Stanislaus Watershed Team

October 16, 2024

Members Attending

- USBR: Brian Willard, Chase Ehlo, Myrna Girald Perez, Randi Field, Sarah Roy, Spencer Marshall, Zarela Guerrero
- USFWS: N/A
- CDFW: Crystal Rigby, Gretchen Murphey, Steve Tsao, Travis Apgar
- NMFS: Rachael Alcala
- DWR: N/A
- SWRCB: Chris Carr, Yongxuan Gao
- PSMFC: Hunter Morris, Logan Day
- SSJID: Brandon Nakagawa
- Fishbio: N/A
- Stockton East Water District (SEWD): N/A
- WAPA: N/A
- Herum/Crabtree/Suntag Attorneys: Lilliana Selke
- Kearns & West: Karis Johnston, Tom Fischer, Bethany Taylor

Action Items

 All – Submit annual report contribution sections by 10/22/2024 to Myrna Girald Perez, Reclamation by uploading documents to the SWT SharePoint site.

Announcements

- The 14th Annual Stanislaus River Salmon Festival will be held on Saturday, 11/9/2024.
 - If interested in exhibiting, reach out to Gretchen Murphey, CDFW.
 - Attendance is free, but there will be a \$10 charge to park in the Army Corps parking lots.

Operations Update and Forecasts/ Hydrology

New Melones Reservoir Update

• Water Year 2025 (WY25) began on 10/1/2024.

- There is currently a sufficient amount of flood protection space at the start of the water year.
- Outflow and the current fall pulse flows are providing flow variability on the Stanislaus River.

Daily CVP Water Supply

- Storage at New Melones is 1.81 MAF going into WY25, or approximately 138% of the 15year average. Storage levels typically decrease gradually at this time of year due to lower inflows and generally drier atmospheric conditions ahead of the late-fall and winter seasons.
- Accumulated inflow at New Melones for WY25 is 14 TAF.
- Accumulated precipitation at New Melones is currently at zero inches for WY25.

Tulloch Dam

- Storage at Tulloch Reservoir began showing variability in late September to accommodate for the Tulloch drawdown by the Army Corps of Engineers to meet the flood space requirement. Additional drawdowns will be occurring through October.
- Tulloch is expected to conduct maintenance sometime in October that may result in additional variance in elevation.

Goodwin Dam

- As of 10/14/2024, Goodwin Dam is releasing 548 cfs, although releases have ranged from 250 cfs to 1,200 cfs with the current fall pulse flows. Releases will increase to a pulse flow peak of 1,250 cfs on 10/18/2024.
- September releases remained consistent at approximately 250 cfs.

Current Conditions

N/A

Questions and Comments

N/A

Water Temperature Updates

- The water temperatures are looking healthy for juveniles through Ripon at approximately 60°F.
- Orange Blossom Bridge has seen a temperature jump on 10/15/2025 that was suspected to be caused by a battery outage. As of 10/16/2024, the issue seems to be resolved.
- Questions and Comments

- Reclamation has taken a number of data points and will follow up to ensure the station is working properly.
 - CDFW asked of all of those temperature data points were taken at Orange Blossom.
- Reclamation believes this is correct.

Flow Planning

- CDFW reported that the fall pulse flow is in effect.
- The next flow planning item will be for winter storm pulses in January. SWT outlined the planning steps as follows:
 - Planning will need to start in November and may take up to three weeks to discuss and decide on flow shaping before creating a draft operations plan.
 - Reclamation and CDFW will draft the proposal.
 - SWT provides feedback on the draft proposal.
 - Reclamation and CDFW incorporate feedback, and the finalized proposal is submitted to Reclamation's upper management for review. They may require 1-2 weeks of review time due to limited staff.
 - Once approved, the change order and operations plan go into effect.
- Questions and Comments
 - CDFW relayed that they often plan winter pulse flows around a storm event.
 - Reclamation added that another option is to plan for the pulse to take effect in the last week of January or the last week of February depending on the precipitation levels.
 - CDFW acknowledged that there have been some years where pulse flows were combined.

Stanislaus River Forum (SRF) Call Review

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

Fish Monitoring

CDFW Fish Monitoring

- Chinook salmon carcass surveys
 - CDFW began conducting fall-run Chinook salmon carcass and redd surveys the week of 9/23/2024 for the Stanislaus River.

- The Tuolumne River and Merced River carcass surveys started on 9/16/2024.
- CDFW began conducting fall-run Chinook salmon carcass and redd surveys the week of 9/23/2024 for the Stanislaus River.
- Crews at the Stanislaus River are starting to see live redds coming into the system.
- Three adipose-clipped carcasses were tagged and their CWTs will be decoded by CDFW staff.
- CDFW staff also recovered a double-tagged O. mykiss
- Carcass survey data for the three San Joaquin River tributaries through the week of 10/7/2024 are included in the October meeting handout.
- Steelhead O. mykiss redd surveys
 - Surveys will start in February 2025.
 - Usually these overlap with the end of the carcass surveys.

Mossdale Trawl

- Trawl operations and sampling are ongoing, but catch is rare outside of the spring months.
- Salmonid catch has been zero since 6/28/2024.
- Reporting on the trawl will resume in March 2025 or when salmonids are caught.

FISHBIO Monitoring

- Chinook salmon monitoring began on 9/5/2024.
- As of 10/13/2024, a total of 262 salmon have been caught.
- CDFW shared that FISHBIO has funding from Reclamation to continue to monitor O. mykiss and will therefore keep the weir installed through spring of 2025.

PSMFC Monitoring

N/A

Restoration Project Updates

N/A

Other Discussion Items

Curtailments

N/A

SWRCB Updates

N/A

Annual Reporting

- The deadline to complete the report is 12/27/2024.
- Reclamation is running slightly behind schedule and may not make their initial deadline to have a draft report in place by 10/18/2024 due to staff on leave.
- Agencies still have time to submit their sections to Reclamation.
- Kearns & West is still working on shared Teams access for agencies to be able to upload report sections.

Items to elevate to WOMT

N/A

Next Meeting

• Wednesday, November 20, 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, October 16, 2023

Agenda

1. Introductions

- Ground Rules¹
- 3. Announcements
 - a. Meeting will be recorded for notetaking purposes Kari Johnston, Kearns
 & West
- 4. Operations Update and Forecasts/Hydrology Randi C Field, USBR
- 5. Temperature Updates Barbara Byrne, NMFS
- 6. Flow Planning Zarela Guerrero, USBR and Gretchen Murphey, CDFW
- Stanislaus River Forum (SRF) Call Review Myrna Girald Perez and Zarela Guerrero, USBR

- 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

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

- 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. Annual Report Updates, Myrna Girald Perez and Zarela Guerrero, USBR
 - b. SWRCB Updates
 - c. Items to elevate to WOMT
- 11. Review Action Items Karis Johnston, Kearns & West
- 12. Next Meeting: November 20, 2024

Tables for BDO

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

October 14, 2024

Run Date: October 15, 2024

Table 1. Reservoir Releases in Cubic Feet Per Second

Reservoir	Dam	WY 2024	WY 2025	15-Year Median
Trinity	Lewiston	445	446	446
Sacramento	Keswick	6,103	6,869	6,506
Feather	Oroville (SWP)	2,500	2,450	2,450
American	Nimbus	2,486	1,513	1,510
Stanislaus	Goodwin	1,106	548	569
San Joaquin	Friant	384	409	384

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

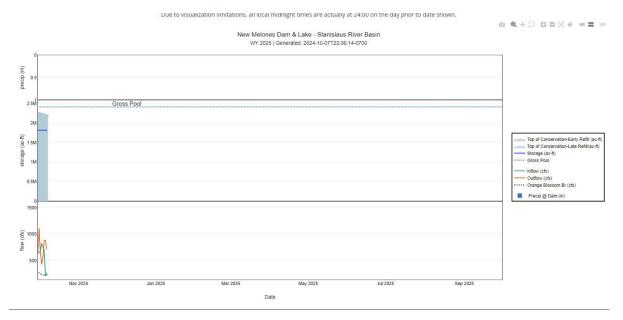
Reservoir	Capacity	15-Yr Avg	WY 2024	WY 2025	% O 15 Yr Avg
Trinity	2,448	1,293	1,250	1,671	129
Shasta	4,552	2,383	3,249	2,691	113
Folsom	977	434	614	437	101
New Melones	2,420	1,309	1,892	1,813	138
Fed. San Luis	966	350	758	342	98
Total North CVP	11,363	5,769	7,763	6,954	121
Millerton	521	260	167	227	87
Oroville (SWP)	3,538	1,619	2,504	1,790	111

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	2	4	5	3	72
Shasta	77	106	111	78	98
Folsom	30	31	49	26	117
New Melones	14	N/A	22	19	77
Millerton	27	17	91	30	91

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

Reservoir	Current WY 2025	WY 1977	WY 1983	Avg (N Yrs)	% of Avg	Last 24 Hours
Trinity at Fish Hatchery	0.07	0.13	0.39	0.45 (64)	15	0.00
Sacramento at Shasta Dam	0.02	0.07	0.24	0.91 (69)	2	0.00
American at Blue Canyon	0.00	0.87	0.73	0.83 (50)	0	0.00
Stanislaus at New Melones	0.00	N/A	0.30	0.37 (47)	0	0.00
San Joaquin at Huntington LK	0.01	1.20	0.00	0.71 (51)	1	0.00



New Melones Dam & Lake – Stanislaus River Basin, 2024-10-07T22:06:14-0700

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 October 2024, with an outflow peak at 1000 cfs, and inflow drop below 500 cfs.

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

New Melones Lake Daily Operations, October 2024, Run Date: 10/15/2024

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	1,823.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1	1,035.85	1,823.3	-0.1	679	651	0	0	81	0.24	0.00
2	1,035.90	1,823.8	0.5	827	428	0	0	135	0.40	0.00
3	1,035.91	1,823.9	0.1	759	561	0	0	146	0.43	0.00
4	1,035.85	1,823.3	-0.6	699	880	0	0	135	0.40	0.00
5	1,035.70	1,821.7	-1.6	214	883	0	0	122	0.36	0.00
6	1,035.59	1,820.6	-1.1	267	717	0	0	129	0.38	0.00
7	1,035.51	1,819.7	-0.8	410	740	0	0	91	0.27	0.00
8	1,035.46	1,819.2	-0.5	707	849	0	0	122	0.36	0.00
9	1,035.55	1,820.1	0.9	654	14	0	0	166	0.49	0.00
10	1,035.54	1,820.0	-0.1	442	400	0	0	95	0.28	0.00
11	1,035.34	1,817.9	-2.1	425	1,415	0	0	64	0.19	0.00
12	1,035.04	1,814.8	-3.1	340	1,850	0	0	71	0.21	0.00
13	1,034.93	1,813.7	-1.1	431	948	0	0	61	0.18	0.00
14	1,034.85	1,812.8	-0.8	310	683	0	0	47	0.14	0.00
Totals	N/A	N/A	-10.4	7,164	11,019	0	0	1,465	4.33	0.00
Acre- Feet	N/A	N/A	-10,400	14,210	21,856	0	0	2,906	N/A	N/A

Comments:

This Month 0.00 October 1, 2024 to Date 0.00

^{*} Computed inflow is the sum of change in storage, releases, and evaporation. Summary Precipitation

Summary: Release (acre-feet)

Release (acre-feet)	N/A
Power	21,856
Spill	0
Outlet	0

Total 21.856

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

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

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.	Precip.
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
16	1,037.22	1,837.6	-1.6	440	1,144	0	0	92	0.27	0.00
17	1,037.01	1,835.4	-2.2	339	1,417	0	0	37	0.11	0.00
18	1,036.83	1,833.5	-1.9	456	1,323	0	0	85	0.25	0.00
19	1,036.68	1,832.0	-1.6	530	1,275	0	0	48	0.14	0.00
20	1,036.63	1,831.4	-0.5	586	793	0	0	58	0.17	0.00
21	1,036.53	1,830.4	-1.0	541	1,006	0	0	64	0.19	0.00
22	1,036.41	1,829.1	-1.3	536	1,100	0	0	71	0.21	0.00
23	1,036.28	1,827.8	-1.4	657	1,266	0	0	78	0.23	0.00
24	1,036.13	1,826.2	-1.6	599	1,301	0	0	91	0.27	0.00
25	1,036.01	1,824.9	-1.3	577	1,056	0	0	156	0.46	0.00
26	1,035.91	1,823.9	-1.0	577	1,040	0	0	64	0.19	0.00
27	1,035.95	1,824.3	0.4	703	397	0	0	95	0.28	0.00

Day	Elev	Storage 1000- Acre-Feet in Lake	Storage 1000- Acre- Feet Change		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	1,035.98	1,824.6	0.3	716	456	0	0	102	0.30	0.00
29	1,035.96	1,824.4	-0.2	653	670	0	0	88	0.26	0.00
30	1,035.86	1,823.4	-1.0	647	1,110	0	0	64	0.19	0.00
Totals	N/A	N/A	-42.8	16,035	34,635	0	0	2,920	8.57	0.00
Acre- Feet	N/A	N/A	-42,800	31,805	68,699	0	0	5,792	-42,800	31,805

Comments:

Summary Precipitation

This Month 0.00 October 1, 2024 to Date 28.92

Summary: Release (acre-feet)

 Release (acre-feet)
 N/A

 Power
 68,699

 Spill
 0

 Outlet
 0

 Total
 68,699

 $[\]ensuremath{^{\star}}$ Computed inflow is the sum of change in storage, releases, and evaporation.

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

Tulloch Reservoir Daily Operations, October 2024, Run Date: 10/15/2024

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	61,754	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1	505.37	61,342	-412	758	651	957	0	0	9
2	504.70	60,560	-782	492	428	871	0	0	15
3	504.39	60,201	-359	629	561	794	0	0	16
4	504.76	60,629	428	1,013	880	782	0	0	15
5	505.14	61,072	443	1,027	883	790	0	0	14
6	505.29	61,248	176	820	717	717	0	0	14
7	505.47	61,460	212	809	740	692	0	0	10
8	505.80	61,848	388	890	849	680	0	0	14
9	504.27	60,062	-1,786	1	14	883	0	0	18
10	502.71	58,285	-1,777	393	400	593	0	686	10
11	502.04	57,535	-750	1,428	1,415	1,799	0	0	7
12	502.60	58,162	627	1,892	1,850	1,568	0	0	8
13	501.99	57,479	-683	1,001	948	1,339	0	0	6
14	501.25	56,663	-816	749	683	1,155	0	0	5
Totals	N/A	N/A	-5,091	11,902	11,019	13,620	0	686	161
Acre- Feet	N/A	N/A	-5,091	23,608	21,856	27,015	0	1,361	319

Comments:

Summary: Release (acre-feet)

 Release (acre-feet)
 N/A

 Power
 27,015

 Spill
 0

 Outlet
 1,361

 Total
 28,376

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

⁽¹⁾ Evaporation records taken from New Melones Pan.

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

Tulloch Reservoir Daily Operations, September 2024, Run Date: 10/10/2024

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	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
16	507.43	63,798	-315	1,296	1,144	1,444	0	0	11
17	507.75	64,186	388	1,632	1,417	1,432	0	0	4
18	507.89	64,356	170	1,522	1,323	1,426	0	0	10
19	507.95	64,428	72	1,456	1,275	1,414	0	0	6
20	507.13	63,435	-993	892	793	1,386	0	0	7
21	506.76	62,990	-445	1,134	1,006	1,351	0	0	7
22	506.71	62,931	-59	1,265	1,100	1,287	0	0	8
23	507.02	63,301	370	1,463	1,266	1,267	0	0	9
24	507.35	63,701	400	1,500	1,301	1,287	0	0	11
25	507.34	63,689	-12	1,228	1,056	1,216	0	0	18
26	507.45	63,822	133	1,197	1,040	1,123	0	0	7

Day	Elev	Storage (Acre Feet) Res.	Storage (Acre- Feet) Change	Inflow	New Melones Release	Release C.F.S. Power	Release C.F.S. Spill	Release C.F.S. Outlet	Evap. C.F.S. (1)
27	506.56	62,752	-1,070	452	397	980	0	0	11
28	505.63	61,648	-1,104	490	456	1,036	0	0	11
29	505.24	61,189	-459	760	670	981	0	0	10
30	505.72	61,754	565	1,239	1,110	947	0	0	7
Totals	NA	NA	-3,055	39,686	34,635	40,889	0	0	337
Acre-Feet	NA	NA	-3,055	78,717	68,699	81,103	0	0	668

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 81,103 Power Spill 0 Outlet 0 81,103 **Total**

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

Goodwin Reservoir Daily Operations, October 2024, Run Date: 10/15/2024

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	525	N/A	N/A	N/A	N/A	N/A	N/A
1	359.83	525	0	957	0	254	454	327
2	359.83	525	0	871	0	253	374	327
3	359.82	524	-1	794	0	253	363	265
4	359.83	525	1	782	0	253	365	251
5	359.83	525	0	790	0	255	377	240
6	359.83	525	0	717	0	253	327	221
7	359.83	525	0	692	0	254	280	247
8	359.86	527	2	680	0	289	261	213
9	359.99	536	9	883	0	459	278	232
10	360.29	557	21	1,279	0	888	282	206
11	360.42	566	9	1,799	0	1,192	437	269
12	360.27	556	-10	1,568	0	1,034	449	193
13	360.17	549	-7	1,339	0	856	432	158
14	359.98	536	-13	1,155	0	548	478	231
Totals	N/A	N/A	11	14,306	0	7,041	5,157	3,380
Acre-Feet	N/A	N/A	11	28,376	0	13,966	10,229	6,704

Joint Main Operated by SSJID and OID.

Summary: Release (acre-feet)

Joint Main Canal 10,229
South Main Canal 6,704
Outlet 0
Spill 13,966
Total 30.899

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

Goodwin Reservoir Daily Operations, September 2024, Run Date: 10/10/2024

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	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
16	359.85	527	0	1,444	0	254	706	346
17	359.85	527	0	1,432	0	254	715	326
18	359.85	527	0	1,426	0	251	715	326
19	359.85	527	0	1,414	0	252	713	313
20	359.85	527	0	1,386	0	253	733	271
21	359.85	527	0	1,351	0	252	733	251
22	359.85	527	0	1,287	0	254	701	220
23	359.85	527	0	1,267	0	254	701	200
24	359.85	527	0	1,287	0	252	702	221
25	359.83	525	-2	1,216	0	251	573	251
26	359.83	525	0	1,123	0	253	527	195

Day		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
27	359.83	525	0	980	0	253	391	229
28	359.83	525	0	1,036	0	254	437	262
29	359.83	525	0	981	0	253	448	230
30	359.83	525	0	947	0	254	447	281
Totals	N/A	N/A	-2	40,889	0	7,587	20,441	9,012
Acre-Feet	N/A	N/A	-2	81,103	0	15,049	40,545	17,875

Joint Main Operated by SSJID and OID.

Summary: Release (acre-feet)

 Joint Main Canal
 40,545

 South Main Canal
 17,875

 Outlet
 0

 Spill
 15,049

 Total
 73.469

October 2024 Water Temperature and Fish Monitoring Update

Year-to-Date Flows

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

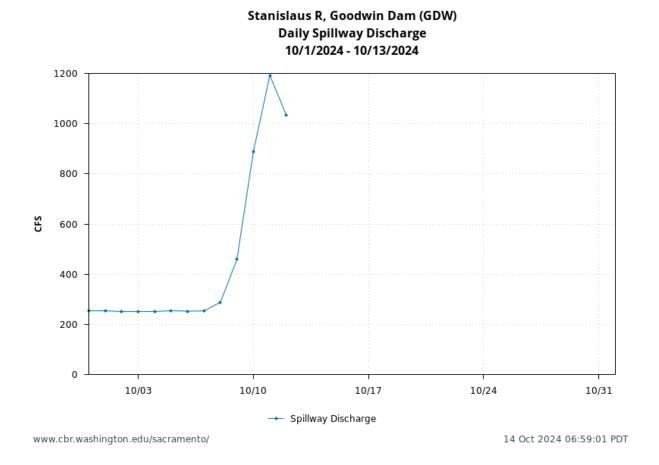


Figure 1. Goodwin (daily) releases to the Stanislaus River since October 1, 2024. Data from GDW station on CDEC.

Figure 1 is a line graph showing Goodwin Dam daily spillway discharge. The graph shows a steady release of approximately 280 cfs in early October 2024, with a peak of 1,200 cfs on October 10 2024.

Water Temperature

The temperature thresholds included in Figures 2-10, 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 August 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 August 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.

Stanislaus R blw Goodwin Dam nr Knights Ferry USGS (11302000) **Water Temperature** 08/13/2024 - 10/13/2024 59 Daily Min Daily Max Daily Avg 58 Incubation 54°F Juveniles 68°F 57 Temperature °F 56 54 53 6 Max-Min 5 Max-Min °F 4 3 2 1 0 08/15 08/22 08/29 09/05 09/12 09/19 09/26 10/03 10/10 www.cbr.washington.edu/sacramento/ 14 Oct 2024 06:59:02 PDT

Figure 2. Daily water temperatures on the Stanislaus River upstream of Knights Ferry since August 13, 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 08/13/2024 - 10/13/2024

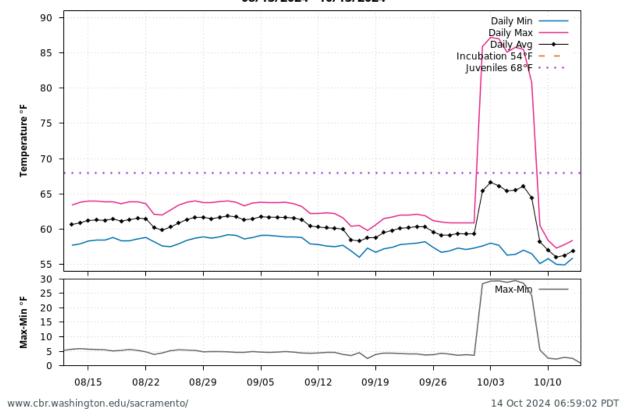


Figure 3. Stanislaus (hourly) water temperatures at Orange Blossom Bridge since August 13, 2023.

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.

Stanislaus R at Ripon (USGS) (RIP) Water Temperature 08/13/2024 - 10/13/2024

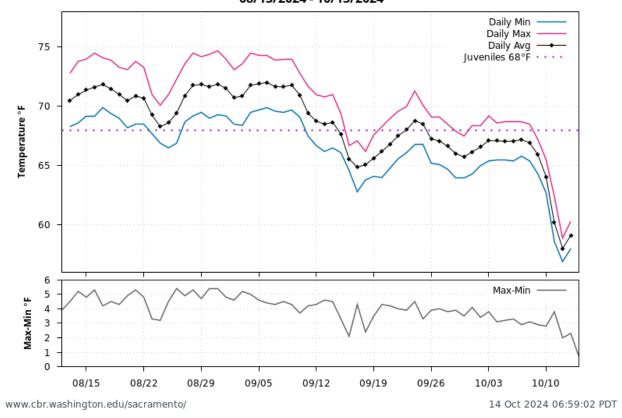


Figure 4. Stanislaus water temperatures at Ripon since August 13, 2024. Data from RIP station on CDEC.

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 08/13/2024 - 10/13/2024

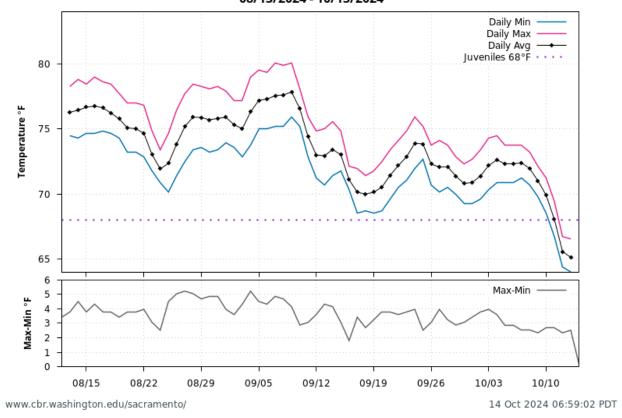


Figure 5. San Joaquin River (15-minute) water temperatures at Vernalis since August 13, 2024. Data from VNS station on CDEC. Note that, unlike in the previous figures, temperature is reported in degrees Celsius. 8°C=46.4°F; 10°C=50°F; 12°C=53.6°F; 14°C=57.2°F; 16°C=60.8°F; 18°C=64.4°F; 20°C=68.0°F; 22°C=71.6°F; 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) 2000-2024 Daily Average Water Temperature Observed Range 43.0-73.0 08/15 - 12/13

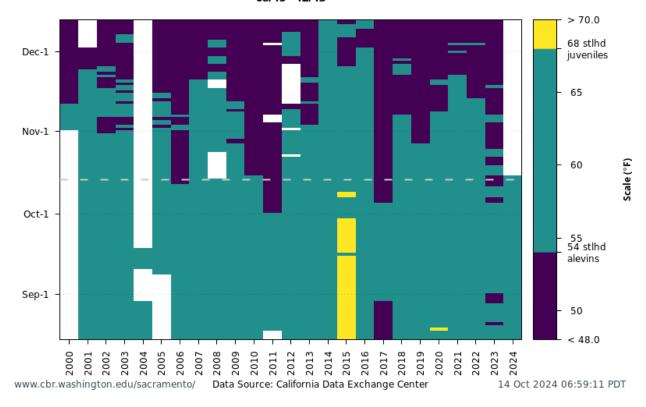


Figure 6. Stanislaus River water temperatures at Orange Blossom Bridge for WY 2001 to present. <u>Data from SacPAS website</u>; temperature threshold reference lines added by SWT.

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.

Stanislaus R at Ripon (USGS) (RIP) 2011-2024 Daily Average Water Temperature Observed Range 42.1-80.4 08/15 - 12/13

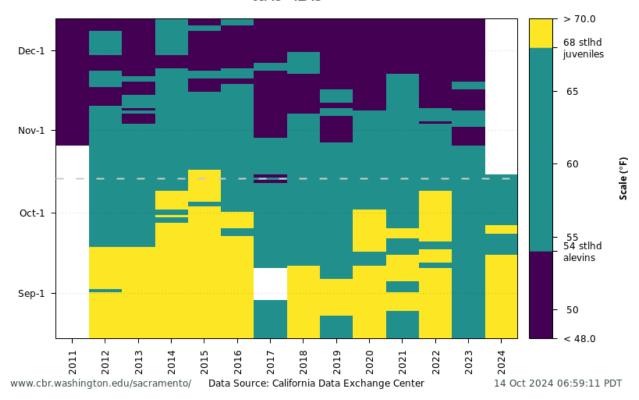


Figure 7. Stanislaus River water temperatures at Ripon for WY 2011 to present. Figure from <u>SacPAS website</u> using RIP station data from CDEC; temperature threshold reference line added by SWT.

Figure 7 is a bar chart showing water temperatures at Ripon for WY 2011 to present for August to November. The chart shows that during this time, the daily average water temperature was mostly above 68 degrees Fahrenheit with WY2017 being the only year where water temperature remained below 68 degrees Fahrenheit.

San Joaquin R nr Vernalis (VNS) 2014-2024 Daily Average Water Temperature Observed Range 45.8-84.8 08/15 - 12/13

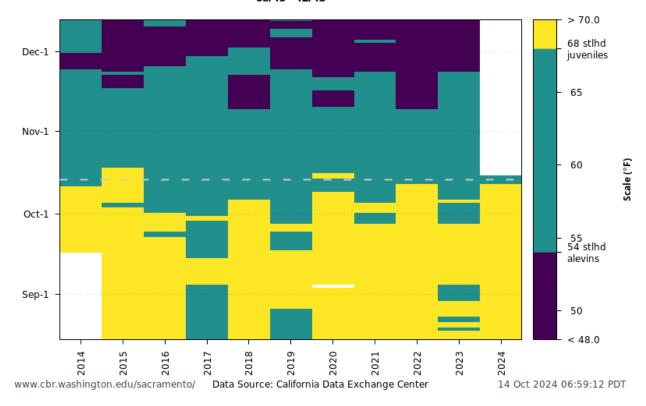


Figure 8. San Joaquin River water temperatures at Vernalis for WY 2014 to present. Figure from <u>SacPAS website</u> using VNS station data from CDEC; temperature threshold reference line added by SWT.

Figure 8 is a bar chart showing water temperatures at Vernalis for WY 2018 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 being the only year where water temperature mostly remained below 68 degrees Fahrenheit.



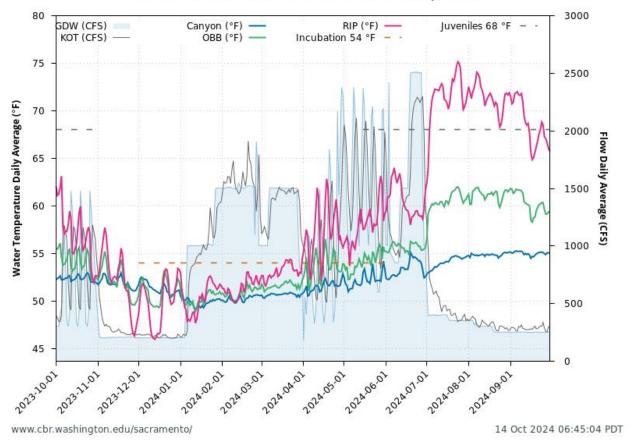


Figure 9. Stanislaus River flow and water temperatures from October 1, 2023 to October 14, 2024. <u>Data (including temperature threshold reference lines) from SacPAS website</u>:

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

Flow Planning

CDFW and USBR Updates

Updates to be shared/discussed at the 10/16 meeting.

USBR Updates

Receive live update from USBR staff on the 10/15 call.

Fish Monitoring

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 October 7, 2024 are reported in Table 5.

Table 5. Data from the fall 2023 CDFW carcass survey for the San Joaquin tributaries.

River	Week	Date	# Live	# Redds	# Skeleto ns	# Tagged	# Ad- Clipped	# Scale Sampl- es	# Recover -ed	Averag e 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	9	1	1	1	1	1	0	400
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
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

Planning to start the steelhead redd surveys in February 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

Table 6. Chinook catch---Updated through: 10/13/2024.

Year	Monitoring Start Date	Net Passage to Date	Season Total
2024	9/5/24	262	262
2023	9/6/23	280	2,443
2022	9/15/22	96	3,798
2021	9/8/21	378	6,032
2020	9/10/20	113	1,906
2019	8/29/19	132	2,594

Year	Monitoring Start Date	Net Passage to Date	Season Total
2018	9/5/18	437	4,777
2017	9/15/17	519	8,500
2016	9/8/16	676	14,399
2015	9/15/15	127	12,707
2014	9/5/14	410	5,527
2013	9/3/13	802	5,452
2012	9/11/12	1,030	7,248
2011	11/8/11	ns	776
2010	9/7/10	252	1,364
2009	9/9/09	306	1,303
2008	9/9/08	261	928
2007	9/22/07	62	439
2006	9/8/06	325	3,074
2005	9/8/05	352	4,124
2004	9/10/04	587	4,448
2003	9/5/03	1,744	4,848

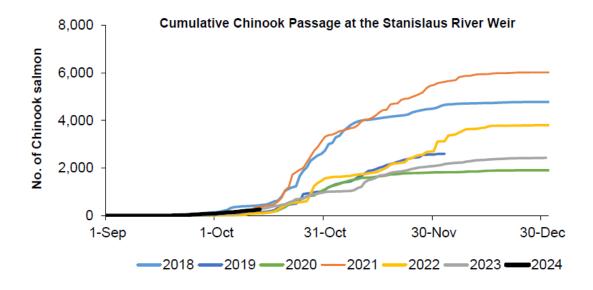


Figure 10. Graph of cumulative Chinook passage at the Stanislaus River Weir.

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

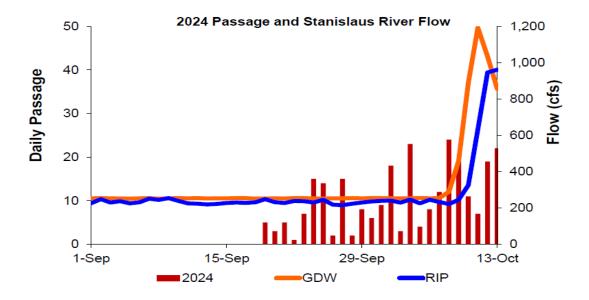


Figure 11. Graph of 2024 passage and Stanislaus River flow.

Figure 11 is a bar chart showing the 2024 passage and Stanislaus Rive flow, with the highest peaks occurring in late September through early October.

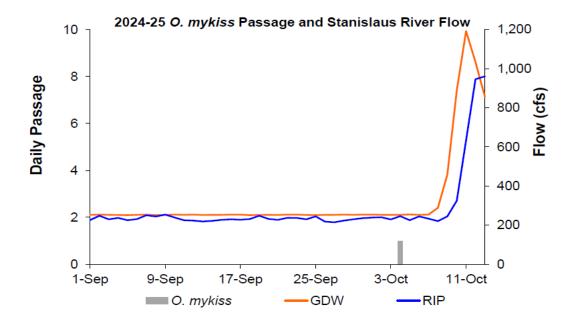


Figure 12. Graph of 2024-2025 O. mykiss passage and Stanislaus River flow.

Figure 12 is a bar chart showing the 2024-2025 O. mykiss passage and Stanislaus Rive flow, with the highest peaks occurring in early October.

PSMFC Update

No updates for October 2024.

Archived information can be found at the <u>Caswell RST CalFish webpage</u>, which includes catch spreadsheets, annual reports, and other project information.