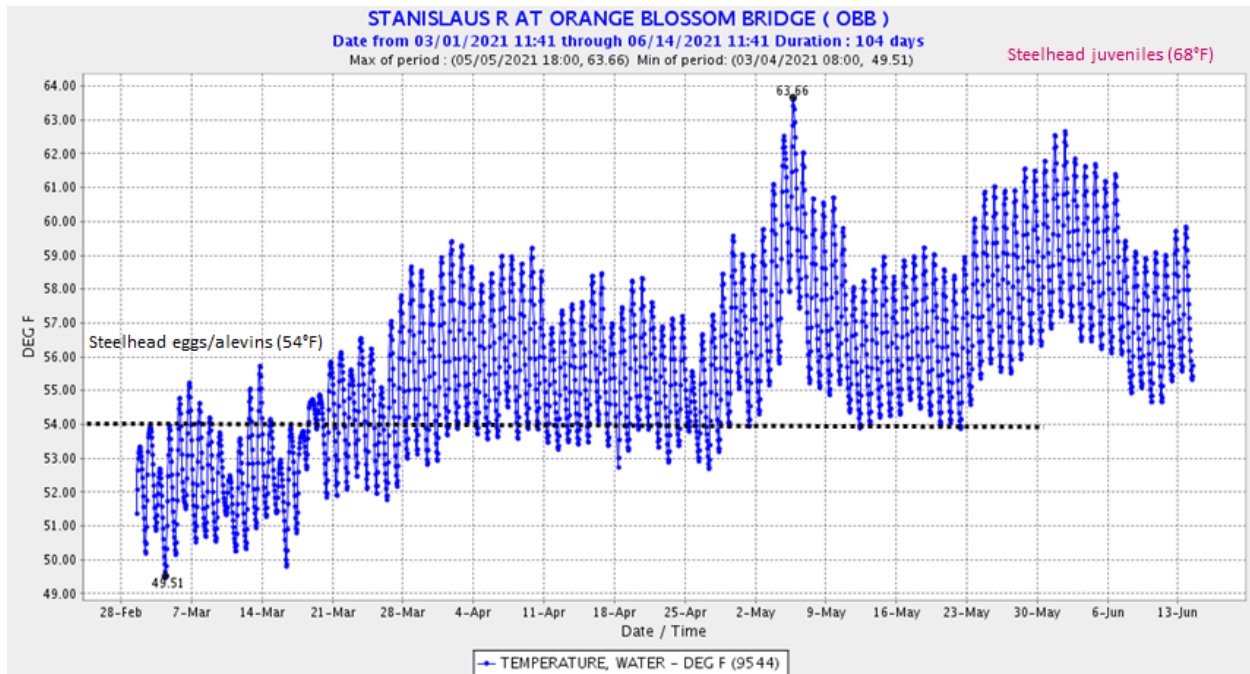
The temperature thresholds included in Figures 2-9, below, are the thresholds used in the 2019 NMFS LTO BiOp<sup>2</sup> (see Incidental Take Statement on p. 807) to define the extent of take anticipated from water temperature effects in the Stanislaus River. *It is important to note that many of the 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 these figures at the request of Stanislaus Watershed Team members to provide a general reference of water temperature suitability.

Water temperatures in the Stanislaus River since March 1, 2021 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 March 1, 2021 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). A compilation of Stanislaus River water temperatures and Goodwin releases is provided in Figure 9.

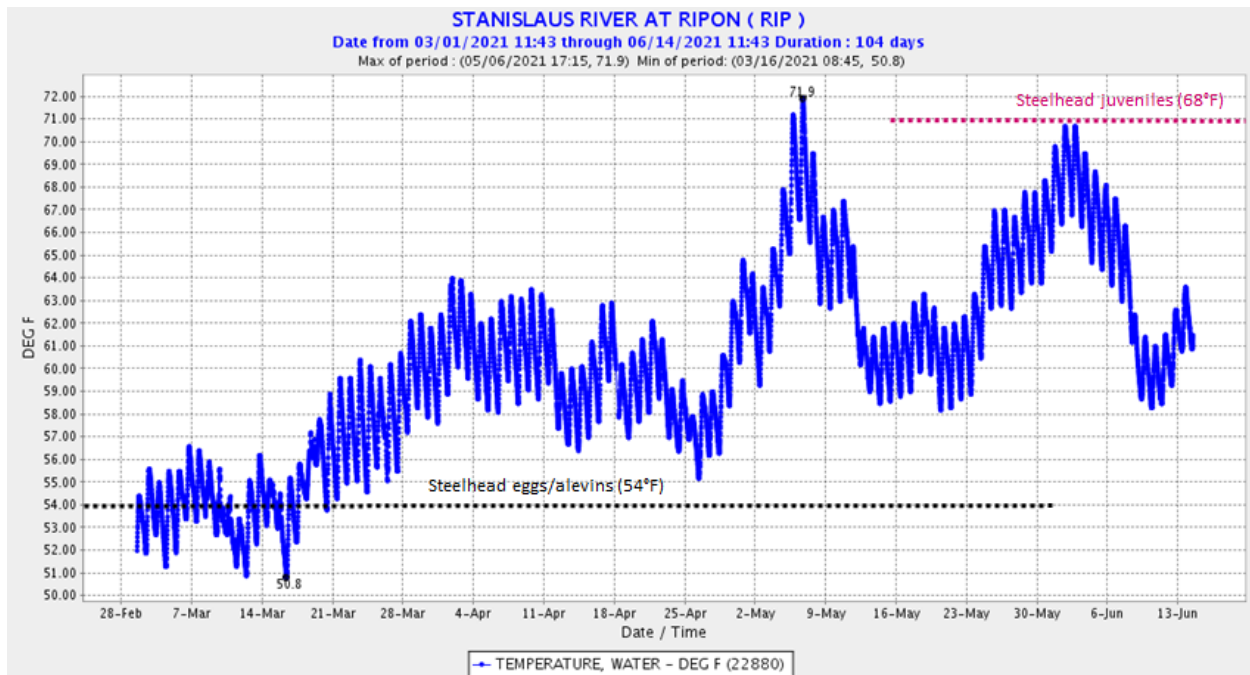
<sup>2</sup> The 2019 NMFS LTO BiOp is [available online here](#).



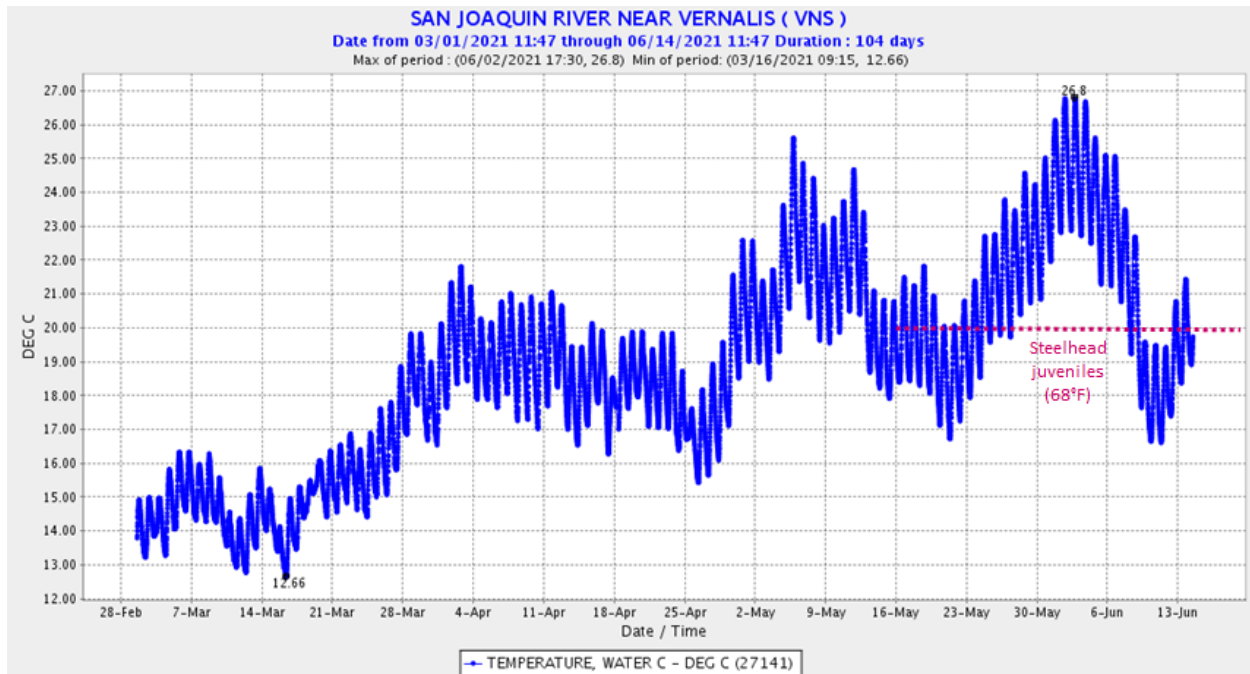
**Figure 2.** Daily water temperatures on the Stanislaus River upstream of Knights Ferry since March 1, 2021. Data from USGS gage 11302000 on NWIS; temperature threshold reference line added by SWT.



**Figure 3.** Stanislaus (hourly) water temperatures at Orange Blossom Bridge since March 1, 2021. Data from OBB station on CDEC; temperature threshold reference line added by SWT.

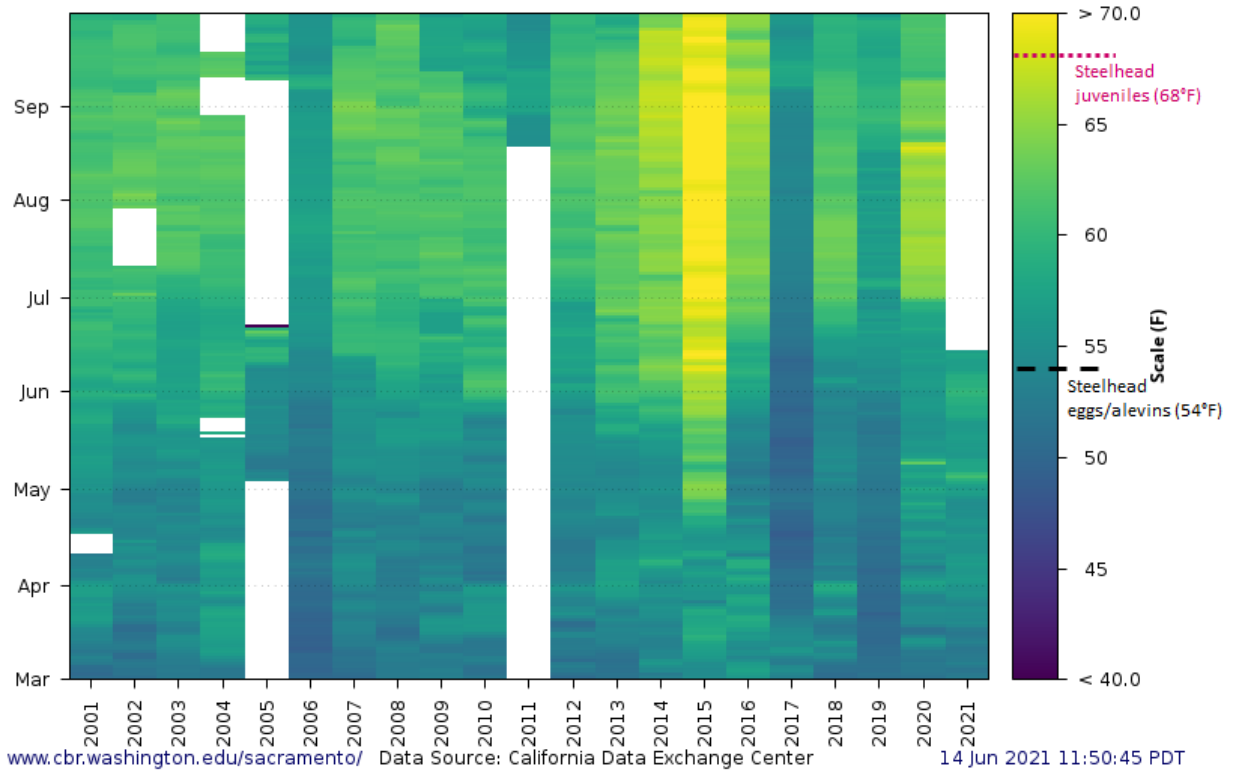


**Figure 4.** Stanislaus (15-minute) water temperatures at Ripon since March 1, 2021. Data from RIP station on CDEC; temperature threshold reference lines added by SWT.



**Figure 5.** San Joaquin River (15-minute) water temperatures at Vernalis since March 1, 2021. 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.  $10^{\circ}\text{C}=50^{\circ}\text{F}$ ;  $12^{\circ}\text{C}=53.6^{\circ}\text{F}$ ;  $14^{\circ}\text{C}=57.2^{\circ}\text{F}$ ;  $16^{\circ}\text{C}=60.8^{\circ}\text{F}$ ;  $18^{\circ}\text{C}=64.4^{\circ}\text{F}$ ;  $20^{\circ}\text{C}=68.0^{\circ}\text{F}$ ;  $22^{\circ}\text{C}=71.6^{\circ}\text{F}$ ;  $24^{\circ}\text{C}=75.2^{\circ}\text{F}$ ;  $26^{\circ}\text{C}=78.8^{\circ}\text{F}$ ;  $28^{\circ}\text{C}=82.4^{\circ}\text{F}$ ;  $30^{\circ}\text{C}=86.0^{\circ}\text{F}$ .

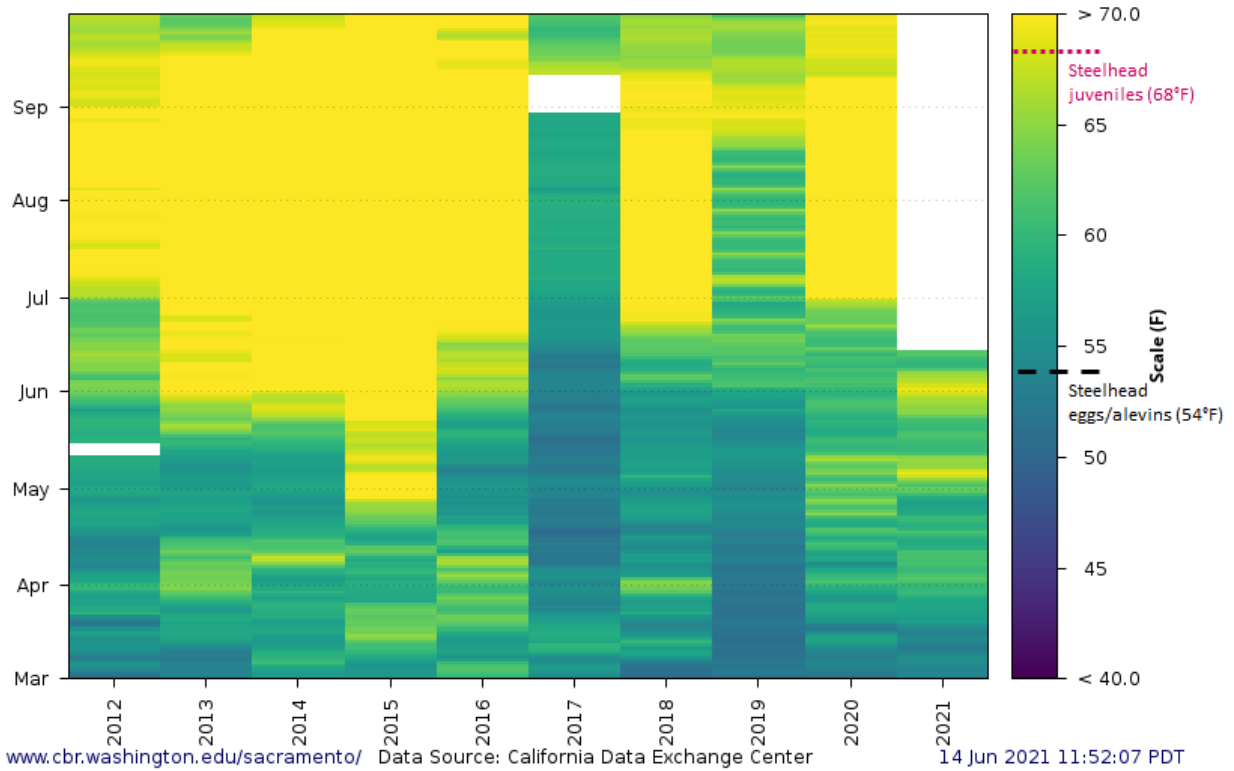
**WY 2001-2021 OBB Stanislaus R at Orange Blossom Bridge**  
**Daily Average Water Temperature (F)**  
**Observed Range 36.30-73.10**



**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.

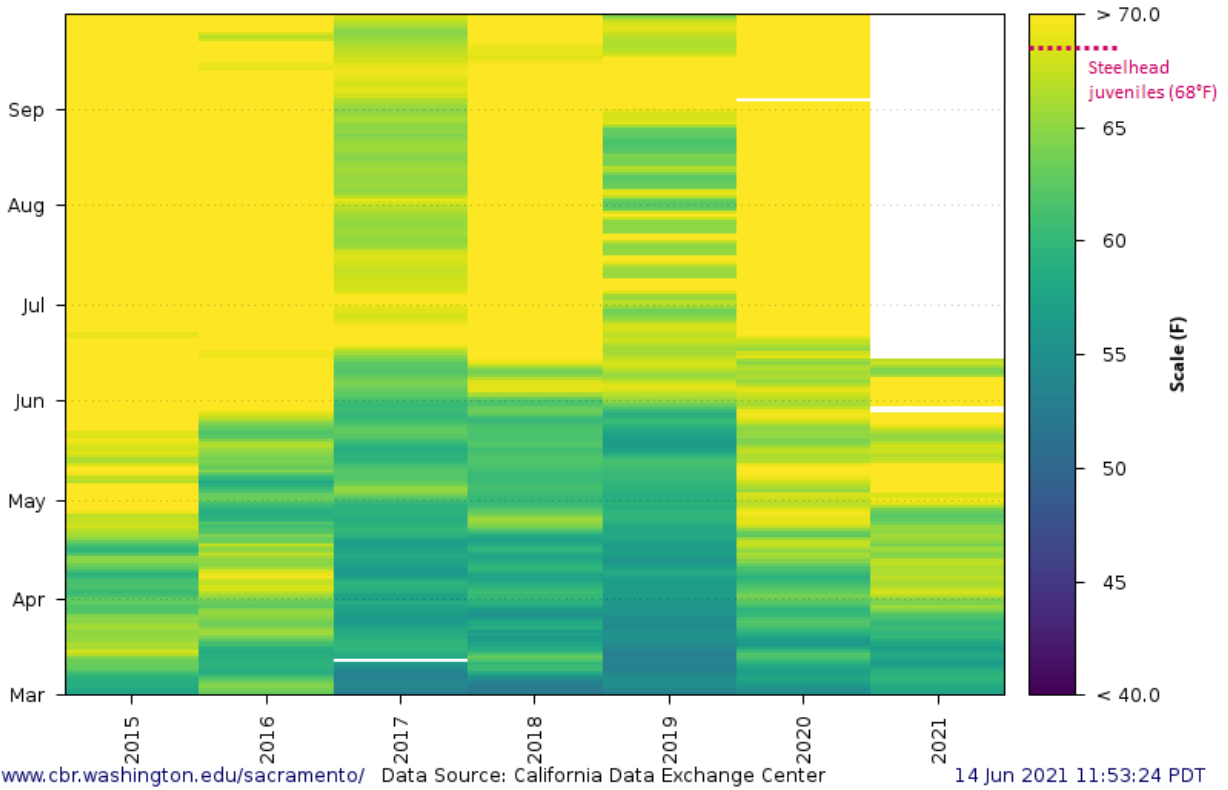


WY 2012-2021 RIP Stanislaus R at Ripon (USGS)  
Daily Average Water Temperature (F)  
Observed Range 50.37-82.35

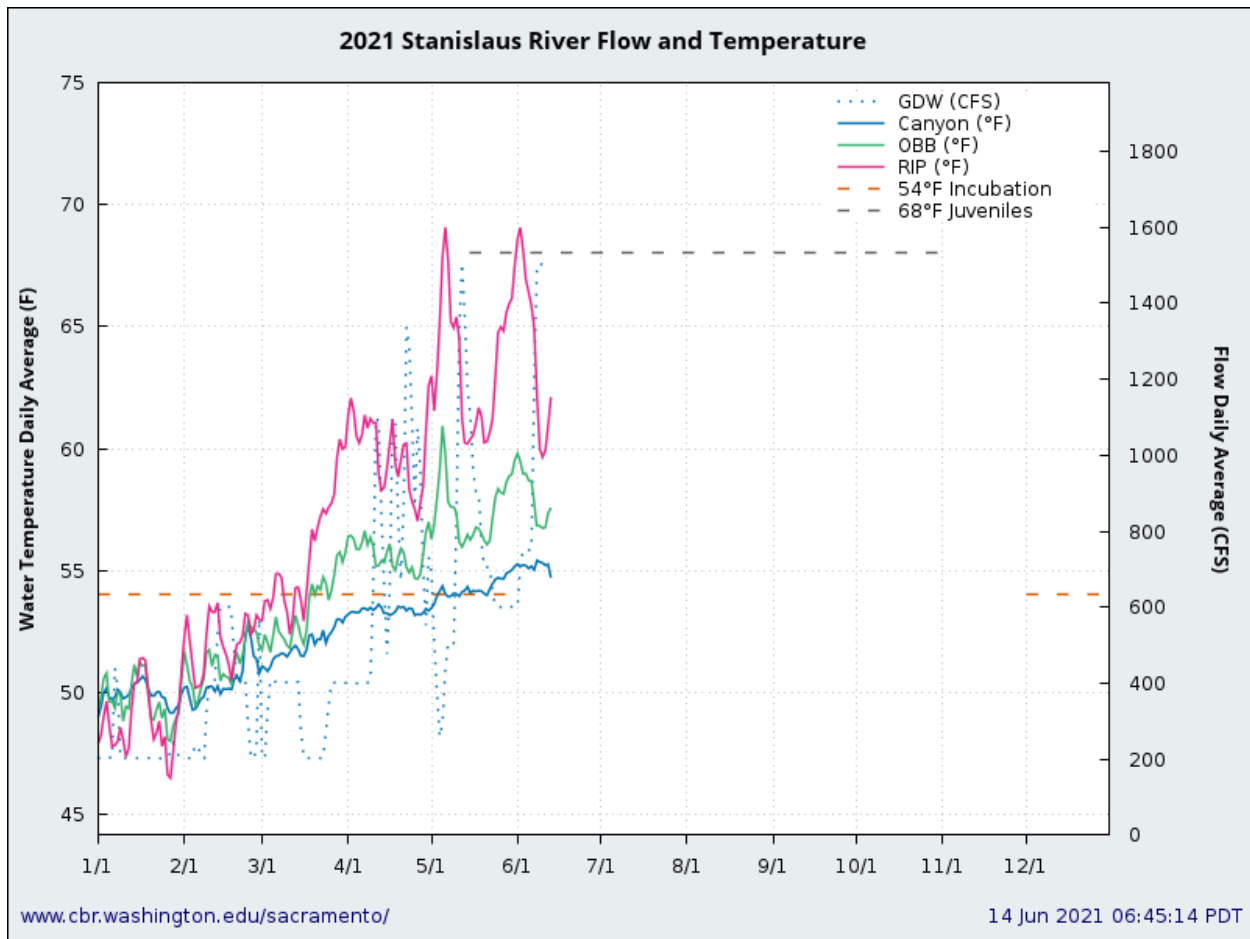


**Figure 7.** Stanislaus River water temperatures at Ripon for March through September from 2012 to present. [Figure from SacPAS using RIP station data from CDEC](#); temperature threshold reference lines added by SWT.

WY 2015-2021 VNS San Joaquin R near Vernalis  
Daily Average Water Temperature (F)  
Observed Range 51.42-84.80



**Figure 8.** San Joaquin River water temperatures at Vernalis for March through September from 2015 to present. [Figure from SacPAS using VNS station data from CDEC](#); temperature threshold reference line added by SWT.



**Figure 9.** Stanislaus River flow and water temperatures from January 1, 2021 to present. [Data \(including temperature threshold reference lines\) from SacPAS:](#)

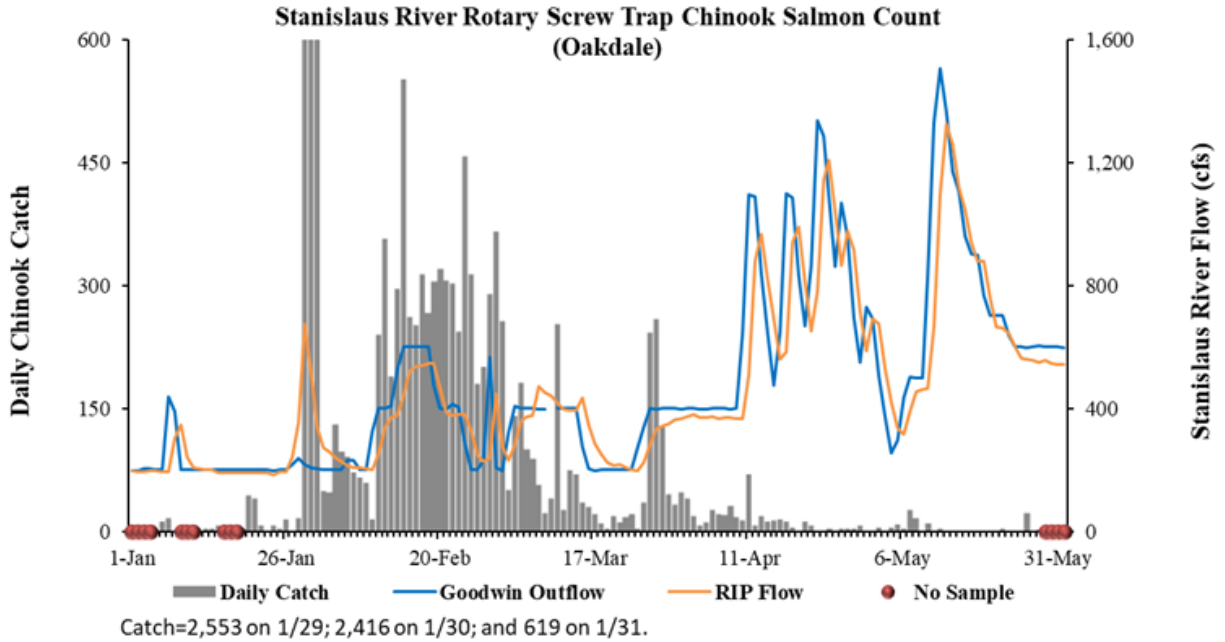
## Update on Fish Monitoring

### Rotary Screw Traps

Rotary screw trapping at Oakdale (conducted by FISHBIO) and Caswell [conducted by the Pacific States Marine Fisheries Commission (PSMFC)] for the 2020/2021 outmigration season (for monitoring of outmigrating juvenile salmonids) began in early January. Chinook catch at each location is summarized in Figure 10 (Oakdale) and Figures 11 and 12 (Caswell). Through June 1, 2021, the trap at Caswell has captured a total of 199 unmarked Chinook Salmon, 0 unmarked steelhead, and 3,441 juvenile lamprey.

Starting May 7, 2021, due to seasonal increase of river recreationalists, the rotary screw trap cones at the Caswell trap were raised over the weekend to allow floaters and boaters to safely circumvent the traps. Sampling at Caswell concluded for the season on June 3, 2021.

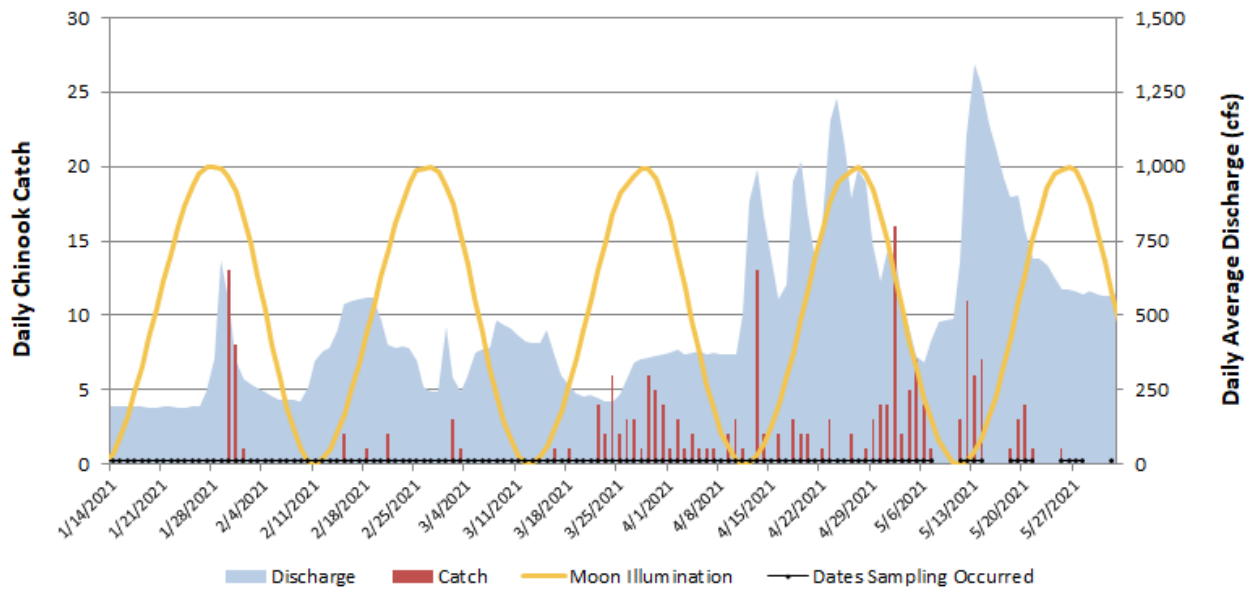
The rotary screw trap at Oakdale is still sampling Monday through Friday (as at Caswell, cones raised over the weekend) and sampling will likely conclude for the season at the end of June.



**Figure 10.** Daily juvenile Chinook catch through June 1, 2021, at the rotary screw trap near Oakdale. Figure courtesy of Fishbio from their San Joaquin Basin update.

**Stanislaus River at Caswell Memorial State Park (RSTs):**

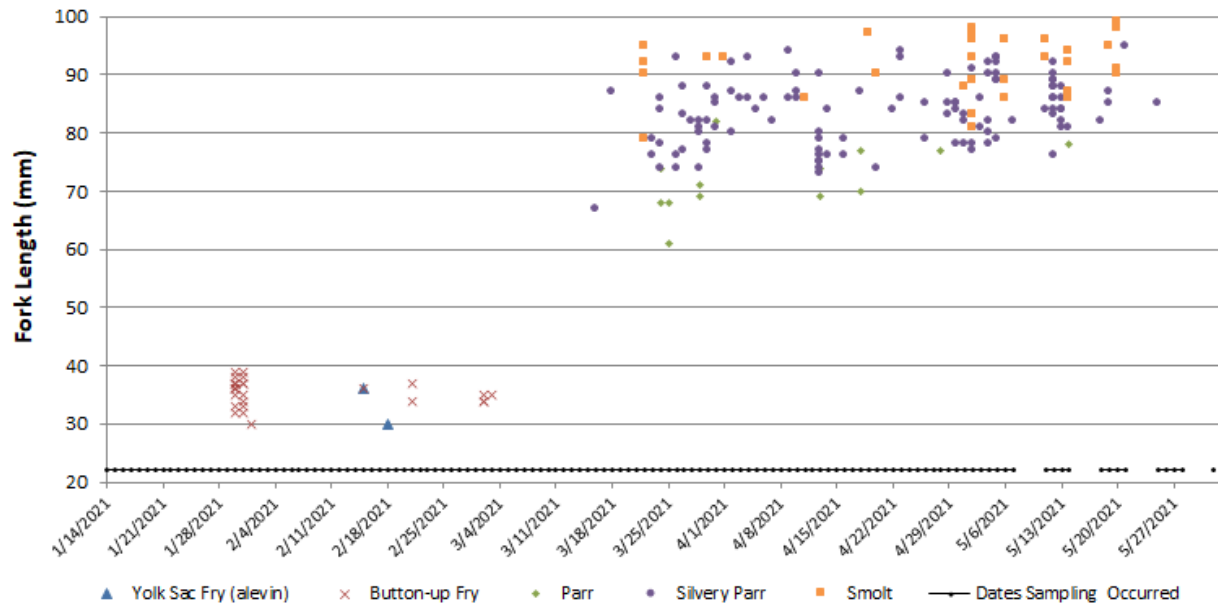
Daily catch of natural origin Chinook Salmon and daily average discharge at Ripon during the 2021 Stanislaus River rotary screw trap survey season.



**Figure 11.** Daily juvenile Chinook catch through June 1, 2021, at the rotary screw trap near Caswell State Park. Discharge data is at Ripon. Figure courtesy of Pacific States Marine Fisheries Commission.

**Stanislaus River at Caswell Memorial State Park (RSTs):**

Daily fork length distribution by life stage of natural origin Chinook Salmon measured during the 2021 Stanislaus River rotary screw trap survey season.



**Figure 12.** Daily juvenile Chinook catch (plotted by fork length and life stage) through June 1, 2021, at the rotary screw trap near Caswell State Park. Figure courtesy of Pacific States Marine Fisheries Commission.

**Mossdale Trawl**

Because of COVID19 concerns, there was no Mossdale trawl sampling for much of the year, including from mid-March through early May. USFWS began sampling using the Mossdale trawl on May 4, 2021, and sampling shifted to CDFW on May 10, 2021. For the period May 4, 2021 through June 5, 2021, 92 unclipped Chinook salmon and zero *O. mykiss* have been caught in the trawl.

**Steelhead Redd Survey**

The Stanislaus Steelhead redd survey ended April 30, 2021.

## Drought Activities Update for SWT – 6/16/21

State Water Project and Central Valley Project Drought Contingency Plan: The Drought Contingency Plan (Drought Plan) was prepared by the California Department of Water Resources (DWR) and the U.S. Bureau of Reclamation (Reclamation) in an effort to provide updated information about areas of potential concern given the current dry hydrology of 2021. DWR and Reclamation operate the State Water Project (SWP) and the Central Valley Project (CVP), respectively, to the 2020 Record of Decision (ROD) as analyzed in the 2019 U.S. Fish and Wildlife Service (USFWS) Biological Opinion and 2019 National Marine Fisheries Service (NMFS) Biological Opinion on the Coordinated Long-Term Operation of the Central Valley Project and the State Water Project (Collectively the 2019 Biological Opinions), and DWR also operates the SWP to the 2020 California Department of Fish and Wildlife (CDFW) Incidental Take Permit (ITP). An updated Drought Plan was submitted by DWR to CDFW in response to Condition 8.21 of CDFW's ITP. Concurrently, this plan is shared with the Water Operations Management Team (WOMT) which includes representatives from DWR, Reclamation, USFWS, NMFS, CDFW, and the State Water Resources Control Board (SWRCB) (collectively referred to as Agencies). This report was first drafted in February and subsequently updated in March, April, and May 2021. [For more information, please click here.](#)

Temporary Urgency Change Petition: DWR and Reclamation through their TUCPs have requested changes to their Delta water quality requirements included in State Water Board Decision 1641 (D-1641) to allow reservoir releases on a pattern that conserves upstream storage for fish and wildlife protection and Delta salinity control while providing critical water supply needs. [For more information, please see the Water Boards' web page.](#)

Drought Relief Year (DRY) Team: An interagency team to coordinate planning and implementation of Drought Relief Actions (DRAs) in relation to the long term operations of the CVP and SWP. The DRY Team will be convened at the request of the Water Operations Management Team (WOMT), in years when conditions warrant the implementation of DRAs, consistent with the Drought and Dry Year Planning Toolkit (Drought Toolkit). The DRY team will function as a drought-planning hub to serve both technical and policy roles in coordination with the Project Manager (PM) with WOMT for the Drought Toolkit.

Drought Tool Kit: The Drought Toolkit intends to provide information on potential drought relief actions that could be implemented to avoid or mitigate the effects of conditions and operations during critical hydrologic year types. The Drought Toolkit should complement actions that can be taken year-round, such as operational flexibility and ongoing habitat and restoration actions that may bolster the species' resilience, especially during drought and dry year conditions.

### **Other Operations Coordination**

Reclamation hosts a weekly meeting (Fish and Water Operations Meeting) on Wednesday mornings that is anyone is welcome to attend to learn more about real-time operations and provide input. If you are interested in being added to the email distribution list, contact Elissa Buttermore (ebuttermore@usbr.gov).