

Stanislaus Watershed Team

September 18, 2024

Members Attending

- USBR: Peggy Manza, Randi Field, Zarela Guerrero
- USFWS: Craig Anderson, J.D. Wikert
- CDFW: Crystal Rigby, Ryan Kok, Steve Tsao
- NMFS: Barb Byrne, Rachael Alcala, Sam Pyros
- DWR: N/A
- SWRCB: Chris Carr, Yongxuan Gao
- PSMFC: Logan Day
- SSJID: Brandon Nakagawa
- Fishbio: N/A
- Stockton East Water District (SEWD): N/A
- WAPA: Jeffrey Trow, Vanessa Armentrout
- Herum/Crabtree/Suntag Attorneys: Lilliana Selke
- Kearns & West: Karis Johnston, Bethany Taylor

Action Items

1. Reclamation
 - a. Zarela Guerrero to resend the fall pulse planning proposal to the SWT.
2. All
 - a. Provide any feedback on the fall pulse flow plan proposal to Zarela Guerrero, Reclamation, by COB 9/20/2024.

Announcements

1. Peggy Manza, USBR, will be transitioning off dam operations for the Stanislaus River to start a new assignment. Randi Field, USBR, will provide operations updates beginning in October 2024/Water Year (WY) 2025.
2. There will be an in-person meeting in a few months to commemorate J.D. Wikert's retirement from USFWS. Date TBD. Spice cake was requested.

3. Tom Fischer, Kearns & West, will take over SWT facilitation once fall flow planning concludes.

Operations Update and Forecasts/ Hydrology

New Melones Reservoir Update

1. There has been no new precipitation at the New Melones Reservoir during the previous few months. There is a possibility of upcoming scattered showers.
2. Looking at the full WY 2024 figure, there were enough frequent but smaller precipitation events to add up to an Above Average water year.
3. Storage slowly decreased through the summer. Reclamation estimates that the current water year will conclude at a storage level of approximately 1.8 MAF, which is a good level for entering WY 2025 and remains below the flood control rule of 1.97 MAF.
4. Outflow from New Melones is still higher than inflow, which is typical for the summer months.

Daily CVP Water Supply

1. As of 9/15/2024, storage at New Melones is 1.84 MAF, or approximately 138% of the 15-year average.
2. Accumulated inflow at New Melones was 933 TAF as of 9/15/2024, or 87% of the 15-year average. Reclamation does not expect to reach 1 MAF of accumulated inflow.
3. Accumulated precipitation at New Melones remains at 28.92 inches, or 107% of average.
4. Precipitation was a greater source of water this year compared with snow pack levels. In WY 2024, snow melt concluded in June.
 - a. USFWS added that high evaporation may have also contributed to accumulated inflow. As air temperatures trend higher, more precipitation may be lost to evaporation before it reaches the reservoirs.
 - b. Reclamation agreed with the comment and speculated that this may result in plans for reduction of evaporation. This could potentially include solar arrays on top of the reservoirs to shade the water, but it would likely be a complicated process due to the size of New Melones Reservoir and could further interfere with the natural aesthetic of the area.

Tulloch Dam

1. There have been no spill or outlet releases at Tulloch during September or August. All water is going through the power plant.
2. Tulloch is operated in a range and therefore, variations from positive to negative change in storage are expected.

Goodwin Dam

1. Releases have been at 250 cfs since 8/19/2024.
2. Combined diversions from the canals in July and early August were closer to 1,400-1,600 cfs; currently they total around 1,000 cfs.
3. The agricultural growing season is starting to decline and crop harvest will likely be happening soon; therefore, diversions are expected to drop further this month and through October.

Current Conditions

1. N/A

Questions and Comments

1. Reclamation reminded SWT members that Zarela Guerrero distributed a draft fish pulse flow proposal for October. The peak flow is proposed to be 1,250 cfs once per week for four weeks.

Water Temperature Updates

1. The water temperature at Orange Blossom is 60°F, which is healthy for juveniles. Temperatures at and above 65°F are detrimental.
2. Water temperatures at Ripon recently decreased to 65°F, showing evidence that the seasonal cooling trend is helping with conditions further downstream.
3. The Sacramento Valley is expecting another heat wave towards the end of the week of 9/16/2024.

Flow Planning

1. Reclamation drafted a proposal. Limited feedback was received from SWT, so additional feedback will be accepted through 9/20/2024.
2. USFWS and NMFS recommend considering these factors in a flow plan proposal:
 - a. Variability of releases
 - b. Maintaining weir operability (keep flows no higher than 1,500 cfs)
 - c. Feedback using these parameters is helpful
 - d. Ideally, cool the water temperature in the Stanislaus River
 - e. Avoid running out of water while still meeting the water volume commitment
 - f. Avoid negative impacts to the peak fish spawning season
 - g. Incorporate low flows for staff conducting carcass surveys

- i. Reclamation confirmed that Column M is the proposed flow figures on which they're requesting feedback in order to finalize them. The figures in Column L represent the SRP release amounts.
- g. SWRCB asked about the Constraints listed on the spreadsheet. One constraint is timing: meeting Vernalis flow objectives in combination with other basin releases. Does this refer to the D1641 Vernalis flow objectives?
 - i. NMFS speculates yes. There are conversations between Reclamation and the State Board about requirements. Reclamation considers the fall pulse flow be the main contribution to the Vernalis flow requirement. Aside from volume, Reclamation likes to keep the timing between mid-April and mid-May.
 - ii. SWRCB asked if these conversations and the requirements from D1641 are being considered with the timing release in Column M of the proposed flow plan?
 - 1. NMFS says it may play more into the timing of the spring pulse flow. The volume of water to be released in November will not necessarily contribute to the mean Vernalis flow since most of it will occur in October.

Stanislaus River Forum (SRF) Call Review

1. There were no comments or questions received from members of the public at the SRF September meeting.

Fish Monitoring

CDFW Fish Monitoring

1. Chinook salmon carcass surveys
 - a. CDFW plans to begin the 2024 Escapement Survey in October.
2. Steelhead *O. mykiss* redd surveys
 - a. Surveys will start in January 2025.

Mossdale Trawl

1. Trawl operations will shift back to USFWS in October.
2. Salmonid catch was zero during the previous month.

FISHBIO Monitoring

1. The weir was installed 9/3 – 9/5/2024 and began fishing at 10:30 a.m. on 9/5/2024.
2. As of 9/10/2024, no salmonids have been observed at the weir.

PSMFC Monitoring

1. N/A

Restoration Project Updates

1. USFWS is still awaiting a decision on project funding.
2. There have been no project completions in the previous month.

Other Discussion Items

Curtailments

1. N/A

SWRCB Updates

1. N/A

Items to elevate to WOMT

1. N/A

Next Meeting

1. Wednesday, October 16, 10:00 am –12:00 pm. The meeting will be virtual.



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, September 18, 2024

Agenda

1. Introductions
2. Ground Rules¹
3. Announcements
 - a. Meeting will be recorded for notetaking purposes – Karis Johnston, Kearns & West
 - b. Staff transitions – Restorations Projects, Operations, Kearns & West
4. Operations Update and Forecasts/Hydrology – Peggy Manza, USBR
5. Temperature Updates – Barbara Byrne, NMFS
6. Flow Planning – Zarela Guerrero, USBR and Gretchen Murphey, CDFW
7. Stanislaus River Forum (SRF) Call Review – Zarela Guerrero, 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

8. Fish Monitoring and Studies – CDFW, FISHBIO, NMFS, PSMFC
9. Restoration Project Updates
 - a. TBD, USFWS
 - b. Caterina Pien, USBR
10. Other Discussion Items
 - a. SWRCB Updates
 - b. Items to elevate to WOMT
11. Review Action Items – Karis Johnston, Kearns & West
12. Next Meeting: October 16, 2024

Tables for BDO

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

September 15, 2024
 Run Date: September 16, 2024

Table 1. Reservoir Releases in Cubic Feet Per Second

Reservoir	Dam	WY 2023	WY 2024	15-Year Median
Trinity	Lewiston	449	470	470
Sacramento	Keswick	7,447	8,108	7,447
Feather	Oroville (SWP)	7,000	9,000	5,500
American	Nimbus	3,037	1,777	1,890
Stanislaus	Goodwin	371	253	253
San Joaquin	Friant	390	0	352

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

Reservoir	Capacity	15-Yr Avg	WY 2023	WY 2024	% O 15 Yr Avg
Trinity	2,448	1,375	1,315	1,770	129
Shasta	4,552	2,544	3,417	2,875	113
Folsom	977	490	697	478	97
New Melones	2,420	1,332	1,902	1,839	138
Fed. San Luis	966	340	802	409	120
Total North CVP	11,363	6,082	8,133	7,371	121
Millerton	521	278	255	0	0
Oroville (SWP)	3,538	1,772	2,741	2,093	118

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

Reservoir	Current WY 2024	WY 1977	WY 1983	15-Yr Avg	% O 15 Yr Avg
Trinity	1,532	689	1,988	1,099	139
Shasta	5,541	3,503	8,897	4,745	117
Folsom	2,300	1,100	6,035	2,643	87
New Melones	933	N/A	2,135	1,069	87
Millerton	1,866	778	3,048	1,706	109

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

Reservoir	Current WY 2024	WY 1977	WY 1983	Avg (N Yrs)	% of Avg	Last 24 Hours
Trinity at Fish Hatchery	35.62	23.95	40.08	30.47	(64)	117
Sacramento at Shasta Dam	64.09	38.53	86.86	59.34	(69)	108
American at Blue Canyon	51.61	5.09	113.32	64.26	(50)	80
Stanislaus at New Melones	28.92	N/A	36.75	26.91	(47)	107
San Joaquin at Huntington LK	32.28	15.90	67.30	40.36	(51)	80

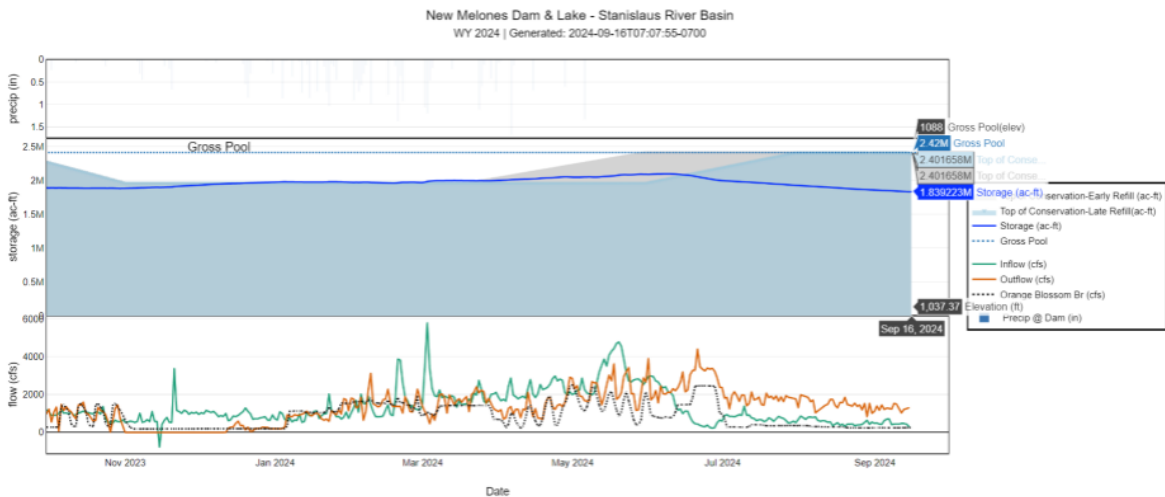


Figure 1. Flow (cfs), storage (ac-ft) and precipitation (in) for New Melones Dam and Lake at Stanislaus River Basin from November 2023 to September 2024.

Figure 1 is a line graph showing the flow, storage, and precipitation for New Melones Dam and Lake from November 2023 to September 2024. The graph shows storage of around 2M ac-ft from December to June, with flow staying at 1,000 cfs, except for peaks in early December at approximately 3,000 cfs and in March at approximately 6,000 cfs. After March, there is a gradual increase to over 2,000 cfs up until July and a gradual decrease between July and September.

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

New Melones Lake Daily Operations, September 2024, Run Date: 09/16/2024

Day	Elev	Storage 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	1,866.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1	1,039.72	1,864.0	-2.0	504	1,406	0	0	113	0.33	0.00
2	1,039.56	1,862.3	-1.7	447	1,182	0	0	120	0.35	0.00
3	1,039.35	1,860.1	-2.2	434	1,463	0	0	93	0.27	0.00
4	1,039.22	1,858.7	-1.4	633	1,225	0	0	103	0.30	0.00
5	1,039.08	1,857.3	-1.5	707	1,298	0	0	157	0.46	0.00
6	1,038.95	1,855.9	-1.4	720	1,281	0	0	133	0.39	0.00
7	1,038.77	1,854.0	-1.9	420	1,238	0	0	140	0.41	0.00
8	1,038.54	1,851.6	-2.4	445	1,550	0	0	120	0.35	0.00
9	1,038.32	1,849.2	-2.3	456	1,507	0	0	120	0.35	0.00
10	1,038.14	1,847.3	-1.9	447	1,275	0	0	130	0.38	0.00
11	1,038.01	1,846.0	-1.4	480	1,042	0	0	130	0.38	0.00
12	1,037.85	1,844.3	-1.7	478	1,222	0	0	106	0.31	0.00
13	1,037.68	1,842.5	-1.8	453	1,263	0	0	92	0.27	0.00
14	1,037.48	1,840.4	-2.1	328	1,311	0	0	78	0.23	0.00
15	1,037.37	1,839.2	-1.2	526	1,018	0	0	92	0.27	0.00
Totals	N/A	N/A	-26.9	7,478	19,281	0	0	1,727	5.05	0.00
Acre- Feet	N/A	N/A	-26,900	14,833	38,244	0	0	3,426	N/A	N/A

Comments:

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

Summary Precipitation

This Month 0.00
 October 01, 2023 to Date 28.92

Summary: Release (acre- feet)

Release (acre-feet)	N/A
Power	38,244
Spill	0
Outlet	0
Total	38,244

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

New Melones Lake Daily Operations, August 2024, Run Date: 09/12/2024

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	1,933.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1	1,045.96	1,930.9	-2.5	875	2,003	0	0	130	0.37	0.00
2	1,045.69	1,928.0	-2.9	793	2,118	0	0	147	0.42	0.00
3	1,045.48	1,925.7	-2.3	696	1,750	0	0	91	0.26	0.00
4	1,045.26	1,923.4	-2.4	813	1,866	0	0	147	0.42	0.00
5	1,045.08	1,921.4	-1.9	820	1,634	0	0	168	0.48	0.00
6	1,044.89	1,919.4	-2.1	798	1,727	0	0	105	0.30	0.00
7	1,044.82	1,918.6	-0.8	829	1,048	0	0	161	0.46	0.00
8	1,044.60	1,916.2	-2.4	639	1,688	0	0	147	0.42	0.00
9	1,044.35	1,913.5	-2.7	596	1,797	0	0	157	0.45	0.00
10	1,044.16	1,911.5	-2.0	630	1,513	0	0	150	0.43	0.00
11	1,043.98	1,909.6	-1.9	614	1,446	0	0	146	0.42	0.00
12	1,043.78	1,907.4	-2.1	547	1,501	0	0	129	0.37	0.00
13	1,043.54	1,904.8	-2.6	569	1,751	0	0	118	0.34	0.00
14	1,043.26	1,901.8	-3.0	365	1,764	0	0	118	0.34	0.00
15	1,043.05	1,899.6	-2.3	438	1,443	0	0	132	0.38	0.00
16	1,042.88	1,897.7	-1.8	521	1,312	0	0	128	0.37	0.00
17	1,042.63	1,895.1	-2.7	382	1,604	0	0	128	0.37	0.00
18	1,042.40	1,892.6	-2.5	443	1,577	0	0	107	0.31	0.00
19	1,042.09	1,889.3	-3.3	327	1,872	0	0	128	0.37	0.00
20	1,041.88	1,887.0	-2.2	446	1,484	0	0	93	0.27	0.00
21	1,041.67	1,884.8	-2.2	436	1,449	0	0	117	0.34	0.00
22	1,041.47	1,882.7	-2.1	461	1,399	0	0	138	0.40	0.00
23	1,041.23	1,880.1	-2.6	359	1,557	0	0	93	0.27	0.00
24	1,041.03	1,878.0	-2.1	400	1,390	0	0	86	0.25	0.00
25	1,040.82	1,875.7	-2.2	406	1,463	0	0	69	0.20	0.00
26	1,040.66	1,874.0	-1.7	430	1,205	0	0	83	0.24	0.00
27	1,040.45	1,871.8	-2.2	537	1,546	0	0	117	0.34	0.00

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
28	1,040.39	1,871.2	-0.6	649	844	0	0	127	0.37	0.00
29	1,040.16	1,868.7	-2.4	436	1,549	0	0	120	0.35	0.00
30	1,040.05	1,867.5	-1.2	557	1,019	0	0	127	0.37	0.00
31	1,039.91	1,866.1	-1.5	490	1,122	0	0	117	0.34	0.00
Totals	N/A	N/A	-67.2	17,302	47,441	0	0	3,824	11.02	0.00
Acre- Feet	N/A	N/A	-67,200	34,319	94,099	0	0	7,585	N/A	N/A

Comments:

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

Summary Precipitation

This Month	0.00
July 1, 2021 to Date	N/A
October 1, 2021 to Date	28.92

Summary: Release (acre-feet)

Release (acre-feet)	N/A
Power	94,099
Spill	0
Outlet	0
Total	94,099

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

Tulloch Reservoir Daily Operations, September 2024, Run Date: 09/16/2024

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	64,809	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1	508.56	65,178	369	1,641	1,406	1,442	0	0	13
2	508.29	64,846	-332	1,351	1,182	1,504	0	0	14
3	508.59	65,215	369	1,724	1,463	1,527	0	0	11
4	508.35	64,920	-295	1,370	1,225	1,507	0	0	12
5	508.23	64,772	-148	1,475	1,298	1,532	0	0	18
6	508.11	64,624	-148	1,496	1,281	1,556	0	0	15
7	507.81	64,259	-365	1,403	1,238	1,571	0	0	16
8	508.27	64,821	562	1,799	1,550	1,502	0	0	14
9	508.76	65,425	604	1,738	1,507	1,419	0	0	14
10	508.74	65,400	-25	1,472	1,275	1,470	0	0	15
11	508.29	64,846	-554	1,178	1,042	1,442	0	0	15
12	508.15	64,674	-172	1,400	1,222	1,475	0	0	12
13	508.08	64,587	-87	1,438	1,263	1,471	0	0	11
14	508.14	64,661	74	1,522	1,311	1,476	0	0	9
15	507.69	64,113	-548	1,153	1,018	1,418	0	0	11
Totals	N/A	N/A	-696	22,160	19,281	22,312	0	0	200
Acre-Feet	N/A	N/A	-696	43,954	38,244	44,256	0	0	397

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	44,256
Spill	0
Outlet	0
Total	44,256

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

Tulloch Reservoir Daily Operations, August 2024, Run Date: 09/10/2024

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	63,265	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1	507.36	63,713	448	2,272	2,003	2,032	0	0	14
2	507.96	64,441	728	2,435	2,118	2,051	0	0	17
3	507.87	64,331	-110	2,017	1,750	2,062	0	0	10
4	508.26	64,809	478	2,146	1,866	1,888	0	0	17
5	508.47	65,068	259	1,890	1,634	1,740	0	0	19
6	508.86	65,548	480	1,998	1,727	1,744	0	0	12
7	507.63	64,041	-1,507	1,139	1,048	1,881	0	0	18
8	507.62	64,028	-13	1,947	1,688	1,937	0	0	17
9	507.97	64,453	425	2,090	1,797	1,858	0	0	18
10	507.72	64,150	-303	1,723	1,513	1,859	0	0	17
11	507.47	63,847	-303	1,658	1,446	1,795	0	0	16
12	507.38	63,738	-109	1,736	1,501	1,777	0	0	14
13	507.54	63,931	193	1,997	1,751	1,887	0	0	13
14	507.89	64,356	425	2,137	1,764	1,910	0	0	13
15	507.64	64,053	-303	1,644	1,443	1,782	0	0	15
16	507.18	63,495	-558	1,498	1,312	1,765	0	0	14
17	507.36	63,713	218	1,840	1,604	1,716	0	0	14
18	507.56	63,956	243	1,807	1,577	1,672	0	0	12
19	508.31	64,871	915	2,166	1,872	1,690	0	0	15
20	508.35	64,920	49	1,718	1,484	1,682	0	0	11
21	508.35	64,920	0	1,671	1,449	1,657	0	0	14
22	508.34	64,908	-12	1,604	1,399	1,594	0	0	16
23	508.59	65,215	307	1,801	1,557	1,635	0	0	11
24	508.56	65,178	-37	1,585	1,390	1,594	0	0	10
25	508.79	65,461	283	1,706	1,463	1,555	0	0	8
26	508.63	65,265	-196	1,381	1,205	1,470	0	0	10

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)
27	509.00	65,720	455	1,753	1,546	1,510	0	0	14
28	508.22	64,760	-960	932	844	1,401	0	0	15
29	508.94	65,646	886	1,806	1,549	1,345	0	0	14
30	508.61	65,240	-406	1,156	1,019	1,346	0	0	15
31	508.26	64,809	-431	1,275	1,122	1,479	0	0	13
Totals	NA	NA	1,544	54,528	47,441	53,314	0	0	436
Acre-Feet	NA	NA	1,544	108,156	94,099	105,748	0	0	865

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	105,748
Spill	0
Outlet	4
Total	105,748

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

Goodwin Reservoir Daily Operations, September 2024, Run Date: 09/16/2024

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	527	N/A	N/A	N/A	N/A	N/A	N/A
1	359.88	529	2	1,442	0	253	734	322
2	359.86	527	-2	1,504	0	254	751	372
3	359.86	527	0	1,527	0	253	752	400
4	359.86	527	0	1,507	0	252	781	340
5	359.86	527	0	1,532	0	251	791	350
6	359.85	527	0	1,556	0	253	791	361
7	359.85	527	0	1,571	0	254	791	361
8	359.85	527	0	1,502	0	251	783	301
9	359.85	527	0	1,419	0	253	695	301
10	359.85	527	0	1,470	0	254	722	341
11	359.85	527	0	1,442	0	253	741	290
12	359.85	527	0	1,475	0	254	720	338
13	359.85	527	0	1,471	0	252	696	367
14	359.85	527	0	1,476	0	253	722	350
15	359.85	527	0	1,418	0	253	729	296
Totals	N/A	N/A	0	22,312	0	3,793	11,199	5,090
Acre-Feet	N/A	N/A	0	44,256	0	7,523	22,213	10,096

Joint Main Operated by SSJID and OID.

Summary: Release (acre-feet)

Joint Main Canal	22,213
South Main Canal	10,096
Outlet	0
Spill	7,523
Total	39,833

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

Goodwin Reservoir Daily Operations, August 2024, Run Date: 09/10/2024

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	534	N/A	N/A	N/A	N/A	N/A	N/A
1	359.95	534	0	2,032	0	355	1,011	436
2	359.95	534	0	2,051	0	355	1,026	446
3	359.95	534	0	2,062	0	353	1,019	484
4	359.95	534	0	1,888	0	356	975	360
5	359.90	530	-4	1,740	0	314	883	347
6	359.90	530	0	1,744	0	340	869	371
7	359.90	530	0	1,881	0	302	916	452
8	359.90	530	0	1,937	0	306	968	462
9	359.90	530	0	1,858	0	303	964	411
10	359.90	530	0	1,859	0	305	957	431
11	359.90	530	0	1,795	0	303	913	431
12	359.89	529	-1	1,777	0	303	920	407
13	359.90	530	1	1,887	0	302	940	482
14	359.89	529	-1	1,910	0	304	939	392
15	359.89	529	0	1,782	0	301	929	357
16	359.89	529	0	1,765	0	303	869	371
17	359.90	530	1	1,716	0	303	866	326
18	359.90	530	0	1,672	0	304	817	337
19	359.86	527	-3	1,690	0	268	823	415
20	359.86	527	0	1,682	0	254	853	416
21	359.86	527	0	1,657	0	252	797	441
22	359.86	527	0	1,594	0	251	778	391
23	359.86	527	0	1,635	0	252	798	410
24	359.86	527	0	1,594	0	254	788	380
25	359.88	529	2	1,555	0	251	731	398
26	359.86	527	-2	1,470	0	253	729	326
27	359.86	527	0	1,510	0	254	731	381

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
28	359.86	527	0	1,401	0	255	716	285
29	359.86	527	0	1,345	0	252	676	246
30	359.86	527	0	1,346	0	253	645	281
31	359.86	527	0	1,479	0	254	733	354
Totals	N/A	N/A	-7	53,314	0	9,015	26,579	12,027
Acre-Feet	N/A	N/A	-7	105,748	0	17,881	52,719	23,856

Joint Main Operated by SSJID and OID.

Summary: Release (acre-feet)

Joint Main Canal	52,719
South Main Canal	23,856
Outlet	0
Spill	17,881
Total	94,456

September 2024 Water Temperature Update

Year-to-Date Flows

Goodwin releases since October 1, 2023, are shown in Figure 1.

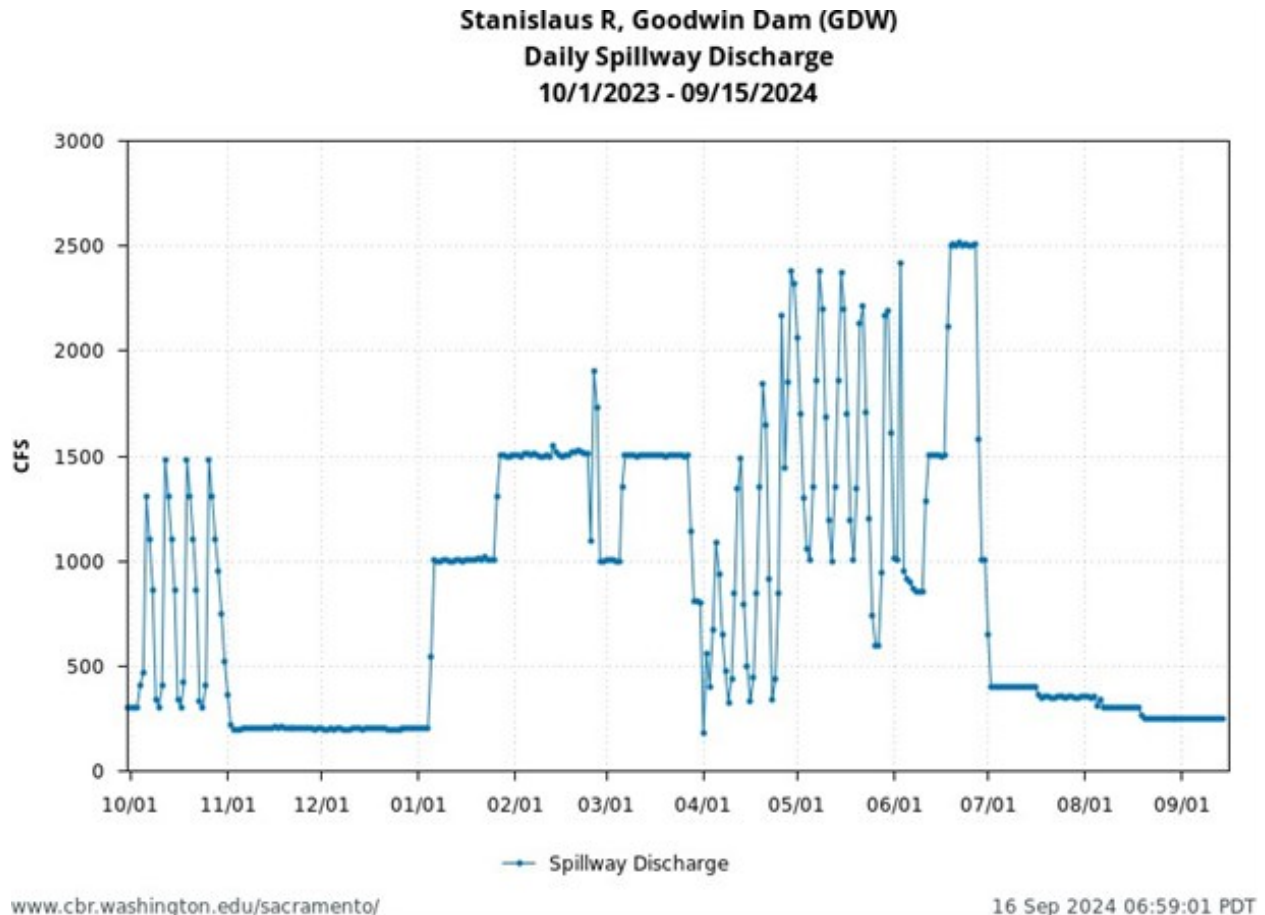


Figure 1. Goodwin (daily) releases to the Stanislaus River since October 1, 2023. Data from GDW station on CDEC.

Figure 1 is a line graph showing Goodwin Dam daily spillway discharge. The graph shows a peak of 2,500 at the end of September 2024, and several periods of oscillating discharge April to June 2024.

Water Temperature

The temperature thresholds included in Figures 2-9, below, are the thresholds used in the 2019 NMFS LTO BiOp (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 June 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 July 2023 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 for water year 2023 is provided in Figure 9.

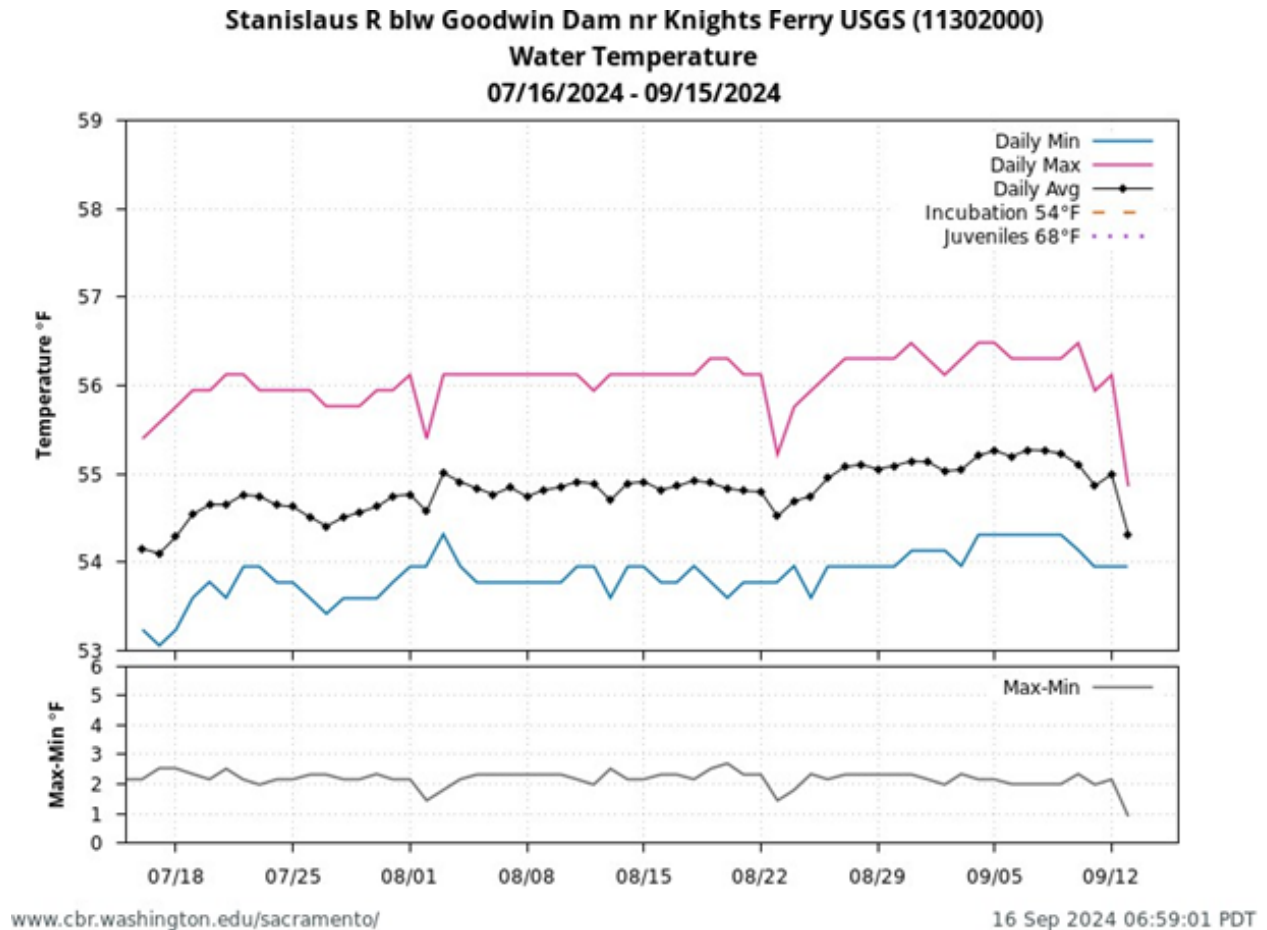
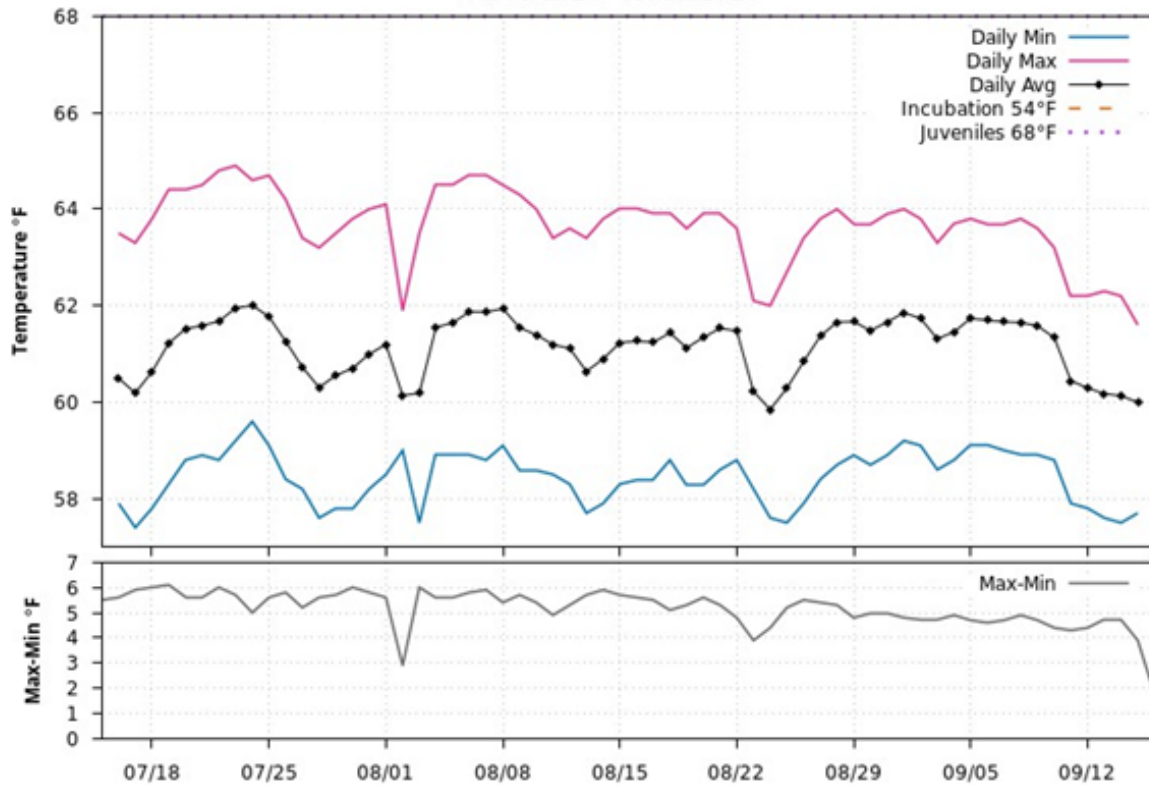


Figure 2. Daily water temperatures on the Stanislaus River upstream of Knights Ferry since June 18, 2024. Data from USGS gage 11302000 on NWIS; temperature threshold reference line added by SWT.

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).

Stanislaus R at Orange Blossom Bridge (OBB)
Water Temperature
07/16/2024 - 09/15/2024



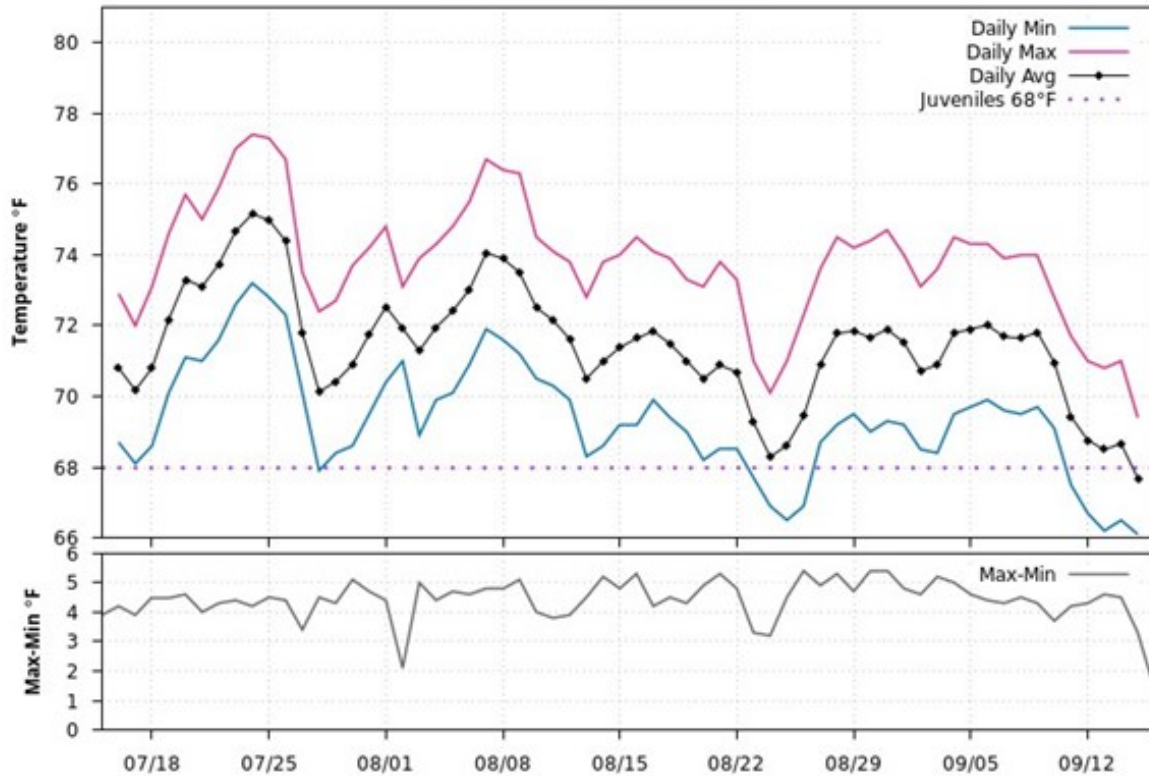
www.cbr.washington.edu/sacramento/

16 Sep 2024 06:59:01 PDT

Figure 3. Stanislaus (hourly) water temperatures at Orange Blossom Bridge since June 18, 2024.

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).

**Stanislaus R at Ripon (USGS) (RIP)
Water Temperature
07/16/2024 - 09/15/2024**



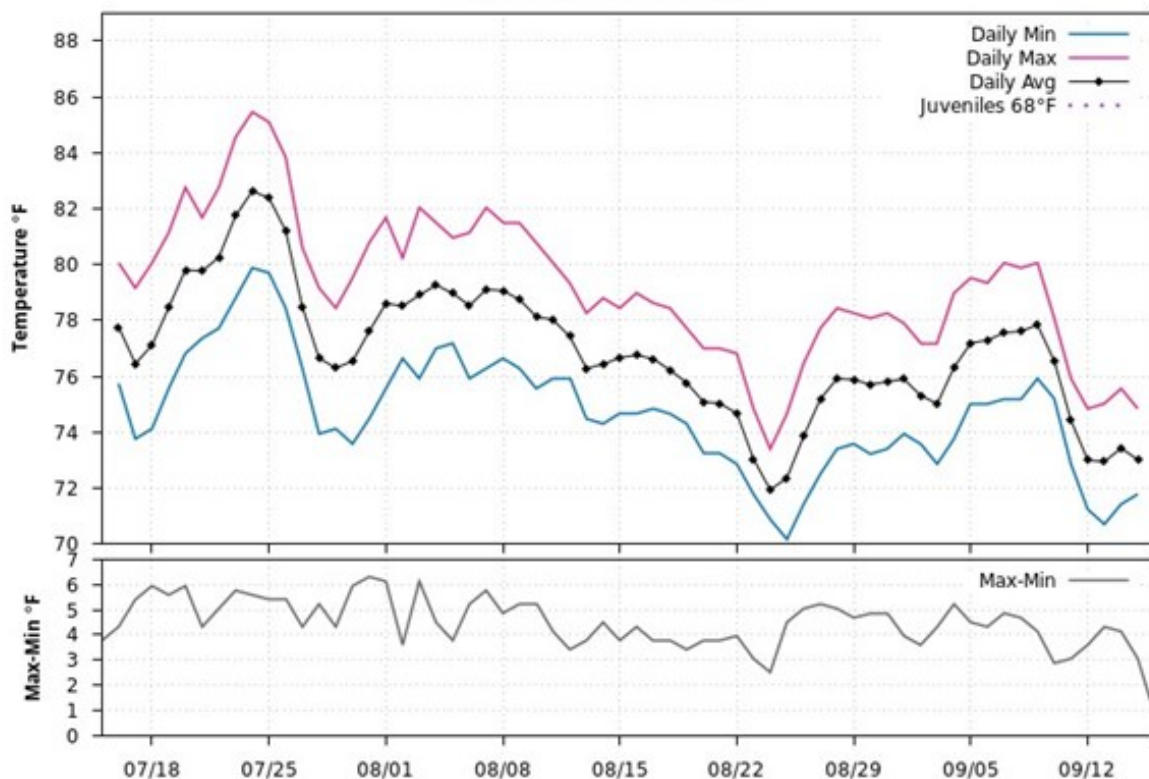
www.cbr.washington.edu/sacramento/

16 Sep 2024 06:59:01 PDT

Figure 4. Stanislaus water temperatures at Ripon since June 18, 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).

**San Joaquin R nr Vernalis (VNS)
Water Temperature
07/16/2024 - 09/15/2024**



www.cbr.washington.edu/sacramento/

16 Sep 2024 06:59:01 PDT

Figure 5. San Joaquin River (15-minute) water temperatures at Vernalis since June 18, 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).

**Stanislaus R at Orange Blossom Bridge (OBB)
2001-2024 Daily Average Water Temperature
Observed Range 48.1-73.1
07/18 - 11/15**

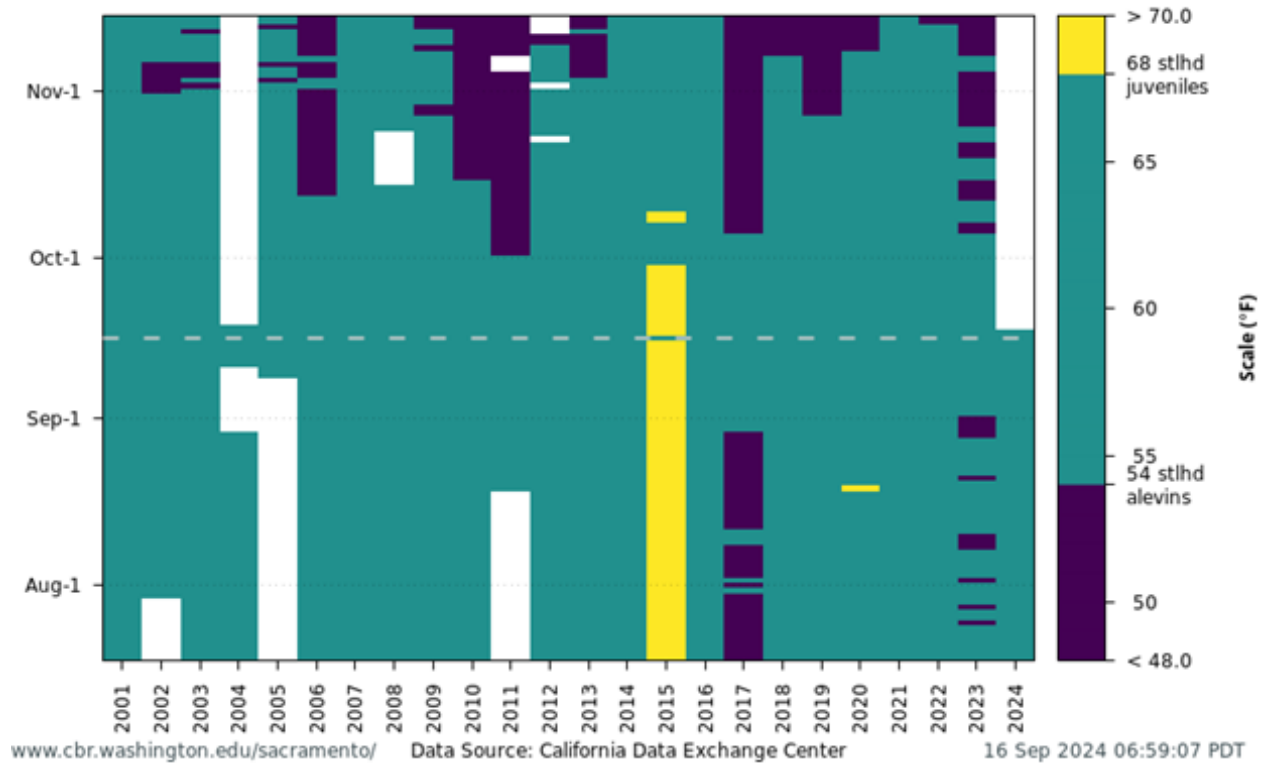


Figure 6. Stanislaus River water temperatures at Orange Blossom Bridge for WY 2001 to present. Data from [SacPAS](https://www.sacpas.org/); website temperature threshold reference lines added by SWT.

Figure 6 is a bar chart showing water temperatures at Orange Blossom Bridge for WY 2001 to present for August to November. The chart shows that during this time, the daily average water temperature was mostly between 54 and 68 degrees Fahrenheit with 2015 being mostly above 68 degrees Fahrenheit.

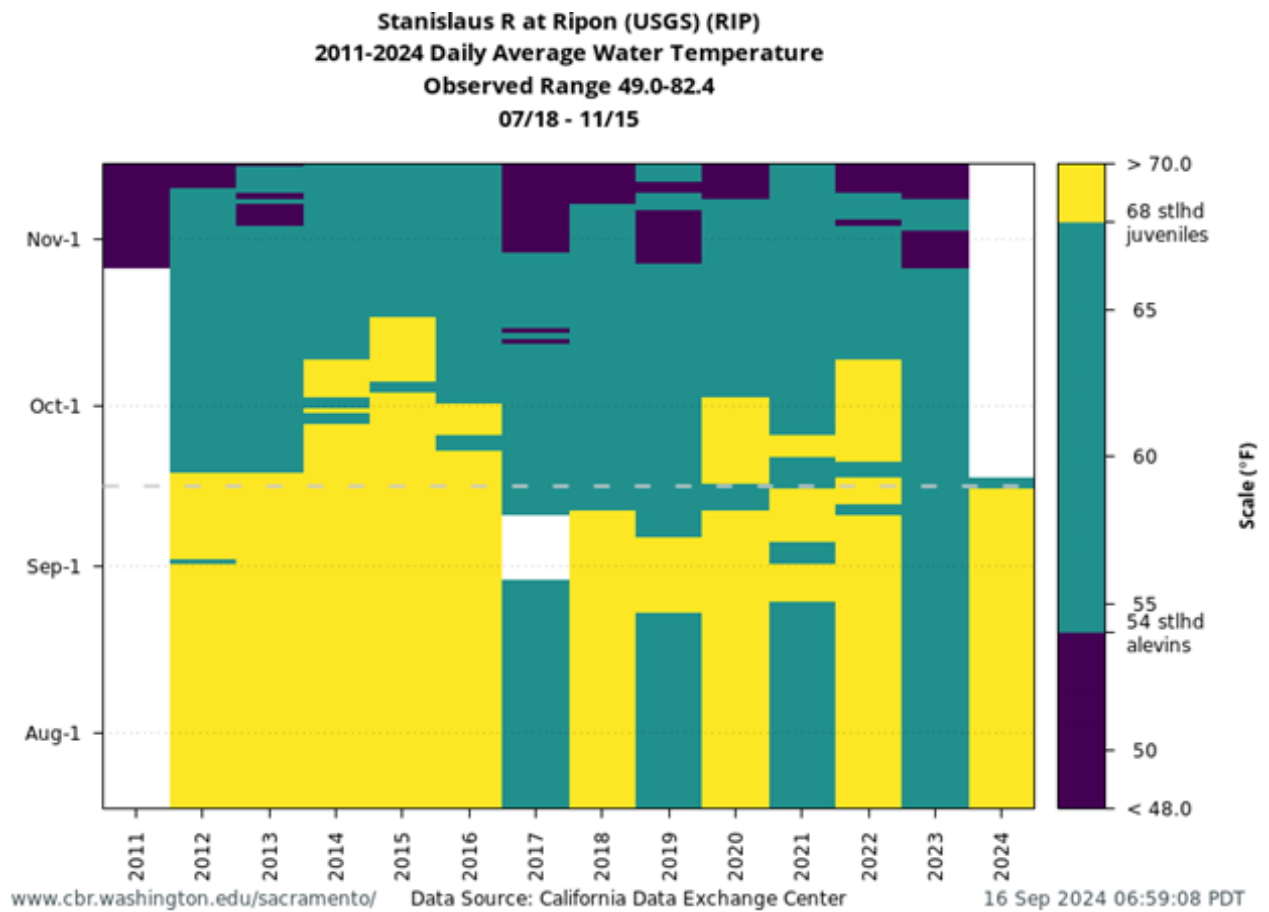


Figure 7. Stanislaus River water temperatures at Ripon for WY 2012 to present. Figure from [SacPAS website](#) using RIP station data from CDEC; temperature threshold reference line added by SWT.

Figure 7 is a bar chart showing water temperatures at Ripon for WY 2012 to present for August to November. The chart shows that during this time, the daily average water temperature was mostly above 68 degrees Fahrenheit with WY2017 and WY 2023 being the only years where water temperature remained below 68 degrees Fahrenheit.

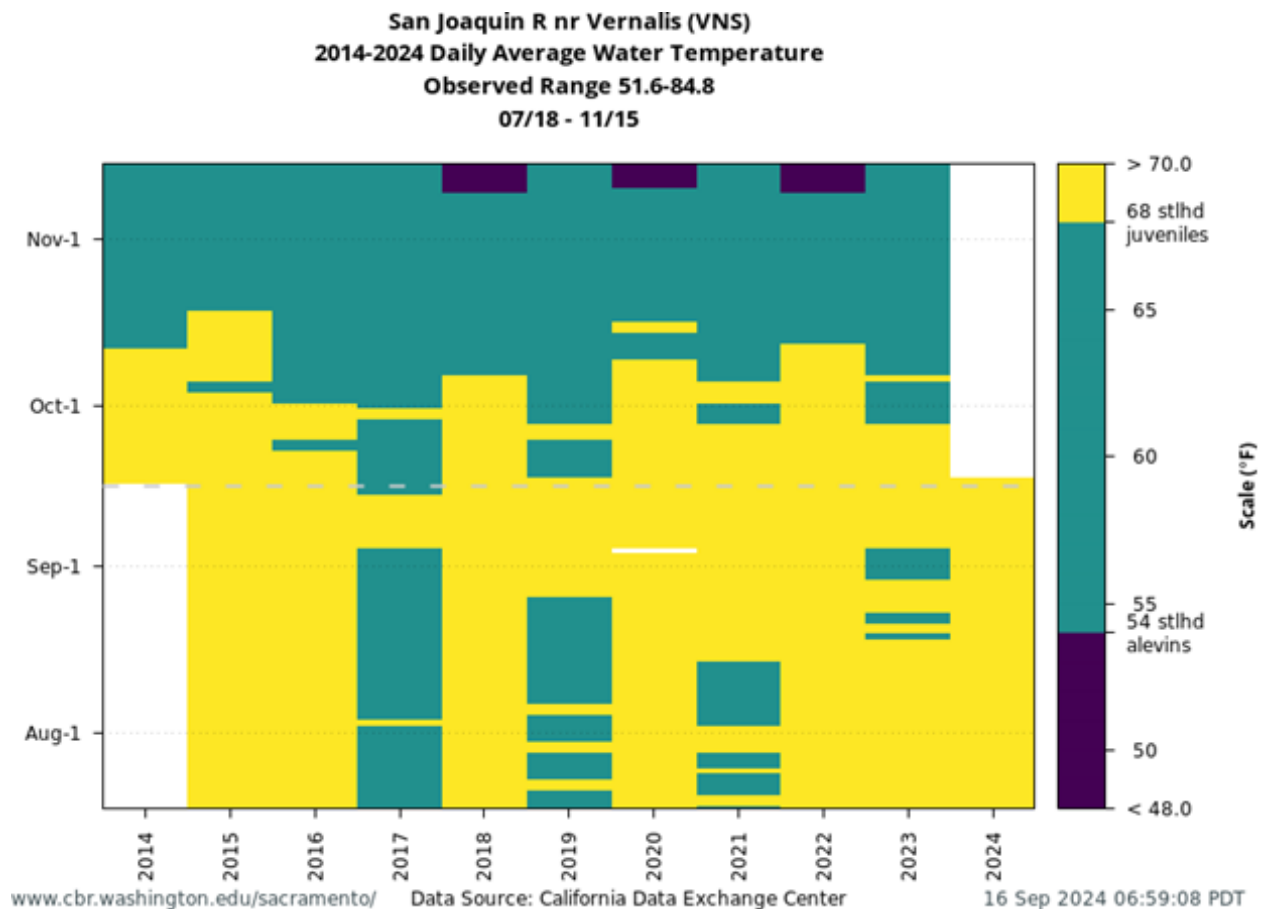


Figure 8. San Joaquin River water temperatures at Vernalis for WY 2014 to present. Figure from [SacPAS website](http://www.sacpas.org) using VNS station data from CDEC; temperature threshold reference line added by SWT.

Figure 8 is a bar chart showing water temperatures at Vernalis for WY 2014 to present for September to July. The chart shows that during this time, the daily average water temperature was mostly above 68 degrees Fahrenheit with WY2017 and 2019 being the only years where water temperature mostly remained below 68 degrees Fahrenheit.

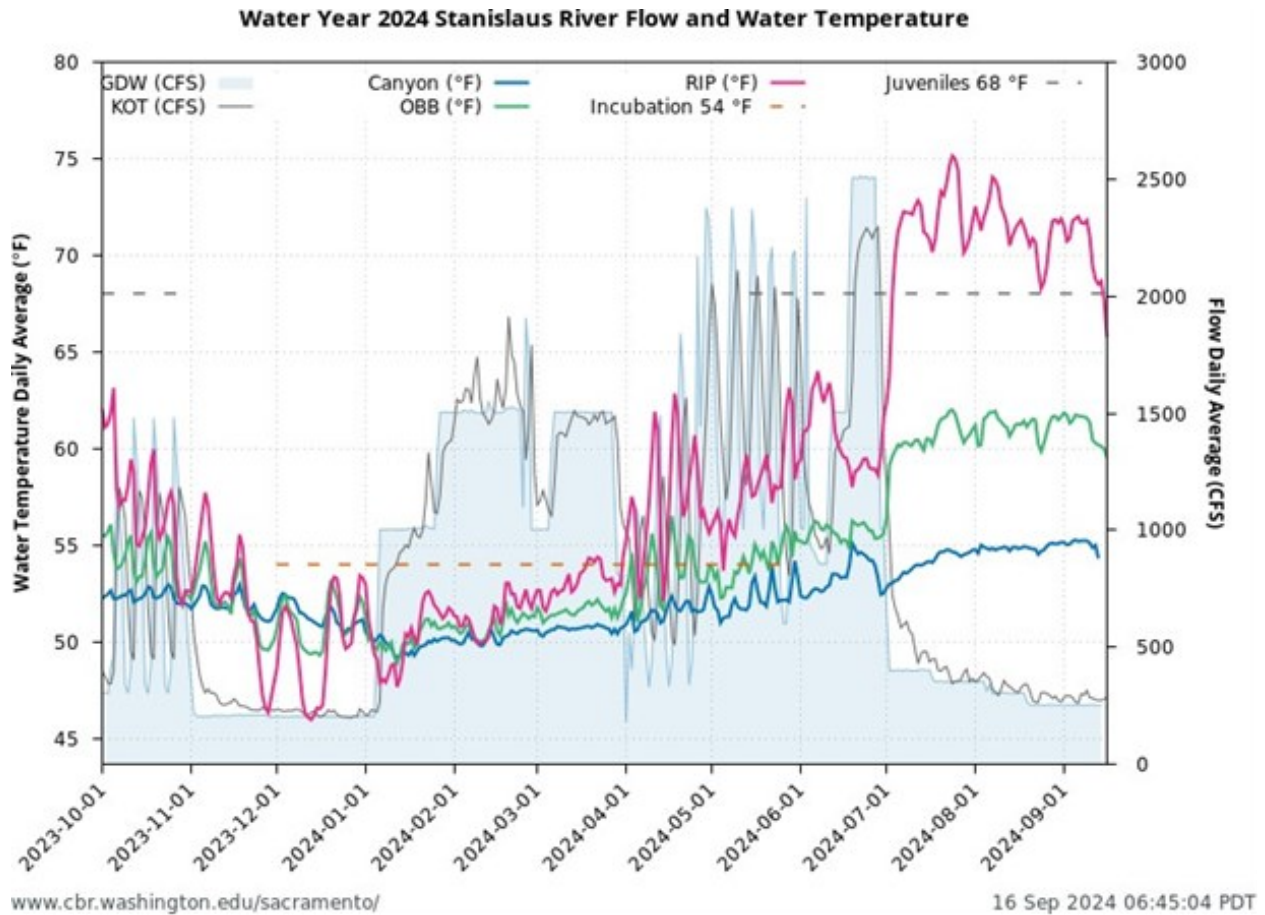


Figure 9. Stanislaus River flow and water temperatures from October 1, 2023 to September 16, 2024. Data (including temperature threshold reference lines) from the [SacPAS website](https://www.cbr.washington.edu/sacramento/).

Figure 9 is a line chart showing river flow and water temperatures on the Stanislaus River. The graph shows slowly decreasing temperatures and flow October 2023 – December 2023 and increasing temperatures April – July 2024.

Flow Planning

CDFW & USBR

Updates to be shared/discussed at the 9/18 meeting.

Stanislaus River Forum (SRF) Call Review

USBR

Receive live update from USBR staff on the 9/17/24 call.

Fish Monitoring and Studies

CDFW

Update on Fish Monitoring (Adults)

Chinook carcass and redd surveys

CDFW plans to start the 2024 Escapement Survey in October.

Steelhead redd surveys

CDFW plans to start the 2025 survey in January.

Update on Fish Monitoring (Juveniles)

Mossdale Trawl

- There has been no salmonid catch in the previous month.
- Trawl operations will shift back to USFWS in October.

FISHBIO

Stanislaus Weir

- The weir was installed 9/3 – 9/5 and began fishing at 10:30 a.m. on 9/5.
- As of 9/10, no salmonids have been observed at the weir.

Table 5 Stanislaus Weir Monitoring Status Summary by WY

Year	Monitoring Start date	Net Passage To Date	Season Total
2024	9/5/24	0	0
2023	9/6/23	0	2,403
2022	9/15/22	ns	3,798
2021	9/8/21	2	6,032
2020	9/10/20	0	1,906
2019	8/29/19	4	2,594
2018	9/5/18	2	4,777
2017	9/15/17	ns	8,500
2016	9/8/16	0	14,399
2015	9/15/15	ns	12,707
2014	9/5/14	0	5,527
2013	9/3/13	0	5,452

Year	Monitoring Start date	Net Passage To Date	Season Total
2012	9/11/12	ns	7,248
2011	11/8/11	ns	776
2010	9/7/10	2	1,364
2009	9/9/09	0	1,303
2008	9/9/08	0	928
2007	9/22/07	ns	439
2006	9/8/06	7	3,074
2005	9/8/05	0	4,124
2004	9/10/04	0	4,448
2003	9/5/03	0	4,848

PSMFC Update

No updates or field work for September 2024.

Archived information can be found at the [Caswell RST CalFish webpage](#), which includes catch spreadsheets, annual reports, and other project information.

Restoration Project Updates

No updates in advance of the 9/18/2024 meeting.