BUREAU OF RECLAMATION

Stanislaus Watershed Team

December 18, 2024

Members Attending

- USBR: Brian Willard, Myrna Girald Perez, Randi Field, Spencer Marshall, Zarela Guerrero
- USFWS: Erika Holcombe, J.D. Wikert
- CDFW: Gretchen Murphey, Crystal Rigby, Steve Tsao, Travis Apgar
- NMFS: Barb Byrne, Rachael Alcala, Sam Pyros
- DWR: N/A
- SWRCB: Chris Carr, Yongxuan Gao
- PSMFC: Hunter Morris, Logan Day
- SSJID: N/A
- FISHBIO: N/A
- Stockton East Water District (SEWD): N/A
- WAPA: Vanessa Armentrout
- University of Washington: Susannah Iltis
- Kearns & West: Tom Fischer, Karis Johnston, Bethany Taylor

Action Items

- Randi Field, Reclamation, to send flow gauge information to Barb Byrne, NMFS.
- Barb Byrne, NMFS
    - Share the draft Stepped Release Plan (SRP) with Gretchen Murphey, CDFW.
    - Follow up with DWR about the Orange Blossom Bridge gauge.
- Susannah Iltis, University of Washington

    - Incorporate color-coded shading for water temperature ranges into the SacPAS map.
    - Add a footnote about the faulty gauge data to any SacPAS graphs for Orange Blossom Bridge.
- Kearns & West
    - Mark the Orange Blossom Bridge data as faulty in the meeting handouts.
    - Coordinate with Reclamation on February in-person meeting planning.

Announcements

- Erika Holcombe, USFWS, will be the new SWT representative for USFWS, taking over for J.D. Wikert upon his upcoming retirement.
- Tom Fischer, Kearns & West, will take over SWT meeting facilitation going forward.

SacPAS Updates

- Susannah Iltis (Iltis), Web Computing Specialist for the School of Aquatic and Fishery Sciences at the University of Washington, presented updates made to the SacPAS website.
    - A SacPAS website update was released in September 2024.
    - Based on feedback from the SWT about errors with the gauge at Orange Blossom Bridge, Iltis put checks in place for all temperature gauges to autodetect when errors occur.
    - Iltis created a webpage titled *Current River Conditions for Stanislaus Watershed Team* also based on a request for mapped current conditions. A data table is also included on the webpage.
    - One feature incorporated into the site is a map that remains static while the user selects various data categories to view, allowing for easier data comparison.
    - Iltis noted that the map could be embedded in the Current River Conditions page but is currently a separate webpage to make the data more digestible.
    - Iltis invited feedback from the SWT on whether the changes met their needs. The product is ready to be used but can always be refined as suggestions are provided.

- Questions and Comments
    - USFWS recommended incorporating color-coded shading for water temperature ranges into the map.

Operations Update and Forecasts/Hydrology

New Melones Reservoir Update

- A large rain event came through the region over the previous weekend.
- As of 12/15/2024, storage is approximately 1.8 MAF, or 138% of the 15-year average. Storage is showing a slow, steady increase.

Daily CVP Water Supply

- Accumulated precipitation is at 37% percent of average with 2.35 inches.
- Accumulated inflow as of 12/15/2024 is 88 TAF into New Melones, or 85% of the 15-year average.
- Reclamation staff conducted maintenance testing during the week of 12/9/2024 that could have contributed to instances of negative inflow. Although it is not an item of concern, Reclamation plans to check on this matter.
- Reclamation noted that storms coming through California are favoring Northern California rather than Southern California in concordance with a La Niña weather pattern.

Tulloch Dam

- The elevation levels at Tulloch are within the band prescribed for the wintertime drawdown for the Army Corps of Engineers requirements.

Goodwin Dam

- Goodwin Dam has maintained a base flow of 200 cfs which is expected to remain through December.

Water Temperature Updates

- Goodwin Canyon water temperatures are currently the warmest of the listed sites.
- Water temperatures are currently suitable for fish.
- Questions and Comments

- CDFW asked why the water temperature graphs cuts short the data for both Goodwin releases and the Canyon while data for Orange Blossom Bridge, for example, reaches to the edge of the graph.
    - NMFS and Iltis speculated that maybe there is some lag time incorporated into the data for Goodwin and the Canyon.
    - Reclamation responded that Goodwin is a daily feed that has been lagging, but it may be a question for cbec Engineering.
    - USFWS added that Goodwin flow is a calculated value rather than a measured value, and it's possible that if partial flows are going down any of the irrigation district canals that are perhaps not reporting, the calculation may not be able to be completed until that district data is collected.

Flow Planning

- The ROD is expected to be signed on 12/20/2024.
- There will not be a January WIF.
- CDFW asked if Reclamation has the new Stepped Release Plan (SRP) flow schedule and if it can be shared.
    - Reclamation doesn't have an updated flow schedule that is available for distribution at this time. They will release it as soon as they have permission.
- NMFS gave an unofficial proposed flow schedule based on the 2021 SRP.
    - Water year types on the schedule are:
        - Critical: Includes 2 days at 1,500 cfs
        - Dry: Includes 3 days at 1,500 cfs
        - Above Normal / Below Normal: Includes 4 days at 1,500 cfs
        - Wet: Includes 5 days at 1,500 cfs
    - The only change between the current schedule and the 2021 SRP is that there will be one larger WIF in late February rather than two smaller WIFs in early January and early February. This is essentially the only change in the Proposed Action (PA).
    - The overall schedule has a combined water volume that is greater than the sum of the two smaller WIFs.

- Questions and Comments
    - CDFW asked if NMFS would share information on the number of days that 1,500 cfs are scheduled for release for each of the four water year types.
    - CDFW commented that another change worth noting in the new ROD is the potential for increased ramping rates in some water year types.
        - NMFS acknowledged this – that the ramping rates can be adjusted if SWT and Reclamation agree to it.

Stanislaus River Forum (SRF) Call Review

- Reclamation reported that the meeting primarily consisted of internal discussion.
- No members of the public were in attendance.

Fish Monitoring

CDFW Fish Monitoring

- Merced River carcass survey numbers have dropped off and crews have reached the threshold to stop surveying. Staff concluded their survey on 12/17/2024.
- The Merced Hatchery closed their rotary screw trap on 12/9/2024.
- Crews working on the Stanislaus and Tuolumne rivers are seeing high numbers of live fish and expect tagging and recapping activities to continue for some time.
- Steelhead redd surveys will begin in January and are expected to overlap with the last weeks of the carcass survey.
- In January, the Mossdale Trawl will resume joint operation between CDFW and USFWS. USFWS has operated the trawl for the previous three months.

FISHBIO Monitoring

No one from FISHBIO provided updates; the following information is taken from their meeting handout materials.

- As of 12/14/2024, a total of 3,461 Chinook salmon have passed upstream of the Stanislaus River weir.
    - 20% (678 fish) were of hatchery origin.
- As of 12/14/2024, ten *O. mykiss* have been observed passing the Stanislaus River.
    - 5 *O. mykiss* were over 16 inches long.
    - 30% were of hatchery origin.

PSMFC Monitoring

- Rotary screw traps (RSTs) will be installed at Caswell Memorial State Park between 12/31/2024 and 1/1/2025.
- Daily trap sampling is scheduled to begin on 1/5/2025.
- PSMFC plans to update the CalFish webpage with their annual report and recent data.
- PSMFC will be contacting the Mokelumne Hatchery with their request for fish; Merced Hatchery will likely not be able to provide any fish.
- Questions and Comments
    - CDFW added that Merced is not able to provide fish because they are having to receive fish eggs from Nimbus Hatchery to increase their production. CDFW may be able to provide study fish but cannot confirm until final calculations are completed.
        - PSMFC will follow up with CDFW at a later date about a potential request.
        - NMFS inquired if the potential fish from CDFW would be Mokelumne fish, Merced fish, or a mix of the two.
            - CDFW clarified that the eggs are from Olympus, not Mokelumne, and will be reared in the Merced before being tagged and released. The study fish will be released in the basins.

Restoration Project Updates

- USFWS is still awaiting a decision from Reclamation on the Year 3 CVPIA Notice of Funding Opportunity (NOFO).
- A couple of large projects were completed in 2024 on the Tuolumne River.
- USFWS is hoping to add gravel at Goodwin by Summer 2025.
- Questions and Comments
    - CDFW asked if USFWS expects any changes in CVPIA funding to move away from the Stanislaus River and more towards projects within the Healthy Rivers and Landscapes program.
        - USFWS said that Reclamation has been working diligently on habitat suitability criteria and eligible projects, as well as retro-fitting completed projects. USFWS added that they are unsure if the

irrigation districts are involved with these decisions. USFWS recommends contacting Rod Wittler with additional questions.

Other Discussion Items

SWRCB Updates

- N/A

Flow Gauge Updates

- NMFS offered to contact DWR about gauge reliability.
    - CDFW contacted DWR three weeks ago about this issue, but no changes or improvements have been made. They are unsure of the current status. CDFW suggested that another federal agency try contacting DWR about this, acknowledging that responses may be delayed over the holiday season.
- Reclamation acknowledged that Orange Blossom Bridge is in a physically challenging spot for conducting repairs. Reclamation also noted that it has been prone to vandalism in the past and suggested that it was perhaps not an ideal station location.
- CDFW added that sometimes river rafting groups may take hold of any physical structures there while attempting to exit the water; this practice could potentially cause damage.
- CDFW recommended keeping a space for a graph on SacPAS for Orange Blossom Bridge but removing the data that populates the graph. A footnote could be included that explains that the reason for the lack of data is to avoid the data being improperly used or interpreted when it is known to be incorrect.
- NMFS suggested omitting the Orange Blossom Bridge graphs and including a footnote with *Figure 9* that reads "Orange Blossom Bridge data is currently unreliable and under investigation."
- Iltis offered to remove the data from SacPAS. She added that she can apply programming logic to the webpage that avoids displaying particular time stretches of data.
    - USFWS prefers to keep the data but include a footnote. This will make it clear that there are still problems with the gauge and that the issue is awaiting a solution.

Meeting Materials Inquire

- Reclamation inquired about the timeline for preparing meeting materials. An automatic reminder is typically sent the Friday before the meeting, but there was concern that the data would be too dated by the time of the meeting.
    - Kearns & West clarified that the reminder goes out Friday to provide people with enough notice to compile and send materials on Monday to Kearns & West. As long as materials are received by Monday afternoon the week of the SWT meeting, they will be incorporated into the month's handout.

Annual Reporting

- Reclamation distributed the final draft 2024 report to the SWT on 12/16/2024.
- The deadline to submit comments is 12/27/2024.
- The final report is anticipated to go out on 1/9/2025, but Reclamation will alert the SWT by email if this date changes.
- Reclamation is working on 508-compliant edits to the document. Once completed, the compliant version will be shared with the SWT.
- Reclamation is working to provide a section on their website dedicated to the annual reports. Links to reports are forthcoming. Once this is complete, Reclamation will alert the SWT.

Items to elevate to WOMT

- N/A

Next Meeting

Wednesday, January 15, 10:00 am –12:00 pm.

Wednesday, February 19, 10:00 am –12:00 pm.

The February 19 meeting will be a hybrid meeting, with an in-person portion hosted by the Reclamation office.

BUREAU OF RECLAMATION

Stanislaus Watershed Team

10:00 a.m. – 12:00 p.m.
Conference Line: 1 (321) 209-6143; Meeting ID: 901 988 581#
Webinar: Join Microsoft Teams Meeting

Wednesday, December 18, 2024

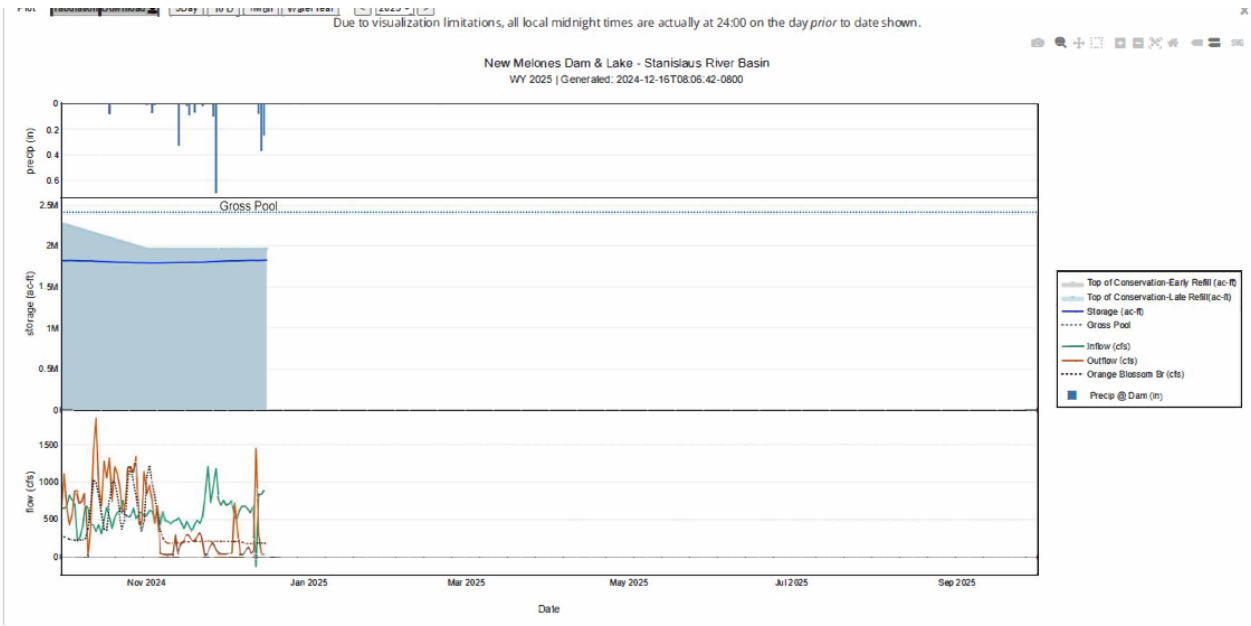
Agenda

1. Introductions
2. Ground Rules[1]
3. Announcements
    a. Meeting will be recorded for notetaking purposes – Tom Fischer, Kearns & West
4. SacPAS Updates – Susannah Iltis, University of Washington
5. Operations Update and Forecasts/Hydrology – Randi Field, USBR
6. Temperature Updates – Barbara Byrne, NMFS
7. February WIF Planning – Zarela Guerrero, USBR and Gretchen Murphey, CDFW
8. Stanislaus River Forum (SRF) Call Review – Myrna Girald Perez, USBR

[1] The Stanislaus Watershed Team's Ground Rules are as follows:

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

9. Fish Monitoring and Studies - CDFW, FISHBIO, NMFS, PSMFC
10. Restoration Project Updates
    a. Restoration Tracker – JD (John) Wikert, USFWS
    b. Cat Pien, USBR
11. Other Discussion Items
    a. SWRCB Updates
    b. Flow Gauges Update – Randi Field, USBR
    c. Items to elevate to WOMT
12. Review Action Items – Tom Fischer, Kearns & West
13. Next Meeting: January 15, 2025



New Melones Dam & Lake – Stanislaus River Basin, 2024-12-16T08:06:42-0800

Graph shows the flow, storage, and precipitation for New Melones Dam and Lake from November 2024 to September 2025. The graph shows storage approximately 1.8M ac-ft in November 2024, with an outflow peak at 1900 cfs, and inflow drop below 500 cfs.

Tables for BDO

United States Department of the Interior
Bureau of Reclamation
Central Valley Project – California Daily CVP Water Supply Report

December 15, 2024
Run Date: December 16, 2024

Table 1. Reservoir Releases in Cubic Feet Per Second

Reservoir	Dam	WY 2024	WY 2025	15-Year Median
Trinity	Lewiston	298	311	305
Sacramento	Keswick	5,047	4,206	4,206
Feather	Oroville (SWP)	1,750	1,750	1,750
American	Nimbus	2,076	2,037	2,037
Stanislaus	Goodwin	203	206	206
San Joaquin	Friant	424	420	390

Table 2. Storage in Major Reservoirs in Thousands of Acre-Feet

Reservoir	Capacity	15-Yr Avg	WY 2024	WY 2025	% of 15 Yr Avg
Trinity	2,448	1,309	1,215	1,697	130
Shasta	4,552	2,427	3,035	2,878	119
Folsom	977	405	456	308	76
New Melones	2,420	1,323	1,963	1,830	138
Fed. San Luis	966	448	738	498	111
Total North CVP	11,363	5,910	7,407	7,211	122
Millerton	521	263	204	214	81
Oroville (SWP)	3,425	1,592	2,325	1,972	124

Table 3. Accumulated Inflow for water Year to Date in Thousands of Acre-Feet

Reservoir	Current WY 2025	WY 1977	WY 1983	15-Yr Avg	% O 15 Yr Avg
Trinity	120	22	137	99	121
Shasta	814	576	853	669	122
Folsom	140	98	658	231	61
New Melones	88	N/A	279	103	85

Reservoir	Current WY 2025	WY 1977	WY 1983	15-Yr Avg	% O 15 Yr Avg
Millerton	103	62	356	133	77

Table 4. Accumulated Precipitation for Water Year to Date in Inches

Reservoir	Current WY 2023	WY 1977	WY 1983	Avg (N Yrs)	% of Avg	Last 24 Hours
Trinity at Fish Hatchery	11.63	1.25	13.06	9.09 (64)	128	0.19
Sacramento at Shasta Dam	24.85	1.63	18.28	16.03 (69)	155	0.95
American at Blue Canyon	19.72	3.27	27.97	17.02 (50)	116	0.32
Stanislaus at New Melones	2.35	N/A	11.38	6.42 (47)	37	0.15
San Joaquin at Huntington LK	4.92	1.80	20.00	8.55 (51)	58	0.06

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

New Melones Lake Daily Operations, December 2024, Run Date: 12/16/2024

Day	Elev	Stor-age 1000-Acre-Feet in Lake	Storage 1000-Acre-Feet Change	Com-puted Inflow C.F.S.	Release C.F.S. Power	Release C.F.S. Spill	Release C.F.S. Outlet	Evap. C.F.S.	Evap. Inches	Precip Inches
N/A	N/A	1,818.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1	1,035.53	1,819.9	1.3	708	45	0	0	30	0.09	0.00
2	1,035.66	1,821.3	1.4	751	56	0	0	10	0.03	0.00
3	1,035.62	1,820.9	-0.4	524	718	0	0	17	0.05	0.00
4	1,035.64	1,821.1	0.2	513	388	0	0	20	0.06	0.00
5	1,035.75	1,822.2	1.2	626	29	0	0	17	0.05	0.00
6	1,035.87	1,823.5	1.3	680	34	0	0	14	0.04	0.00
7	1,035.98	1,824.6	1.2	679	85	0	0	14	0.04	0.00
8	1,036.07	1,825.6	0.9	642	133	0	0	34	0.10	0.00
9	1,036.17	1,826.6	1.0	591	48	0	0	14	0.04	0.00
10	1,036.28	1,827.8	1.2	677	81	0	0	14	0.04	0.00
11	1,035.98	1,824.6	-3.1	-126	1,446	0	0	14	0.04	0.00
12	1,036.08	1,825.7	1.0	843	301	0	0	14	0.04	0.08
13	1,036.23	1,827.3	1.6	836	43	0	0	0	0.00	0.37
14	1,036.39	1,828.9	1.7	888	39	0	0	3	0.01	0.25
15	1,036.48	1,829.9	0.9	531	24	0	0	31	0.09	0.15
Totals	N/A	N/A	11.4	9,363	3,470	0	0	246	0.72	0.85
Acre-Feet	N/A	N/A	11,400	18,572	6,883	0	0	488	N/A	N/A

Comments:

* Computed inflow is the sum of change in storage, releases, and evaporation.

Summary Precipitation

This Month	0.85
October 1, 2024 to Date	2.35

Summary: Release (acre- feet)

Release (acre-feet)	N/A
Power	6,883
Spill	0
Outlet	0
Total	**6,883**

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

New Melones Lake Daily Operations, November 2024, Run Date: 12/10/2024

Day	Elev	Storage 1000-Acre-Feet in Lake	Storage 1000-Acre-Feet Change	Compu-ted Inflow C.F.S.	Release C.F.S. Power	Re-lease C.F.S. Spill	Re-lease C.F.S. Outlet	Evap. C.F.S.	Evap. Inches	Precip. Inches
N/A	N/A	1,797.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1	1,033.26	1,796.3	-0.7	629	958	0	0	37	0.11	0.00
2	1,033.23	1,796.0	-0.3	615	755	0	0	17	0.05	0.07
3	1,033.23	1,796.0	0.0	495	461	0	0	34	0.10	0.01
4	1,033.22	1,795.9	-0.1	643	688	0	0	7	0.02	0.00
5	1,033.29	1,796.6	0.7	441	55	0	0	20	0.06	0.00
6	1,033.39	1,797.6	1.0	611	44	0	0	44	0.13	0.00
7	1,033.47	1,798.5	0.8	492	33	0	0	40	0.12	0.00
8	1,033.55	1,799.3	0.8	486	24	0	0	44	0.13	0.00
9	1,033.62	1,800.0	0.7	453	42	0	0	44	0.13	0.00
10	1,033.70	1,800.9	0.8	492	24	0	0	50	0.15	0.00
11	1,033.73	1,801.2	0.3	491	297	0	0	37	0.11	0.00
12	1,033.82	1,802.1	0.9	519	41	0	0	7	0.02	0.33
13	1,033.87	1,802.6	0.5	458	186	0	0	10	0.03	0.00
14	1,033.90	1,802.9	0.3	378	191	0	0	30	0.09	0.00
15	1,033.93	1,803.2	0.3	474	300	0	0	17	0.05	0.02
16	1,033.95	1,803.5	0.2	409	294	0	0	10	0.03	0.09
17	1,033.97	1,803.7	0.2	345	220	0	0	20	0.06	0.00
18	1,034.01	1,804.1	0.4	439	213	0	0	17	0.05	0.07
19	1,034.05	1,804.5	0.4	490	256	0	0	24	0.07	0.00
20	1,034.07	1,804.7	0.2	451	326	0	0	20	0.06	0.00
21	1,034.12	1,805.2	0.5	542	255	0	0	24	0.07	0.02
22	1,034.27	1,806.8	1.6	849	25	0	0	37	0.11	0.00
23	1,034.49	1,809.1	2.3	1,206	43	0	0	7	0.02	0.00
24	1,034.60	1,810.2	1.1	725	137	0	0	10	0.03	0.00

Day	Elev	Storage 1000-Acre-Feet in Lake	Storage 1000-Acre-Feet Change	Computed Inflow C.F.S.	Release C.F.S. Power	Release C.F.S. Spill	Release C.F.S. Outlet	Evap. C.F.S.	Evap. Inches	Precip. Inches
25	1,034.74	1,811.7	1.5	945	190	0	0	20	0.06	0.10
26	1,034.90	1,813.3	1.7	1,176	333	0	0	3	0.01	0.70
27	1,035.04	1,814.8	1.5	781	38	0	0	7	0.02	0.00
28	1,035.16	1,816.1	1.3	693	44	0	0	17	0.05	0.00
29	1,035.29	1,817.4	1.4	756	44	0	0	27	0.08	0.00
30	1,035.41	1,818.7	1.3	693	44	0	0	17	0.05	0.00
Totals	N/A	N/A	21.6	18,177	6,561	0	0	698	2.07	1.41
Acre-Feet	N/A	N/A	21,600	36,054	13,014	0	0	1,384	N/A	N/A

Comments:

* Computed inflow is the sum of change in storage, releases, and evaporation.

Summary Precipitation

This Month	1.41
October 1, 2021 to Date	1.50

Summary: Release (acre-feet)

Release (acre-feet)	N/A
Power	13,014
Spill	0
Outlet	0
Total	**13,014**

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

Tulloch Reservoir Daily Operations, December 2024, Run Date: 12/16/2024

Day	Elev	Storage (Acre Feet) Res.	Storage (Acre-Feet) Change	Computed Inflow C.F.S.	New Melones Release	Release C.F.S. Power	Release C.F.S. Spill	Release C.F.S. Outlet	Evap. C.F.S. (1)
N/A	N/A	53,658	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1	498.15	53,343	-315	55	45	211	0	0	3
2	497.88	53,061	-282	70	56	211	0	0	1
3	499.20	54,449	1,388	913	718	211	0	0	2
4	499.83	55,122	673	553	388	212	0	0	2
5	499.47	54,737	-385	20	29	212	0	0	2
6	499.11	54,353	-384	19	34	212	0	0	1
7	498.87	54,099	-254	84	85	211	0	0	1
8	498.76	53,984	-115	156	133	211	0	0	3
9	498.44	53,647	-337	42	48	211	0	0	1
10	498.21	53,406	-241	90	81	211	0	0	1
11	501.69	57,148	3,742	2,100	1,446	212	0	0	1
12	502.06	57,557	409	421	301	214	0	0	1
13	501.77	57,236	-321	51	43	213	0	0	0
14	501.51	56,950	-286	69	39	213	0	0	0
15	501.16	56,563	-387	18	24	210	0	0	3
Totals	NA	NA	2,905	4,661	3,470	3,175	0	0	22
Acre-Feet	NA	NA	2,905	9,245	6,883	6,298	0	0	44

Comments:

* Computed inflow is the sum of change in storage, releases, and evaporation.
(1) Evaporation records taken from New Melones Pan.

Summary: Release (acre-feet)

Release (acre-feet)	N/A
Power	6,298
Spill	0
Outlet	0
Total	**6,298**

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

Tulloch Reservoir Daily Operations, November 2024, Run Date: 12/10/2024

Day	Elev	Storage (Acre Feet) Reservoir	Storage (Acre-Feet) Change	Computed Inflow C.F.S.	New Melones Release	Release C.F.S. Power	Release C.F.S. Spill	Release C.F.S. Outlet	Evap. C.F.S. (1)
N/A	N/A	57,203	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1	501.42	56,850	-353	1,076	958	1,250	0	0	4
2	501.18	56,586	-264	865	755	996	0	0	2
3	500.58	55,932	-654	502	461	828	0	0	4
4	501.09	56,486	554	800	688	520	0	0	1
5	500.61	55,964	-522	59	55	320	0	0	2
6	500.22	55,541	-423	51	44	259	0	0	5
7	499.87	55,164	-377	34	33	220	0	0	4
8	499.51	54,780	-384	22	24	212	0	0	4
9	499.19	54,439	-341	43	42	211	0	0	4
10	498.82	54,047	-392	18	24	211	0	0	5
11	499.08	54,321	274	353	297	211	0	0	4
12	498.76	53,984	-337	43	41	212	0	0	1
13	498.76	53,984	0	214	186	213	0	0	1
14	498.75	53,973	-11	209	191	212	0	0	3
15	499.01	54,247	274	352	300	212	0	0	2
16	499.24	54,492	245	335	294	210	0	0	1
17	499.30	54,556	64	247	220	213	0	0	2
18	499.34	54,599	43	237	213	213	0	0	2
19	499.48	54,748	149	290	256	213	0	0	2
20	499.76	55,047	299	365	326	212	0	0	2
21	499.92	55,218	171	299	255	211	0	0	2
22	499.60	54,876	-342	43	25	211	0	0	4
23	499.38	54,641	-235	95	43	212	0	0	1
24	499.27	54,524	-117	154	137	212	0	0	1
25	499.30	54,556	32	230	190	212	0	0	2
26	499.67	54,951	395	411	333	212	0	0	0
27	499.35	54,609	-342	41	38	212	0	0	1
28	499.05	54,289	-320	53	44	212	0	0	2
29	498.75	53,973	-316	56	44	212	0	0	3

Day	Elev	Storage (Acre Feet) Reservoir	Storage (Acre-Feet) Change	Computed Inflow C.F.S.	New Melones Release	Release C.F.S. Power	Release C.F.S. Spill	Release C.F.S. Outlet	Evap. C.F.S. (1)
30	498.45	53,658	-315	55	44	212	0	0	2
Totals	N/A	N/A	-3,545	7,552	6,561	9,266	0	0	73
Acre-Feet	N/A	N/A	-3,545	14,979	13,014	18,379	0	0	145

Comments:

* Computed inflow is the sum of change in storage, releases, and evaporation.
(1) Evaporation records taken from New Melones Pan.

Summary: Release (acre-feet)

Release (acre-feet)	N/A
Power	18,379
Spill	0
Outlet	0
Total	**18,379**

Oakdale Irrigation District South San Joaquin Irrigation
District Tri Dams Project-California

Goodwin Reservoir Daily Operations, November 2024, Run Date: 11/18/2024

Day	Elev	Storage (1000 Acre-Feet) in Reservoir	Storage (1000 Acre-Feet) Change	Tulloch Release	Release C.F.S. – River Outlet	Release C.F.S. – Spill	Canals-Joint Main	Canals – South Main
N/A	N/A	521	N/A	N/A	N/A	N/A	N/A	N/A
1	359.77	521	0	211	0	202	0	0
2	359.77	521	0	211	0	202	0	0
3	359.77	521	0	211	0	202	0	0
4	359.77	521	0	212	0	202	0	0
5	359.77	521	0	212	0	202	0	0
6	359.77	521	0	212	0	203	0	0
7	359.77	521	0	211	0	202	0	0
8	359.77	521	0	211	0	202	0	0
9	359.77	521	0	211	0	202	0	0
10	359.77	521	0	211	0	202	0	0
11	359.77	521	0	212	0	203	0	0
12	359.77	521	0	214	0	210	0	0
13	359.77	521	0	213	0	208	0	0
14	359.77	521	0	213	0	208	0	0
15	359.77	521	0	210	0	206	0	0
Totals	N/A	N/A	0	3,175	0	3,056	0	0
Acre-Feet	N/A	N/A	0	6,298	0	6,062	0	0

Joint Main Operated by SSJID and OID.

Summary: Release (acre-feet)

Joint Main Canal	0
South Main Canal	0
Outlet	0
Spill	6,062
Total	**6,062**

Oakdale Irrigation District South San Joaquin Irrigation
District Tri Dams Project-California

Goodwin Reservoir Daily Operations, November 2024, Run Date: 12/10/2024

Day	Elev	Storage (1000 Acre- Feet) in Lake	Storage (1000 Acre-Feet) Change	Tulloch Release	Release C.F.S. – River Outlet	Release C.F.S. – Spill	Canals– Joint Main	Canals– South Main
N/A	N/A	573	N/A	N/A	N/A	N/A	N/A	N/A
1	360.40	565	-8	1,250	0	1,290	0	0
2	360.27	556	-9	996	0	1,035	0	0
3	360.17	549	-7	828	0	861	0	0
4	359.98	536	-13	520	0	550	0	0
5	359.85	527	-9	320	0	339	0	0
6	359.80	523	-4	259	0	258	0	0
7	359.77	521	-2	220	0	217	0	0
8	359.77	521	0	212	0	202	0	0
9	359.77	521	0	211	0	202	0	0
10	359.77	521	0	211	0	202	0	0
11	359.79	522	1	211	0	205	0	0
12	359.79	522	0	212	0	204	0	0
13	359.79	522	0	213	0	203	0	0
14	359.79	522	0	212	0	203	0	0
15	359.77	521	-1	212	0	203	0	0
16	359.77	521	0	210	0	201	0	0
17	359.79	522	1	213	0	202	0	0
18	359.77	521	-1	213	0	203	0	0
19	359.77	521	0	213	0	203	0	0
20	359.77	521	0	212	0	204	0	0
21	359.77	521	0	211	0	203	0	0
22	359.79	522	1	211	0	204	0	0
23	359.77	521	-1	212	0	209	0	0
24	359.77	521	0	212	0	203	0	0

Day	Elev	Storage (1000 Acre- Feet) in Lake	Storage (1000 Acre-Feet) Change	Tulloch Release	Release C.F.S. – River Outlet	Release C.F.S. – Spill	Canals– Joint Main	Canals– South Main
25	359.77	521	0	212	0	203	0	0
26	359.77	521	0	212	0	206	0	0
27	359.76	520	-1	212	0	230	0	0
28	359.77	521	1	212	0	202	0	0
29	359.76	520	-1	212	0	202	0	0
30	359.77	521	1	212	0	202	0	0
Totals	N/A	N/A	-52	9,266	0	9,251	0	0
Acre Feet	N/A	N/A	-52	18,379	0	18,349	0	0

Joint Main Operated by SSJID and OID.

Summary: Release (acre-feet)

Joint Main Canal	0
South Main Canal	0
Outlet	0
Spill	18,349
Total	**18,349**

December 2024 Water Temperature and Fish Monitoring Update

Year-to-Date Flows

Goodwin releases since October 1, 2024, are shown in Figure 1.

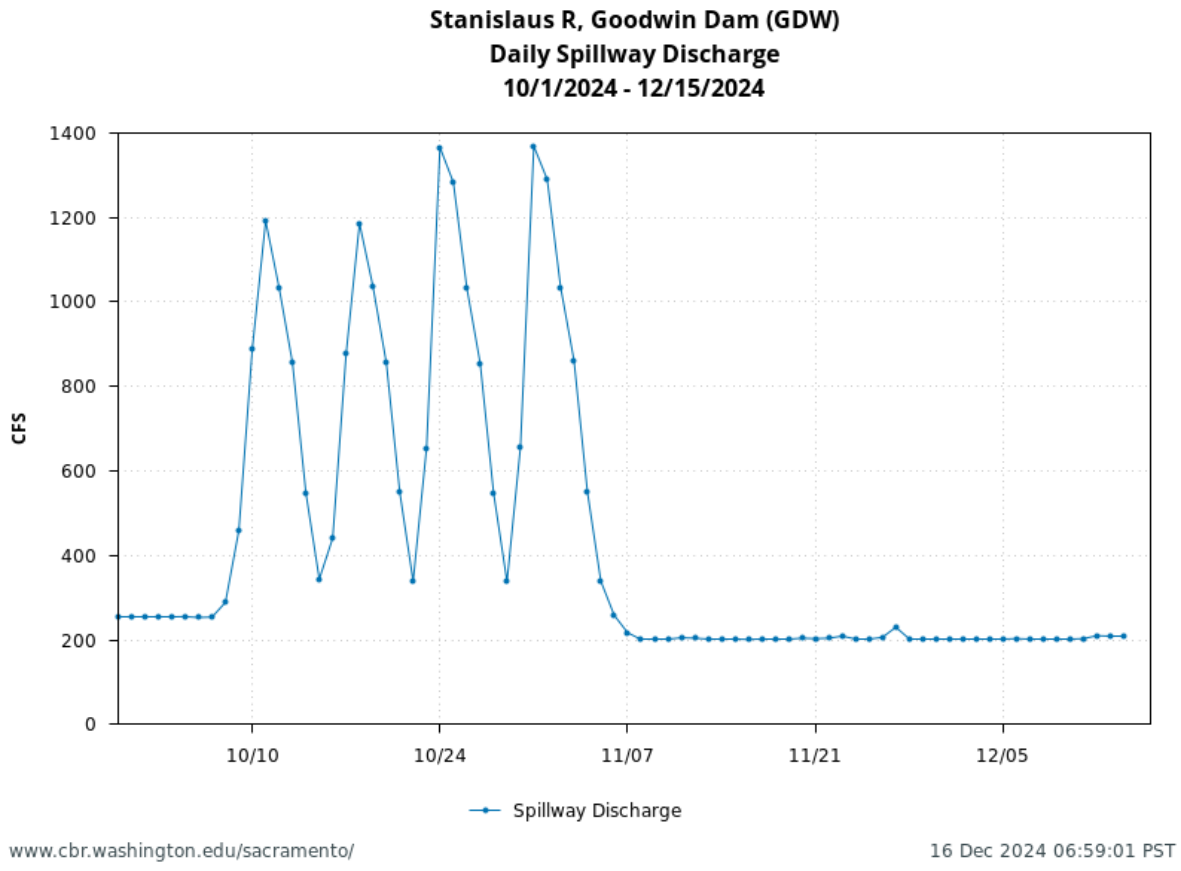


Figure 1. Goodwin (daily) releases to the Stanislaus River since October 1, 2024. Data from GDW station on CDEC.

Figure 1 is a line graph showing Goodwin Dam daily spillway discharge. The graph shows two periods of 1,350 cfs on October 24 and October 31, 2024 and two periods of 1,200 cfs discharge on October 11 and October 18, 2024. The spillway discharge remains around 250 cfs from November 7, 2024 to December 15, 2024, with a minor increase in late November.

Water Temperature

The temperature thresholds included in Figures 2-10, below, are the thresholds used in the 2019 NMFS LTO BiOp[1] (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 October 2024 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 October 2024 are shown below at Vernalis (Figure 5). Current-year water temperatures are plotted along with historical temperatures for upstream of Orange Blossom Bridge (Figure 6), Ripon (Figure 7), and Vernalis (Figure 8). A compilation of Stanislaus River water temperatures and Goodwin releases for water year 2024 and the start of 2025 is provided in Figure 9.

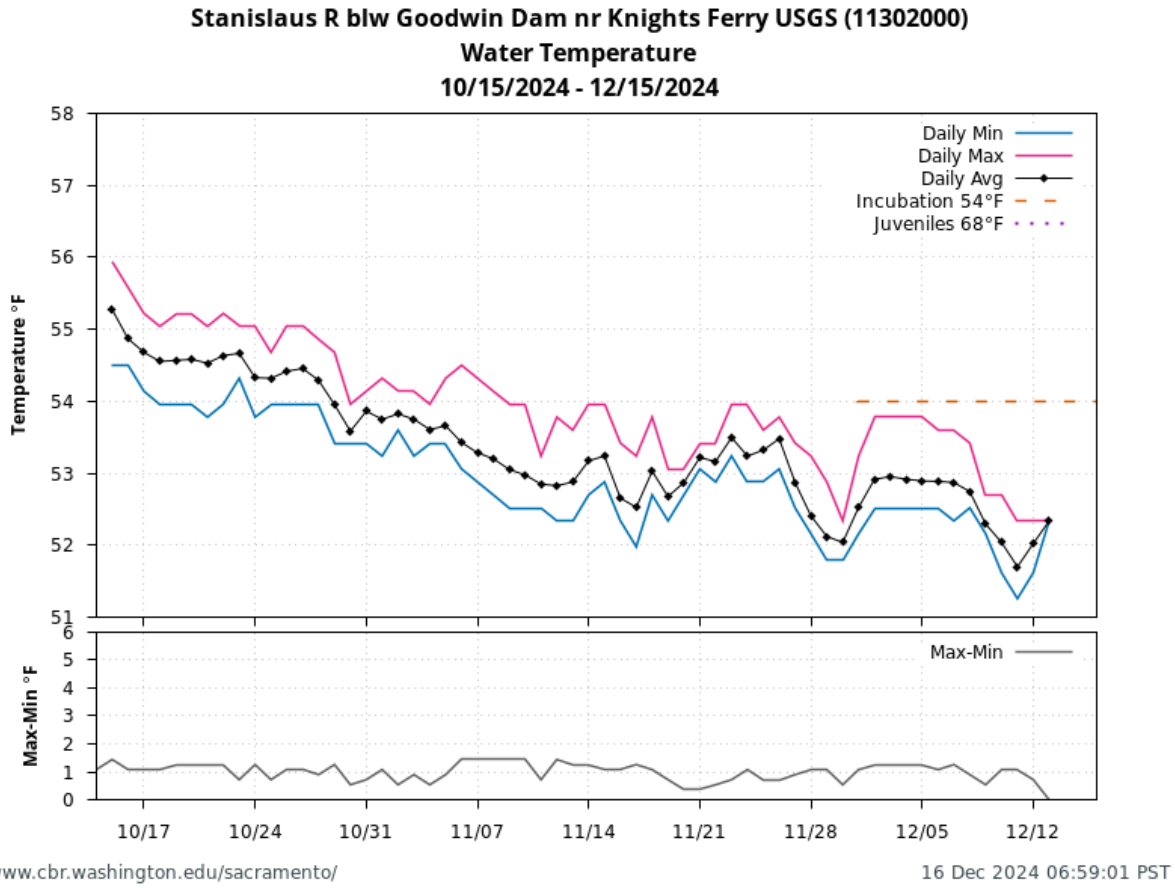


Figure 2. Daily water temperatures on the Stanislaus River upstream of Knights Ferry since October 15, 2024. Data from USGS gage 11302000 on NWIS; temperature threshold reference line added by SWT.

Chart: Stacked chart for daily water temperatures Stanislaus River upstream of Knights Ferry for current 60 days period. Top chart: Daily Min, Max and average water temperatures (in degrees Fahrenheit). Bottom chart: Daily difference between Max and Min measured water temperature in degrees Fahrenheit. Data from OBB station retrieved from CDEC; figure generated by SacPAS (including date-based water temperature threshold reference lines).

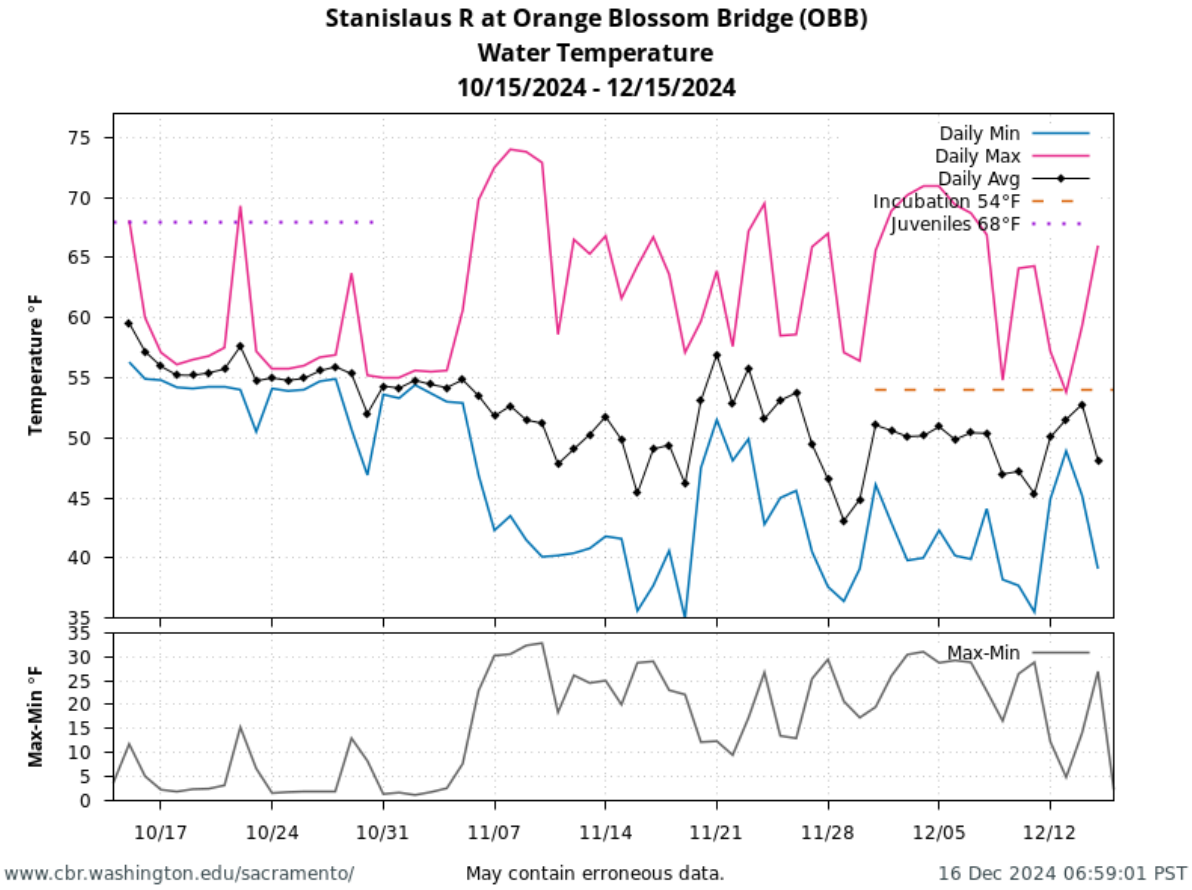


Figure 3. Stanislaus (hourly) water temperatures at Orange Blossom Bridge since October 15, 2024. Data from OBB station on CDEC. Please be aware that due to malfunctions with the temperature gauge at Orange Blossom Bridge, the data should be noted as unreliable.

Chart: Stacked chart for daily water temperatures Stanislaus River at Orange Blossom Bridge for current 60 days period. Top chart: Daily Min, Max and average water temperatures (in degrees Fahrenheit). Bottom chart: Daily difference between Max and Min measured water temperature in degrees Fahrenheit. Data from OBB station retrieved from CDEC; figure generated by SacPAS (including date-based water temperature threshold reference lines). For more information, please call (916) 414-2400.

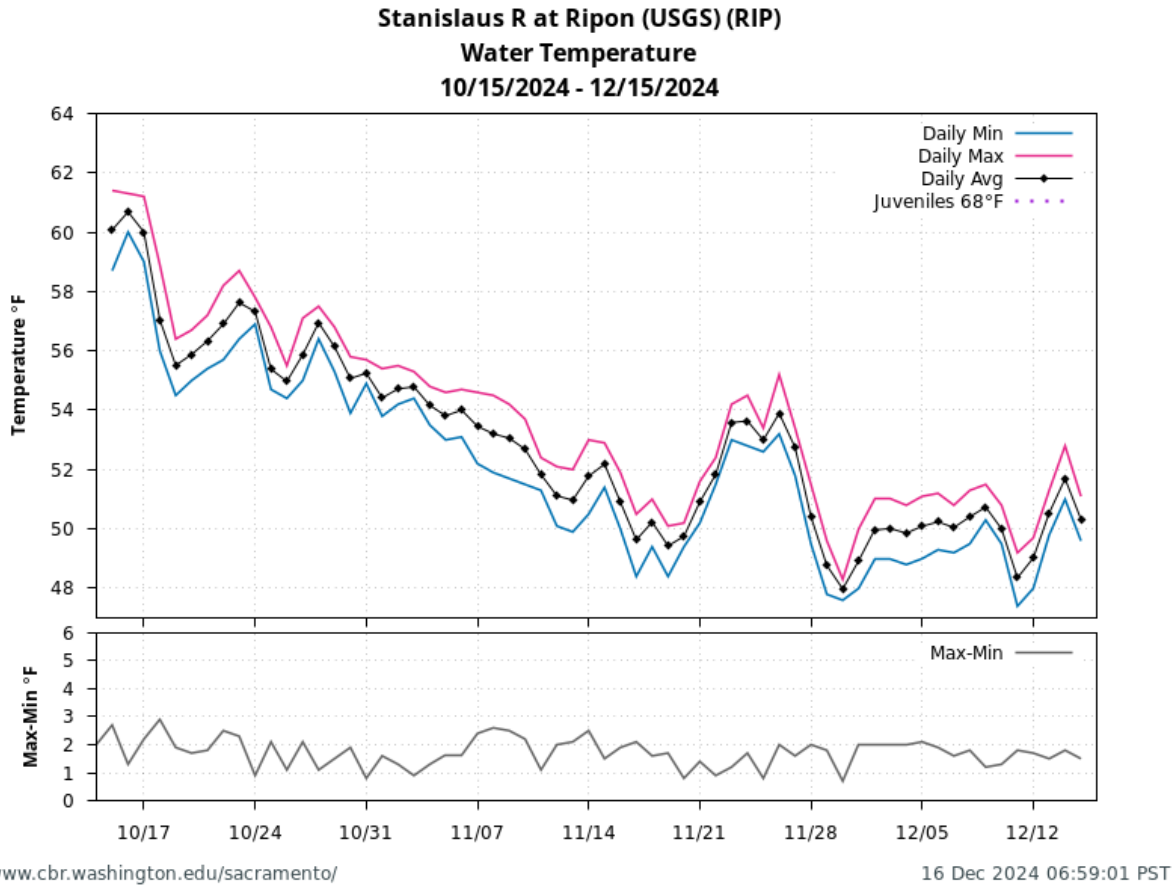


Figure 4. Stanislaus water temperatures at Ripon since October 15, 2024. Data from RIP station on CDEC.

Chart: Stacked chart for daily water temperatures Stanislaus River at Ripon for current 60 days period. Top chart: Daily Min, Max and average water temperatures (in degrees Fahrenheit). Bottom chart: Daily difference between Max and Min measured water temperature in degrees Fahrenheit. Data from OBB station retrieved from CDEC; figure generated by SacPAS (including date-based water temperature threshold reference lines).

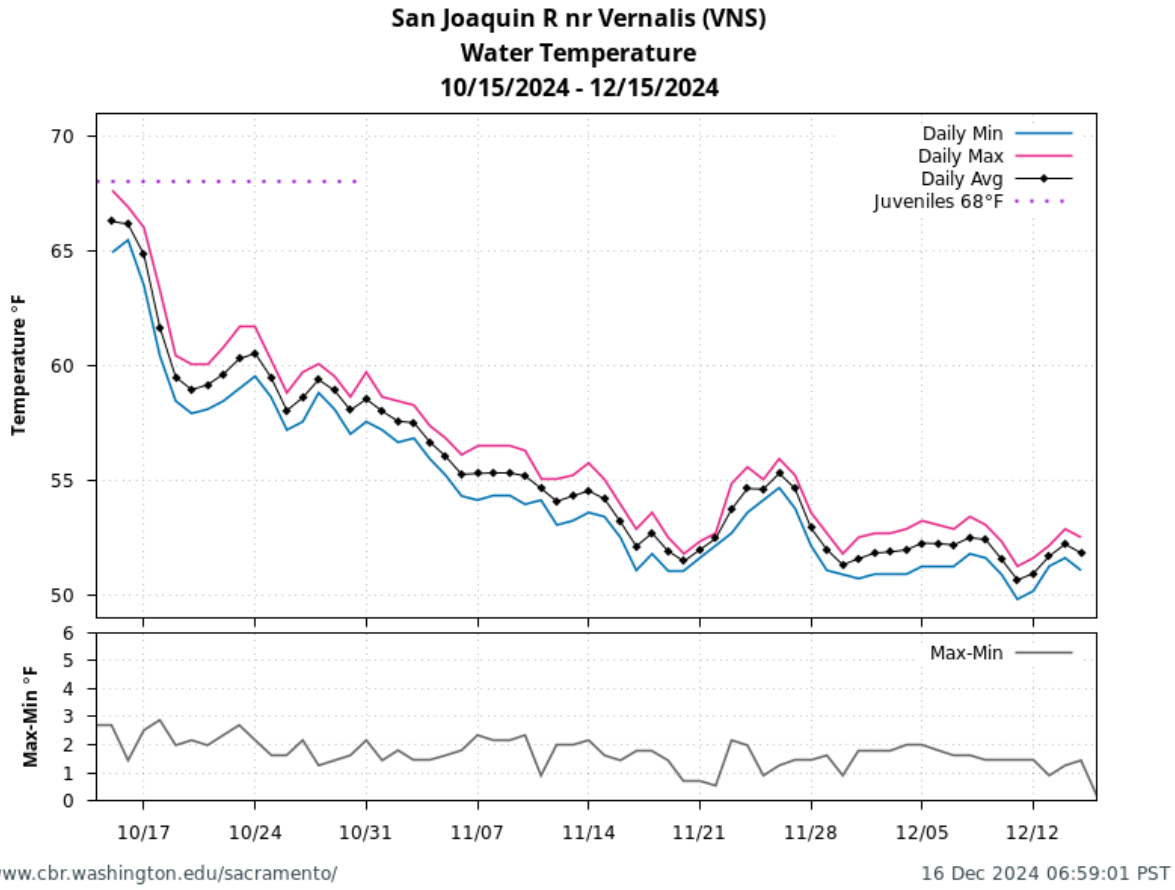


Figure 5. San Joaquin River (15-minute) water temperatures at Vernalis since October 15, 2024. Data from VNS station on CDEC. Note that, unlike in the previous figures, temperature is reported in degrees Celsius. 8°C=46.4°F; 10°C=50°F; 12°C=53.6°F; 14°C=57.2°F; 16°C=60.8°F; 18°C=64.4°F; 20°C=68.0°F; 22°C=71.6°F; 24°C=75.2°F; 26°C=78.8°F; 28°C=82.4°F.

Chart: Stacked chart for daily water temperatures Stanislaus River at Vernalis for current 60 days period. Top chart: Daily Min, Max and average water temperatures (in degrees Fahrenheit). Bottom chart: Daily difference between Max and Min measured water temperature in degrees Fahrenheit. Data from OBB station retrieved from CDEC; figure generated by SacPAS (including date-based water temperature threshold reference lines).

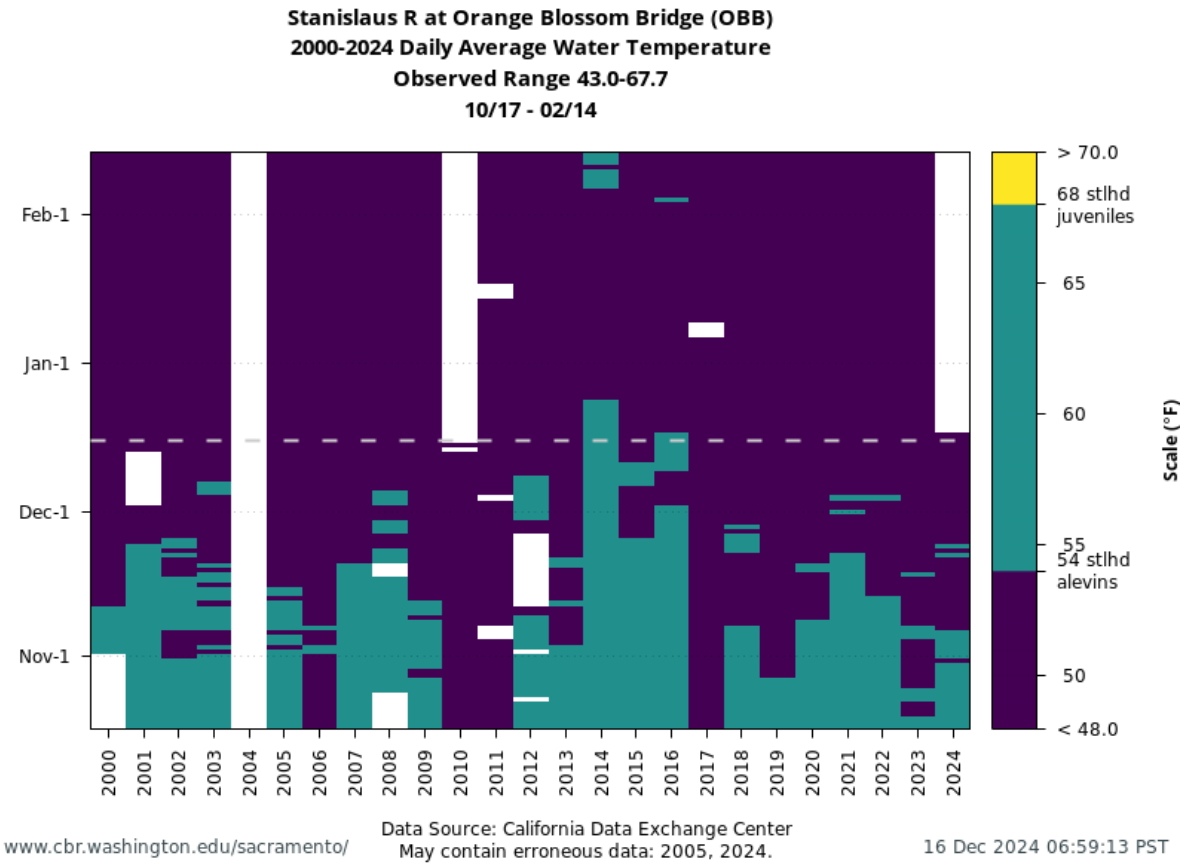


Figure 6. Stanislaus River water temperatures at Orange Blossom Bridge for WY 2001 to present. Data from SacPAS website; temperature threshold reference lines added by SWT. Please be aware that due to malfunctions with the temperature gauge at Orange Blossom Bridge, the data should be noted as unreliable.

Figure 6 is a bar chart showing water temperatures at Orange Blossom Bridge for WY 2001 to present for November to February. Blossom readings were flagged due to incomplete or potentially inaccurate data due to unidentified equipment issues.

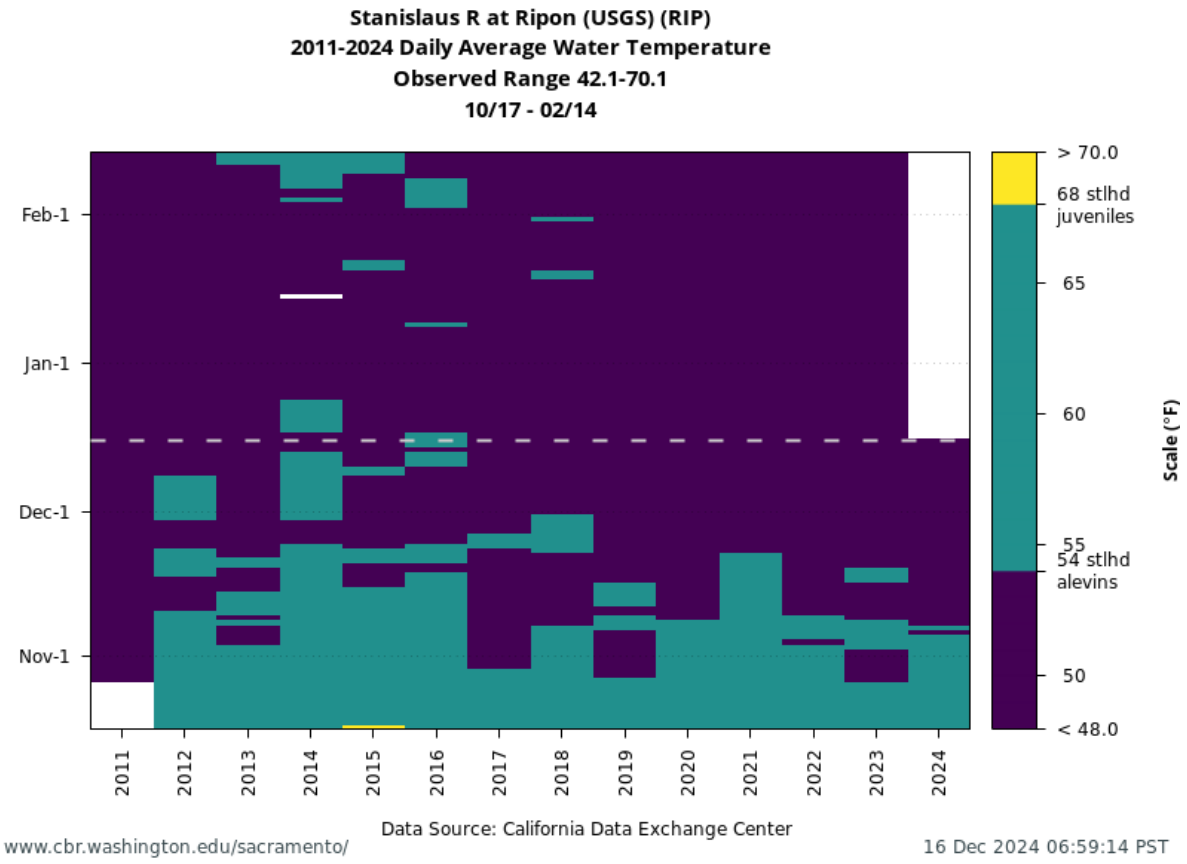


Figure 7. Stanislaus River water temperatures at Ripon for WY 2011 to present. Figure from SacPAS website using RIP station data from CDEC; temperature threshold reference line added by SWT.

Figure 7 is a bar chart showing water temperatures at Ripon for WY 2011 to present for November to February. The chart shows that during this time, the daily average water temperature was mostly below 54 degrees Fahrenheit, and with temperatures exceeding 68 degrees Fahrenheit in October 2015.

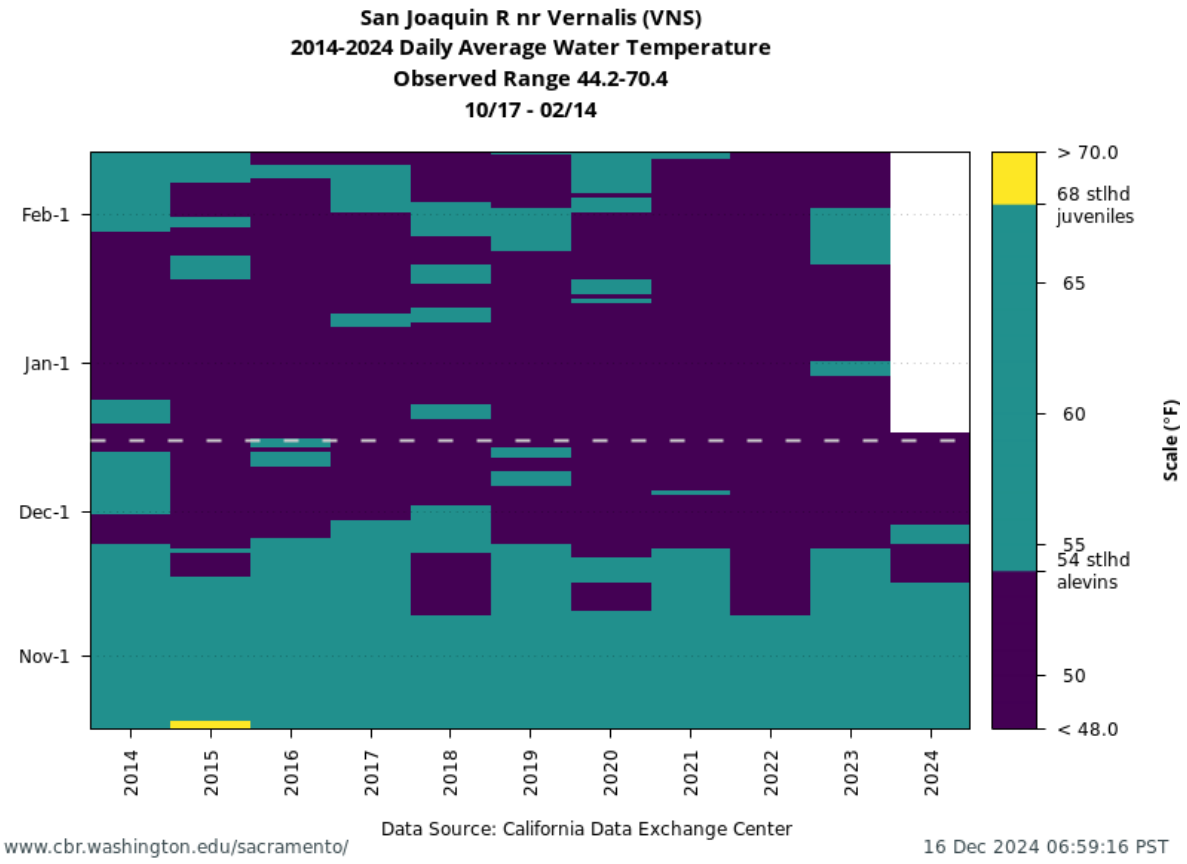


Figure 8. San Joaquin River water temperatures at Vernalis for WY 2014 to present. Figure from SacPAS website using VNS station data from CDEC; temperature threshold reference line added by SWT.

Figure 8 is a bar chart showing water temperatures at Vernalis for WY 2014 to present for November to February. The chart shows that during this time, the daily average water temperature was mostly between 54 and 68 degrees Fahrenheit. The chart shows that during this time, the daily average water temperature was mostly above 68 degrees Fahrenheit in October of 2015.

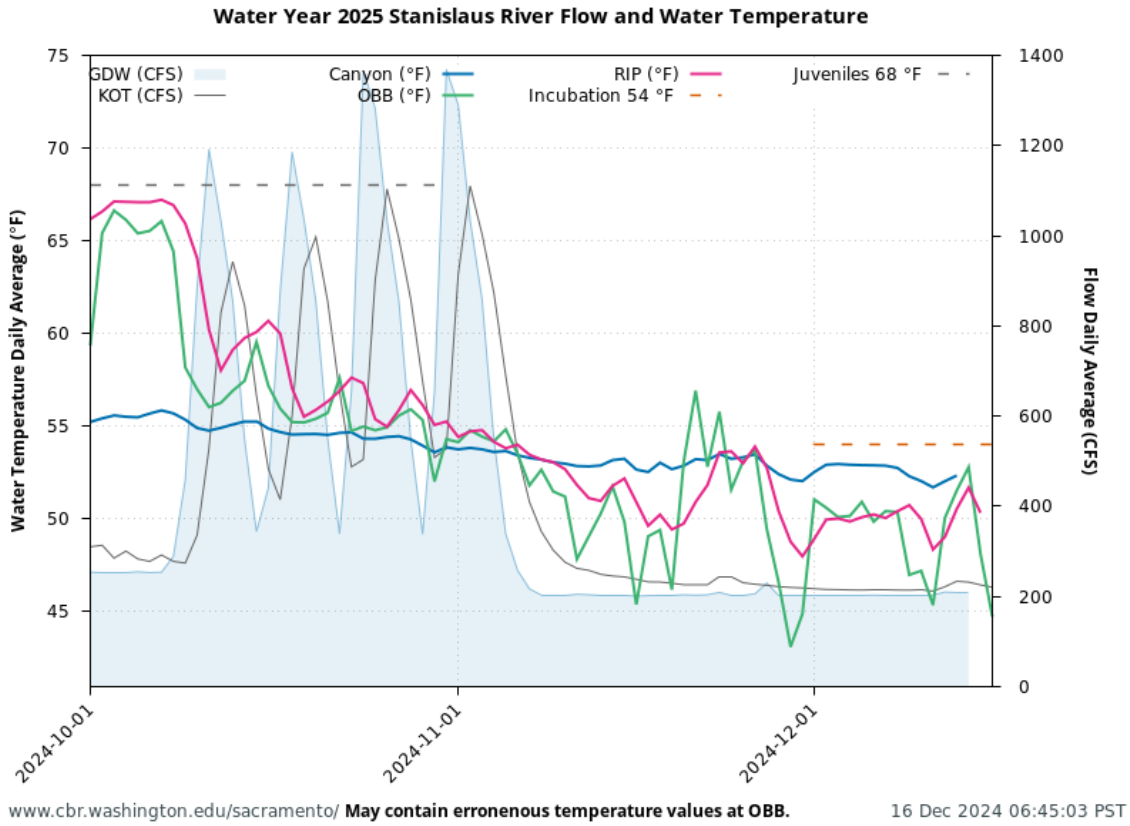


Figure 9. Stanislaus River flow and water temperatures from October 1, 2024 to December 16, 2024. Data (including temperature threshold reference lines) from SacPAS website. Please be aware that due to malfunctions with the temperature gauge at Orange Blossom Bridge, the data should be noted as unreliable.

Figure 9 is a line chart showing river flow and water temperatures on the Stanislaus River. The graph shows decreasing temperatures and flow October 2024 – December 2024 and increasing temperatures in early October 2024.

Item 6. Flow Planning

CDFW & USBR Updates

Updates to be shared/discussed at December meeting.

Item 7. Stanislaus River Forum (SRF) Call Review

USBR Updates

Receive live update from USBR staff on the 12/17 call.

Item 8. Fish Monitoring and Studies

CDFW Update on Fish Monitoring (Adults)

Chinook carcass and redd surveys: The California Department of Fish & Wildlife (CDFW) began conducting fall-run Chinook salmon carcass and redd surveys the week of September 23, 2024 for the Stanislaus River. The Tuolumne and Merced carcass surveys started on September 16. Carcass survey data for all three San Joaquin River tributaries through the week of December 9, 2024 are reported in Table 5.

Update on Fish Monitoring (Juveniles)

Table 5. Data from the fall 2024 CDFW carcass survey for the San Joaquin tributaries.

River	Week	Date	# Live	# Redds	# Skeletons	# Tagged	# Ad-Clipped	# Scale Samples	# Recove-red	Average Flow (cfs)
Stanislaus	1	9/23/2024	8	0	0	1	1	1	0	250
Stanislaus	2	9/30/2024	10	1	0	1	1	1	0	250
Stanislaus	3	10/7/2024	*12*	1	1	1	1	1	0	400
Stanislaus	4	10/14/2024	65	4	1	2	1	2	0	433
Stanislaus	5	10/21/2024	35	8	0	0	0	0	0	683
Stanislaus	6	10/28/2024	109	40	0	0	0	0	0	683
Stanislaus	7	11/4/2024	638	270	9	11	0	11	0	267
Stanislaus	8	11/11/2024	852	649	27	92	17	92	1	200
Stanislaus	9	11/18/2024	796	789	83	257	59	256	27	200
Stanislaus	10	11/25/2024	532	831	144	280	66	280	115	200
Stanislaus	11	12/2/2024	321	740	136	188	40	188	198	200
Stanislaus	12	12/9/2024	206	621	98	86	28	86	193	200
Tuolumne	1	9/16/2024	0	0	0	0	0	0	0	300
Tuolumne	2	9/23/2024	0	0	0	0	0	0	0	300
Tuolumne	3	9/30/2024	4	0	0	0	0	0	0	315
Tuolumne	4	10/7/2024	8	0	0	0	0	0	0	300
Tuolumne	5	10/14/2024	23	0	0	0	0	0	0	322
Tuolumne	6	10/21/2024	82	0	1	0	0	0	0	372
Tuolumne	7	10/28/2024	92	8	0	0	0	0	0	382
Tuolumne	8	11/4/2024	289	103	2	6	0	6	0	415

River	Week	Date	# Live	# Redds	# Skeletons	# Tagged	# Ad-Clipped	# Scale Samples	# Recove-red	Average Flow (cfs)
Tuolumne	9	11/11/2024	234	130	10	17	2	17	0	385
Tuolumne	10	11/18/2024	270	205	16	26	4	26	2	380
Tuolumne	11	11/25/2024	354	283	34	47	11	47	8	382
Tuolumne	12	12/2/2024	302	306	26	60	20	60	18	382
Tuolumne	13	12/9/2024	186	368	35	54	14	54	40	379
Merced	1*	9/16/2024	0	0	0	0	0	0	0	325
Merced	2*	9/23/2024	1	0	0	0	0	0	0	275
Merced	3	9/30/2024	3	0	0	1	1	1	0	200
Merced	4	10/7/02024	12	0	0	0	0	0	0	198
Merced	5**	10/14/2024	1	0	0	0	0	0	0	228
Merced	6	10/21/2024	1	0	0	0	0	0	0	243
Merced	7	10/28/2024	36	1	0	0	0	0	0	227
Merced	8	11/4/2024	132	43	1	0	0	0	0	199
Merced	9	11/11/2024	238	86	1	7	1	7	0	187
Merced	10	11/18/2024	173	142	7	7	1	7	0	198
Merced	11	11/25/2024	113	155	1	5	0	5	0	190
Merced	12	12/2/2024	73	82	1	4	1	4	0	190
Merced	13	12/9/2024	28	29	1	4	1	4	1	195

*- Section 1 only; **- Section 4 not surveyed; Numbers on *Italics* are revised from last month's meeting12

CDFW plans to start the steelhead redd surveys in January 2025.

Update on Fish Monitoring (Juveniles)

Mossdale Trawl

- There has been no salmonid catch since June 28, 2024.
- Sampling is ongoing, but catch is rare outside of the spring months.
- Reporting on the trawl will resume in March 2025 or when salmonids are caught.

Stanislaus Weir

As of December 14, 2024, a total of 3,461 adult Chinook salmon have passed upstream of the Stanislaus River weir (Table 5). Six-hundred seventy-eight (20%) of the adults were adipose fin

clipped (indicating hatchery origin). A total of nine *O. mykiss* (Table 6) have been observed passing the Stanislaus River weir as of December 14, with five being over 16 inches. Three out of nine (30%) of the *O. mykiss* were adipose fin clipped.

Table 6. Chinook passage at the Stanislaus River Weir - Updated through: 12/14/2024

Year	Monitoring Start date	Net Passage To Date	Season Total
2024	9/5/24	3,461	3,461
2023	9/6/23	2,337	2,443
2022	9/15/22	3,692	3,798
2021	9/8/21	5,937	6,032
2020	9/10/20	1,873	1,906
2019	8/29/19	2,594	2,594
2018	9/5/18	4,729	4,777
2017	9/15/17	8,333	8,500
2016	9/8/16	14,045	14,399
2015	9/15/15	11,764	12,707
2014	9/5/14	5,427	5,527
2013	9/3/13	5,389	5,452
2012	9/11/12	7,109	7,248
2011	11/8/11	714	776
2010	9/7/10	1,334	1,364
2009	9/9/09	1,243	1,303
2008	9/9/08	880	928
2007	9/22/07	429	439
2006	9/8/06	2,902	3,074
2005	9/8/05	4,066	4,124
2004	9/10/04	4,424	4,448

Year	Monitoring Start date	Net Passage To Date	Season Total
2003	9/5/03	4,720	4,848

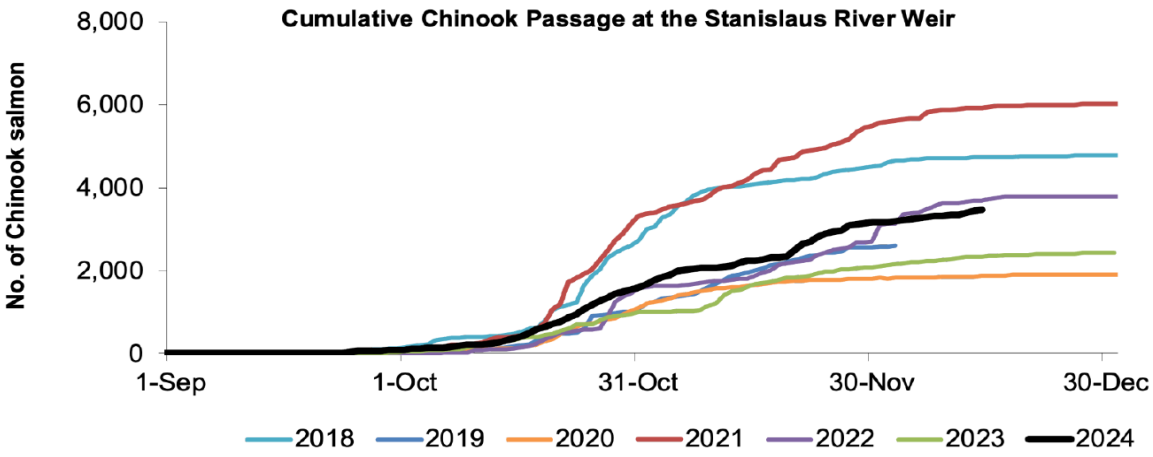


Figure 10. Cumulative Chinook passage at the Stanislaus River weir.

Figure 10 is a line chart showing the cumulative Chinook passage. The majority of Chinook passage occurred October – December 2022.

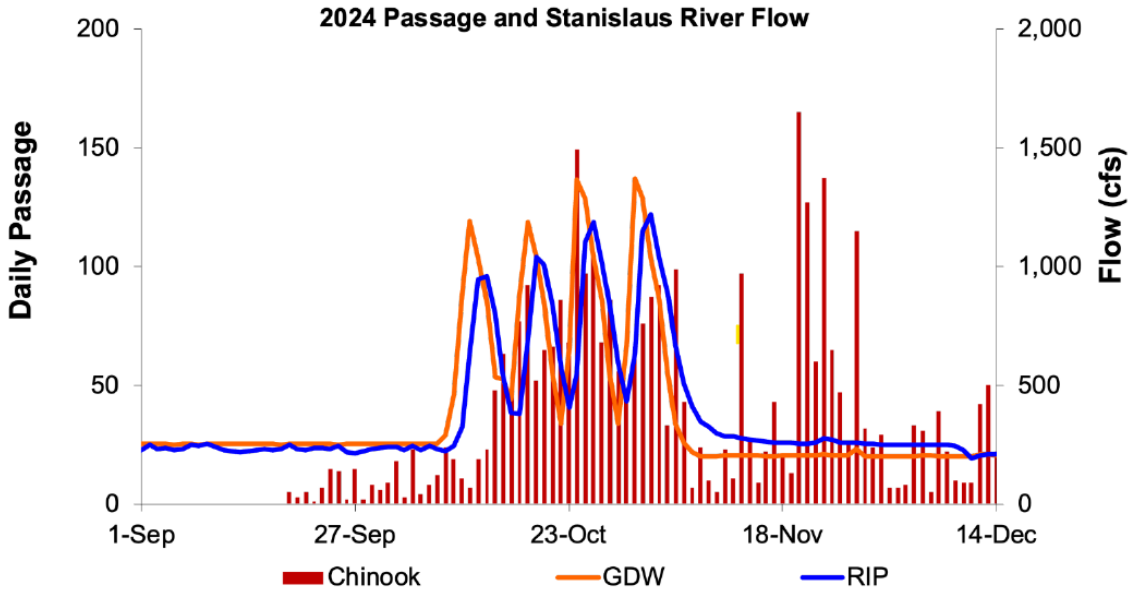


Figure 11. 2024 passage and Stanislaus River flow

Figure 11 is a bar chart showing the 2024 passage and Stanislaus Rive flow, with the highest peaks occurring throughout October.

Table 7. O. mykiss passage at the Stanislaus River Weir as of 11/16 of each year and the season totals, updated through November 16, 2024.

Year	Monitoring Start date	Net Passage To Date	Season Total
2024	9/5/24	10	10
2023	9/6/23	29	55
2022	9/15/22	2	6
2021	9/8/21	18	35
2020	9/10/20	4	8
2019	8/29/19	31	31
2018	9/5/18	21	25
2017	9/15/17	11	11
2016	9/8/16	21	26
2015	9/15/15	1	5
2014	9/5/14	3	8
2013	9/3/13	20	39
2012	9/11/12	26	101
2011	11/8/11	11	86
2010	9/7/10	1	6
2009	9/9/09	6	9
2008	9/9/08	12	15
2007	9/22/07	2	2
2006	9/8/06	6	12
2005	9/8/05	0	0
2004	9/10/04	0	1
2003	9/5/03	0	0

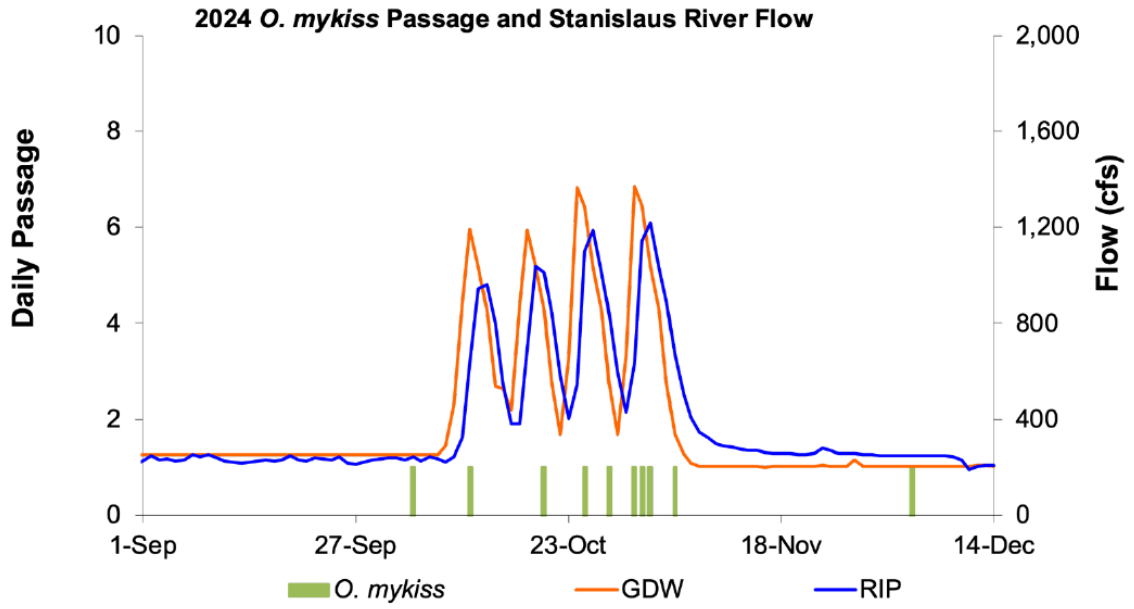


Figure 12. Graph of 2024-2025 O. mykiss passage and Stanislaus River flow.

Figure 12. Graph is a bar chart and line graph showing daily O. mykiss passage at the Stanislaus River weir and river flow at Goodwin (GDW) and Ripon (RIP), 2024. The highest peaks occur throughout October.

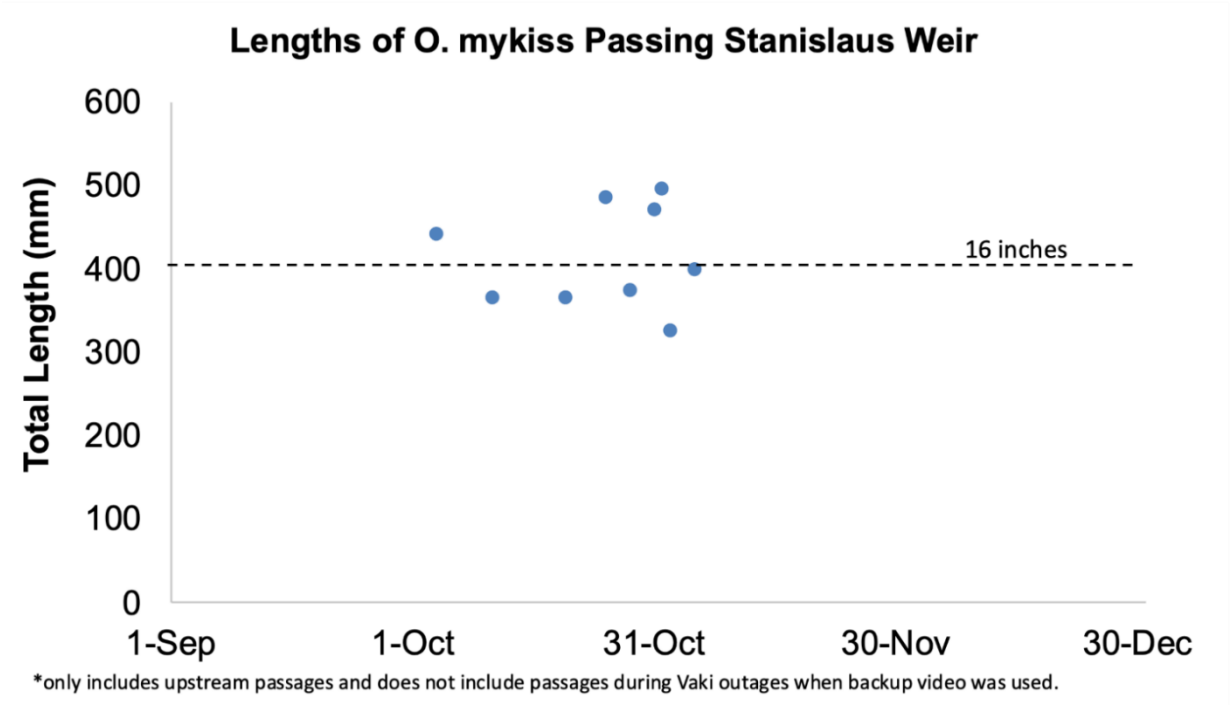


Figure 13. Lengths of O. mykiss passing Stanislaus River Weir

Figure 13. Graph is a scatter plot showing forklengths and timing of O. mykiss passages at the Stanislaus River Weir, 2024.

PSMFC

Rotary Screw Traps (RSTs): Rotary screw trapping at Caswell Memorial State Park by PSMFC for the 2024/2025 outmigration season is expected to begin in January 2025. The RSTs are expected to be installed between Tuesday, 12/31/24 and Wednesday, 1/1/25 with daily sampling to begin on Sunday, 1/5/25.

Archived information can be found at the Caswell RST CalFish webpage, which includes catch spreadsheets, annual reports, and other project information: [CalFish Stanislaus River (Caswell) – RST Monitoring]

Item 9. Restoration Project Updates

No updates shared in advance of the December meeting.