



— BUREAU OF —  
RECLAMATION

## Stanislaus Watershed Team

**10:00 AM – 12:00 PM**

**Conference Line: 1 (321) 209-6143; Meeting ID: 901 988  
581# Webinar: [Join Microsoft Teams Meeting](#)**

**Wednesday, November 16, 2022**

### Agenda

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

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

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

- c. Yellow-bellied cuckoo survey

11. Other Discussion Items

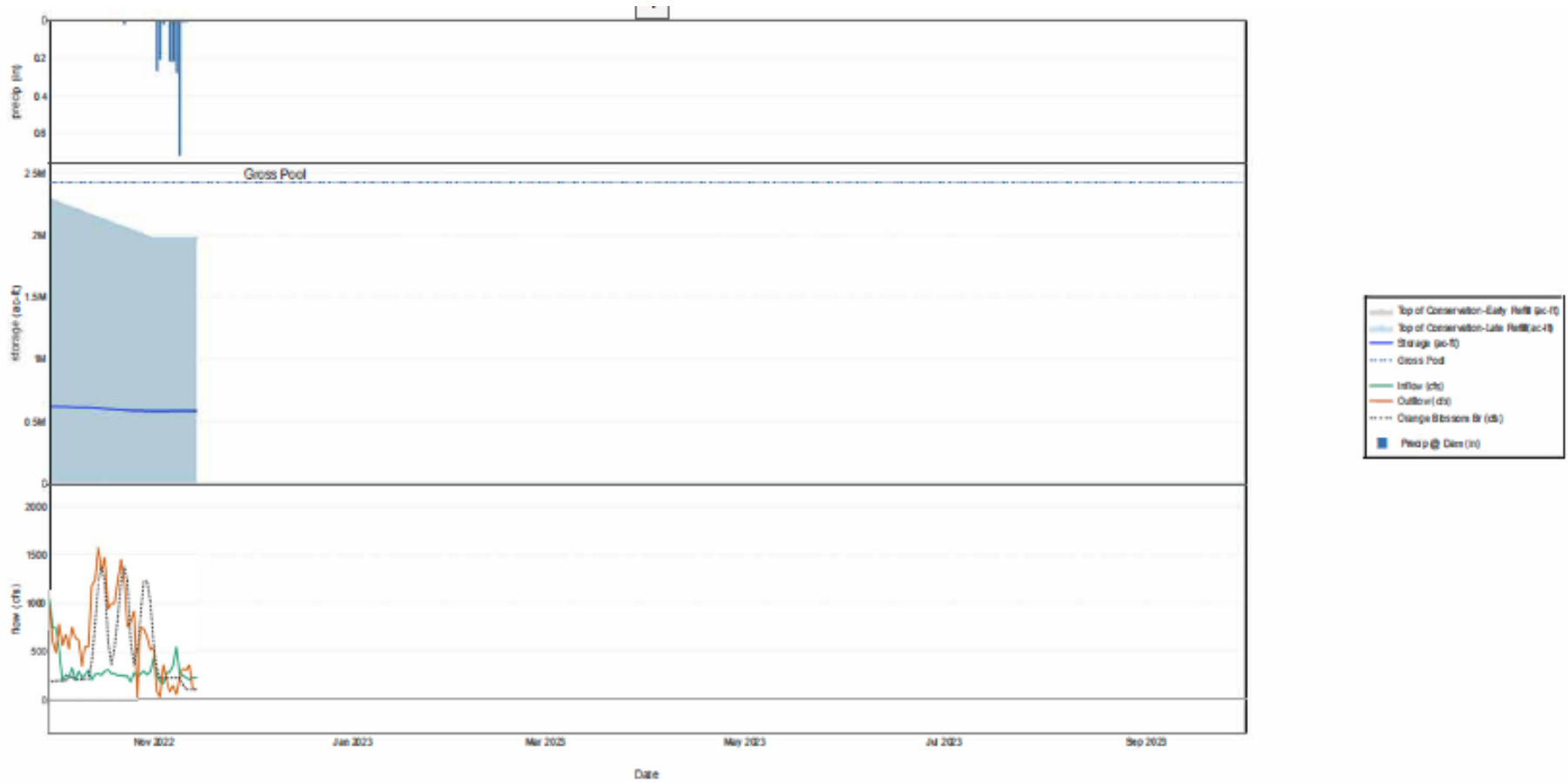
- a. Curtailments

- b. Annual reporting check-in

- c. Items to elevate to WOMT

12. Review Action Items

13. Next Meeting: Wednesday, December 21, 2022  
(10am-12pm)



New Melones Dam & Lake - Stanislaus River Basin  
 2022-11-14T15:06:32-0800



## Tables for BDO

United States Department of the Interior  
U.S. Bureau of Reclamation, Central Valley Project-  
California Daily CVP Water Supply Report

November 13, 2022

Run Date: November 14, 2022

Table 4. Reservoir Releases in Cubic Feet Per Second

Reservoir	Dam	WY 2020	WY 2021	15-Year Median
Trinity	Lewiston	296	305	304
Sacramento	Keswick	3,257	3,724	4,805
Feather	Oroville (SWP)	950	2,000	1,750
American	Nimbus	590	1,310	1,335
Stanislaus	Goodwin	205	201	225
San Joaquin	Friant	230	501	353

Table 5. Storage in Major Reservoirs in Thousands of Acre-Feet

Reservoir	Capacity	15-Yr Avg	WY 2021	WY 2021	% O 15 Yr Avg
Trinity	2,448	1,213	703	532	44
Shasta	4,552	2,125	1,083	1,397	66
Folsom	977	364	337	268	74
New Melones	2,420	1,192	841	585	49
Fed. San Luis	966	346	82	184	53
Total North CVP	11,363	5,240	1,046	2,966	57
Millerton	521	247	311	314	127
Oroville (SWP)	3,538	1,407	1,030	1,027	73

Table 6. Accumulated Inflow for water Year to Date in Thousands of Acre-Feet

Reservoir	Current WY 2021	WY 1977	WY 1983	15-Yr Avg	% O 15 Yr Avg
Trinity	5	26	94	32	15
Shasta	197	325	566	305	65
Folsom	62	25	242	88	70
New Melones	26	NA	90	48	54
Millerton	55	13	164	72	76

Table 7. Accumulated Precipitation for Water Year to Date in Inches

Reservoir	Current WY 2021	WY 1977	WY 1983	Avg (N Yrs)	% of Avg	Last 24 Hours
Trinity at Fish Hatchery	2.80	1.80	5.62	31.82 (60)	9	0.00
Sacramento at Shasta Dam	3.37	3.10	13.86	61.69 (65)	5	0.00
American at Blue Canyon	6.43	1.46	11.67	67.90 (46)	9	0.00
Stanislaus at New Melones	1.98	NA	4.24	27.93 (43)	7	0.00
San Joaquin at Huntington LK	4.94	1.50	4.20	42.31 (47)	12	0.00

UNITED STATES DEPARTMENT OF THE INTERIOR  
U.S. BUREAU OF RECLAMATION-CENTRAL VALLEY PROJECT-CALIFORNIA

**NOVEMBER 2022**

**NEW MELONES LAKE DAILY OPERATIONS**

RUN DATE: 11/14/2022

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
N/A	N/A	583.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1	874.62	583.4	-0.3	442	544	0	0	28	0.17	0.00
2	874.68	583.7	0.3	258	93	0	0	10	0.06	0.27
3	874.74	584.0	0.3	188	31	0	0	2	0.01	0.21
4	874.66	583.6	-0.4	175	369	0	0	13	0.08	0.02
5	874.68	583.7	0.1	280	203	0	0	25	0.15	0.00
6	874.75	584.1	0.4	287	83	0	0	23	0.14	0.22
7	874.82	584.4	0.4	358	154	0	0	23	0.14	0.22
8	875.01	585.4	1.0	550	55	0	0	3	0.02	0.28
9	875.02	585.5	0.1	263	230	0	0	7	0.04	0.72
10	874.99	585.3	-0.2	256	329	0	0	5	0.03	0.01
11	874.96	585.2	-0.2	232	305	0	0	5	0.03	0.01
12	874.89	584.8	-0.4	212	366	0	0	27	0.16	0.00
13	874.93	585.0	0.2	230	113	0	0	13	0.08	0.00
<b>TOTALS</b>	N/A	N/A	<b>1.3</b>	<b>3,731</b>	<b>2,875</b>	<b>0</b>	<b>0</b>	<b>184</b>	<b>1.11</b>	<b>1.96</b>
<b>ACRE-FEET</b>	N/A	N/A	<b>1,300</b>	<b>7,400</b>	<b>5,703</b>	<b>0</b>	<b>0</b>	<b>365</b>	N/A	N/A

COMMENTS:

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

**SUMMARY PRECIPITATION**

TIME	PRECIPITATION
THIS MONTH	1.96
OCT 1, 2021 TO DATE	1.98

**SUMMARY: RELEASE (ACRE FEET)**

RELEASE (ACRE-FEET)	N/A
POWER	5,703
SPILL	0
OUTLET	0
TOTAL	5,703

UNITED STATES DEPARTMENT OF THE INTERIOR  
U.S. BUREAU OF RECLAMATION- CENTRAL VALLEY PROJECT- CALIFORNIA

**NOVEMBER 2022**

**TULLOCH RESERVOIR DAILY OPERATIONS**

RUN DATE: 11/14/2022

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. CFS (1)
N/A	N/A	56,246	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1	501.46	56,894	648	578	544	245	0	0	6
2	501.23	56,641	-253	84	93	210	0	0	2
3	500.9	56,279	-362	30	31	213	0	0	0
4	501.17	56,575	296	368	369	216	0	0	3
5	501.14	56,541	-34	204	203	216	0	0	5
6	500.90	56,279	-262	89	83	216	0	0	5
7	500.81	56,181	-98	172	154	216	0	0	5
8	500.57	55,921	-260	86	55	216	0	0	1
9	500.6	55,953	32	233	230	216	0	0	1
10	500.78	56,149	196	316	329	216	0	0	1
11	500.93	56,311	162	298	305	215	0	0	1
12	501.2	56,608	297	369	366	213	0	0	6
13	501.01	56,398	-210	111	113	214	0	0	3
<b>TOTALS</b>	N/A	N/A	<b>152</b>	<b>2,938</b>	<b>2,875</b>	<b>2,822</b>	<b>0</b>	<b>0</b>	<b>39</b>
<b>ACRE-FEET</b>	N/A	N/A	<b>152</b>	<b>5,828</b>	<b>5,703</b>	<b>5,597</b>	<b>0</b>	<b>0</b>	<b>77</b>

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

(1) EVAPORATION RECORDS TAKEN FROM SHASTA PAN.

**SUMMARY: RELEASE (ACRE FEET)**

RELEASE (ACRE-FEET)	N/A
POWER	5,597
SPILL	0
OUTLET	0
TOTAL	5,597

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

**NOVEMBER 2022**

**GOODWIN RESERVOIR DAILY OPERATIONS**

RUN DATE: 11/14/2022

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	529	N/A	N/A	N/A	N/A	N/A	N/A
1	359.74	519	-10	245	0	256	0	0
2	359.74	519	0	210	0	204	0	0
3	359.74	519	0	213	0	204	0	0
4	359.74	519	0	216	0	202	0	0
5	359.76	520	1	216	0	202	0	0
6	359.76	520	0	216	0	202	0	0
7	359.76	520	0	216	0	209	0	0
8	359.74	519	-1	216	0	209	0	0
9	359.74	519	0	216	0	205	0	0
10	359.74	519	0	216	0	204	0	0
11	359.74	519	0	215	0	204	0	0
12	359.74	519	0	213	0	202	0	0
13	359.74	519	0	214	0	201	0	0
<b>TOTALS</b>	N/A	N/A	<b>-10</b>	<b>2,822</b>	<b>0</b>	<b>2,704</b>	<b>0</b>	<b>0</b>
<b>ACRE-FEET</b>	N/A	N/A	<b>-10</b>	<b>5,597</b>	<b>0</b>	<b>5,363</b>	<b>0</b>	<b>0</b>

JOINT MAIN OPERATED BY SSJID AND OID.

**SUMMARY: RELEASE (ACRE FEET)**

JOINT MAIN CANAL	0
SOUTH MAIN CANAL	0
OUTLET	0
SPILL	5,363
<b>TOTAL</b>	<b>5363.384</b>



UNITED STATES DEPARTMENT OF THE INTERIOR  
U.S. BUREAU OF RECLAMATION-CENTRAL VALLEY PROJECT-CALIFORNIA

**OCTOBER 2022**

**NEW MELONES LAKE DAILY OPERATIONS**

RUN DATE: 11/1/2022

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
N/A	N/A	619.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1	881.47	619.3	0.2	751	603	0	0	41	0.24	0.00
2	881.55	619.7	0.4	747	484	0	0	48	0.28	0.00
3	881.44	619.1	-0.6	526	789	0	0	33	0.19	0.00
4	881.29	618.3	-0.8	195	564	0	0	34	0.2	0.00
5	881.12	617.4	-0.9	261	682	0	0	36	0.21	0.00
6	880.99	616.7	-0.7	230	527	0	0	52	0.3	0.00
7	880.81	615.7	-1.0	333	759	0	0	55	0.32	0.00
8	880.63	614.8	-1.0	207	642	0	0	46	0.27	0.00
9	880.49	614.1	-0.7	296	620	0	0	51	0.3	0.00
10	880.43	613.7	-0.3	233	347	0	0	46	0.27	0.00
11	880.30	613.0	-0.7	258	555	0	0	50	0.29	0.00
12	880.19	612.5	-0.6	309	552	0	0	51	0.30	0.00
13	879.42	610.5	-2.0	208	1,187	0	0	34	0.20	0.00
14	878.92	608.4	-2.1	266	1,252	0	0	51	0.30	0.00
15	878.92	605.8	-2.6	273	1,570	0	0	31	0.18	0.00
16	878.50	603.6	-2.2	258	1,337	0	0	32	0.19	0.00
17	878.05	601.2	-2.4	297	1,463	0	0	25	0.15	0.00
18	877.80	599.9	-1.3	314	945	0	0	27	0.16	0.00
19	877.51	598.4	-1.5	273	1,002	0	0	34	0.20	0.00
20	877.22	596.9	-1.5	272	998	0	0	37	0.22	0.00
21	876.83	594.8	-2.0	254	1,237	0	0	40	0.24	0.00
22	876.36	592.4	-2.4	256	1,441	0	0	45	0.27	0.00
23	875.98	590.4	-2.0	246	1,218	0	0	22	0.13	0.02
24	875.77	589.3	-1.1	247	759	0	0	35	0.21	0.00
25	875.52	588.0	-1.3	190	811	0	0	30	0.18	0.00
26	875.26	586.7	-1.3	282	926	0	0	33	0.20	0.00
27	875.33	587.1	0.4	233	23	0	0	28	0.17	0.00
28	875.13	586.0	-1.0	267	757	0	0	30	0.18	0.00
29	874.95	585.1	-0.9	300	741	0	0	27	0.16	0.00
30	874.77	584.2	-0.9	262	658	0	0	70	0.42	0.00
31	874.67	583.7	0.5	291	522	0	0	28	0.17	0.00
<b>TOTALS</b>	<b>N/A</b>	<b>N/A</b>	<b>-35.3</b>	<b>9,335</b>	<b>25,971</b>	<b>0</b>	<b>0</b>	<b>1,202</b>	<b>7.10</b>	<b>0.02</b>
<b>ACRE-FEET</b>	<b>N/A</b>	<b>N/A</b>	<b>-35,300</b>	<b>18,516</b>	<b>51,513</b>	<b>0</b>	<b>0</b>	<b>2,384</b>	<b>N/A</b>	<b>N/A</b>

COMMENTS:

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

**SUMMARY: RELEASE (ACRE-FEET)**

RELEASE (ACRE-FEET)	N/A
POWER	51,513
SPILL	0
OUTLET	0
TOTAL	51,513

**SUMMARY PRECIPITATION**

TIME	PRECIPITATION
THIS MONTH	0.02
OCT 1, 2021 TO DATE	0.02

UNITED STATES DEPARTMENT OF THE INTERIOR  
U.S. BUREAU OF RECLAMATION-CENTRAL VALLEY PROJECT-CALIFORNIA

**OCTOBER 2022**

**TULLOCH RESERVOIR DAILY OPERATIONS**

RUN DATE: 11/1/2022

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. CFS (1)
N/A	N/A	60,629	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1	504.56	60,398	-231	596	603	703	0	0	9
2	504.26	60,051	-347	462	484	627	0	0	10
3	504.59	60,433	382	773	789	573	0	0	7
4	504.54	60,375	-58	566	564	588	0	0	7
5	504.59	60,433	58	690	682	653	0	0	8
6	504.34	60,143	-290	511	527	646	0	0	11
7	504.54	60,375	232	756	759	627	0	0	12
8	504.52	60,363	-12	632	642	628	0	0	10
9	504.49	60,317	-46	615	620	627	0	0	11
10	504.11	59,877	-440	330	347	542	0	0	10
11	503.93	59,670	-207	550	555	643	0	0	11
12	503.22	58,861	-809	530	552	927	0	0	11
13	503.11	58,735	-126	1,196	1,187	1,253	0	0	7
14	502.38	57,916	-819	1,234	1,252	1,636	0	0	11
15	502.28	57,804	-112	1,560	1,570	1,609	0	0	7
16	502.20	57,174	-90	1,315	1,337	1,353	0	0	7
17	503.40	59,066	1,352	1,479	1,463	791	0	0	6
18	503.76	59,476	410	942	945	729	0	0	6
19	503.75	59,465	-11	1,005	1,002	1,004	0	0	7
20	503.28	58,929	-536	977	998	1,239	0	0	8
21	502.72	58,296	-633	1,229	1,237	1,539	0	0	9
22	502.46	58,005	-291	1,420	1,441	1,557	0	0	10
23	502.43	57,972	-33	1,213	1,218	1,225	0	0	5
24	502.53	58,084	112	738	759	674	0	0	8
25	502.89	58,487	403	808	811	598	0	0	7
26	503.51	59,191	704	927	926	565	0	0	7
27	502.12	57,624	-1,567	-7	23	777	0	0	6
28	501.4	56,828	-796	750	757	1,145	0	0	6
29	500.9	56,279	-549	706	741	977	0	0	6
30	500.68	56,040	-239	654	658	759	0	0	15
31	500.87	56,246	206	520	522	410	0	0	6
<b>TOTALS</b>	NA	NA	<b>-4,383</b>	<b>25,677</b>	<b>25,971</b>	<b>27,624</b>	<b>0</b>	<b>0</b>	<b>261</b>
<b>ACRE-FEET</b>	NA	NA	<b>-4,383</b>	<b>50,930</b>	<b>51,513</b>	<b>54,792</b>	<b>0</b>	<b>0</b>	<b>518</b>

COMMENTS:

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

\*EVAPORATION RECORDS TAKEN FROM SHASTA PAN.

**SUMMARY: RELEASE (ACRE FEET)**

POWER	54,792
SPILL	0
OUTLET	0
TOTAL	54,792

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

OCTOBER 2022

**GOODWIN RESERVOIR DAILY OPERATIONS**

RUN DATE: 11/1/2022

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	517	N/A	N/A	N/A	N/A	N/A	N/A
1	359.71	517	0	703	0	154	321	270
2	359.71	517	0	627	0	156	294	226
3	359.71	517	0	573	0	154	261	207
4	359.76	520	3	588	0	170	268	196
5	359.76	520	0	653	0	204	270	232
6	359.74	519	-1	646	0	204	262	233
7	359.74	519	0	627	0	203	236	243
8	359.74	519	0	628	0	201	239	242
9	359.76	520	1	627	0	202	239	232
10	359.77	521	1	542	0	206	163	225
11	359.76	520	-1	643	0	204	214	281
12	359.96	534	14	927	0	457	212	312
13	360.14	547	13	1,253	0	780	225	317
14	360.36	562	15	1,636	0	1,171	246	297
15	360.36	562	0	1,609	0	1,202	240	253
16	360.02	538	-24	1,353	0	949	239	256
17	359.89	529	-9	791	0	440	221	206
18	359.83	525	-4	729	0	307	199	284
19	360.02	538	13	1,004	0	548	204	302
20	360.14	547	9	1,239	0	794	236	291
21	360.36	562	15	1,539	0	1,172	214	243
22	360.36	562	0	1,557	0	1,202	211	241
23	360.04	540	-22	1,225	0	953	154	218
24	359.89	529	-11	674	0	437	114	201
25	359.83	525	-4	598	0	309	144	213
26	360.02	538	13	565	0	559	13	0
27	360.14	547	9	777	0	794	9	0
28	360.36	462	15	1,145	0	1,168	8	0
29	360.26	555	-7	977	0	1,004	0	0
30	360.02	538	-17	759	0	791	8	0
31	359.89	529	-9	410	0	429	7	0
<b>TOTALS</b>	N/A	N/A	<b>12</b>	<b>27,624</b>	<b>0</b>	<b>17,524</b>	5,671	<b>6,221</b>
<b>ACRE-FEET</b>	N/A	N/A	<b>12</b>	<b>54,792</b>	<b>0</b>	<b>34,759</b>	11,248	<b>12,339</b>

JOINT MAIN OPERATED BY SSJID AND OID.

**SUMMARY: RELEASE (ACRE FEET)**

JOINT MAIN CANAL	11,248
SOUTH MAIN CANAL	12,339
OUTLET	0
SPILL	34,759
TOTAL	58346.636

**SUMMARY: RELEASE (ACRE FEET)**

JOINT MAIN CANAL	11,248
SOUTH MAIN CANAL	12,339
OUTLET	0
SPILL	34,759
TOTAL	58346.636

# November 2022 Water Temperature and Fish Monitoring Update

## Year-to-Date Flows

Goodwin releases since October 1, 2022 are shown in Figure 1.

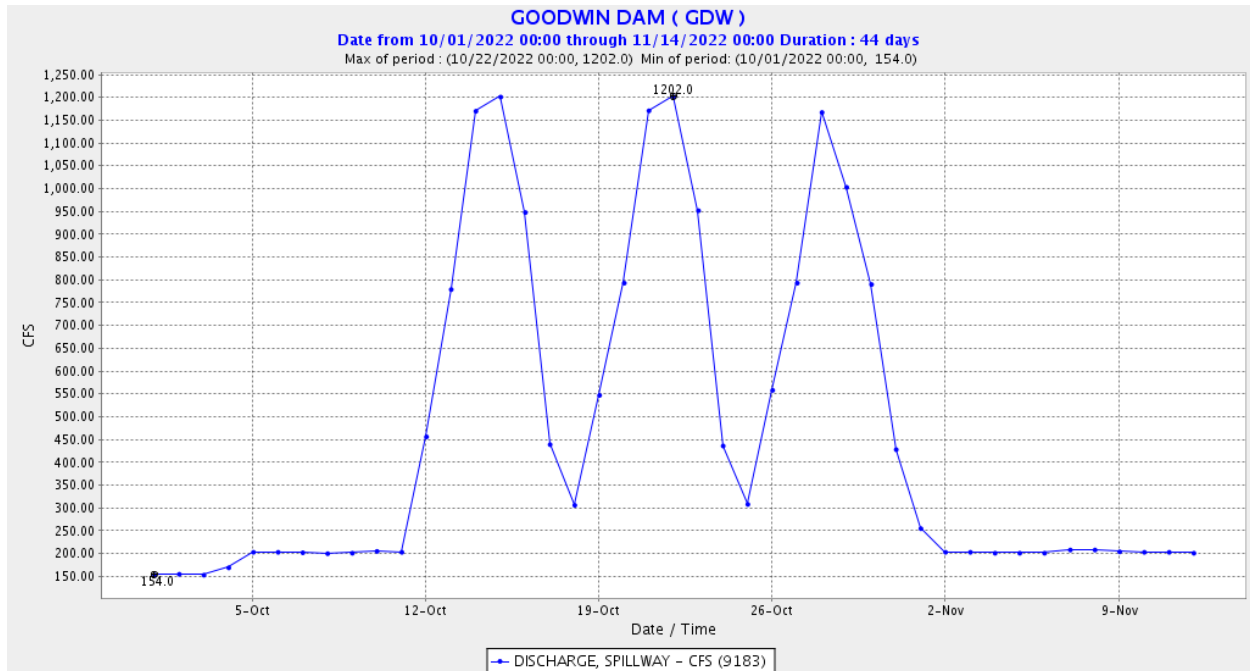


Figure 1. Goodwin (daily) releases to the Stanislaus River since October 1, 2022. Data from GDW station on CDEC.

## Water Temperature

The temperature thresholds included in Figures 2-9, below, are the thresholds used in the 2019 NMFS LTO BiOp<sup>1</sup> (see Incidental Take Statement on p. 807) to define the extent of take anticipated from water temperature effects in the Stanislaus River. *It is important to note that many of the temperature figures provide subdaily information or information at locations other than Orange Blossom Bridge and thus don't reflect the specific metrics for take in the 2019 NMFS LTO BiOp.* Temperature thresholds have been added to these figures at the request of Stanislaus Watershed Team members to provide a general reference of water temperature suitability.

Water temperatures in the Stanislaus River since March 1, 2022 are shown below at Goodwin Canyon (Figure 2), Orange Blossom Bridge (Figure 3), and at Ripon (Figure 4). Water temperatures in the San Joaquin River since March 1, 2022 are shown below at Vernalis (Figure 5). Current-year water temperatures are plotted along with historical temperatures for Orange Blossom Bridge

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

(Figure 6), Ripon (Figure 7), and Vernalis (Figure 8). A compilation of Stanislaus River water temperatures and Goodwin releases for calendar year 2022 is provided in Figure 9.

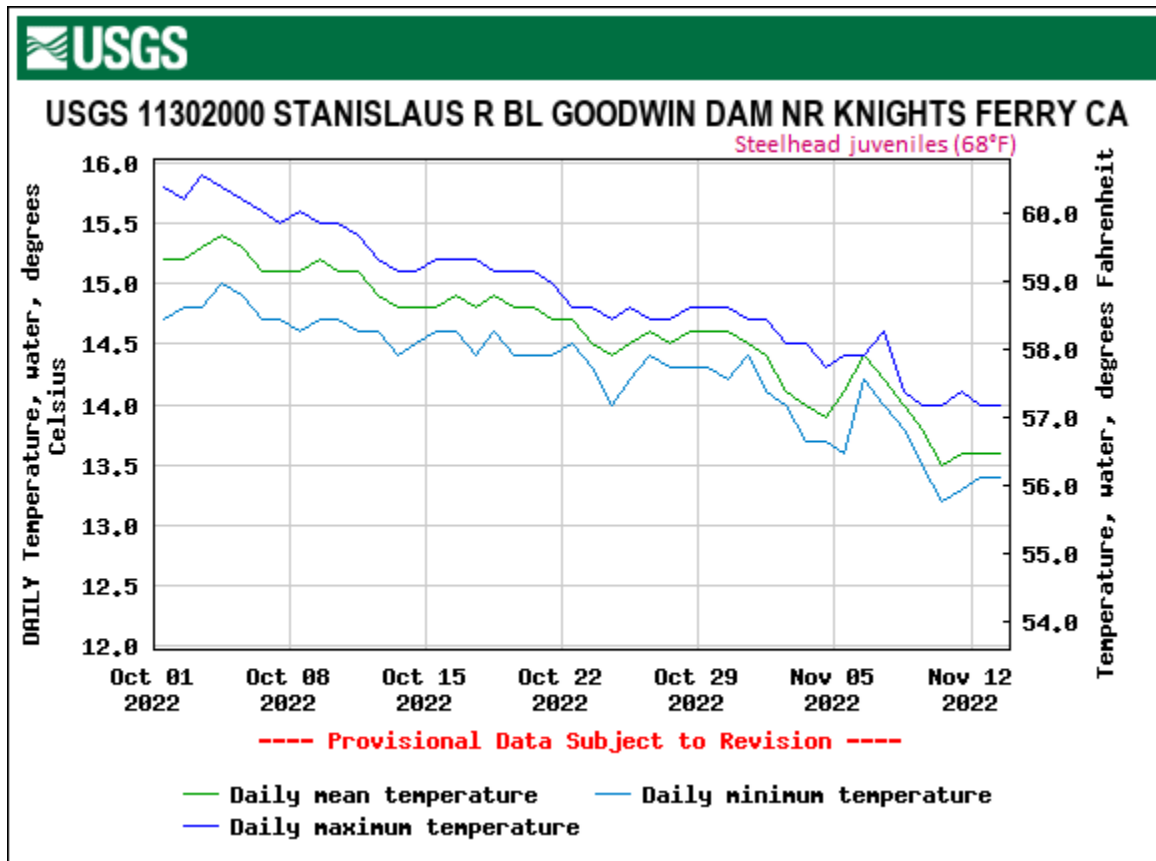


Figure 2. Daily water temperatures on the Stanislaus River upstream of Knights Ferry since October 1, 2022. Data from USGS gage 11302000 on NWIS; temperature threshold reference line added by SWT.

Chart: Vertical axis shows hourly water temperature (in Fahrenheit degrees) at Orange Blossom Bridge on the Stanislaus River. Horizontal axis shows date from 10-1-2022 through 11-14-22. Hourly water temperatures since 1-1-22 have ranged between approximately 55 and 65 degrees Fahrenheit. For more information, please call (916) 414-2400.

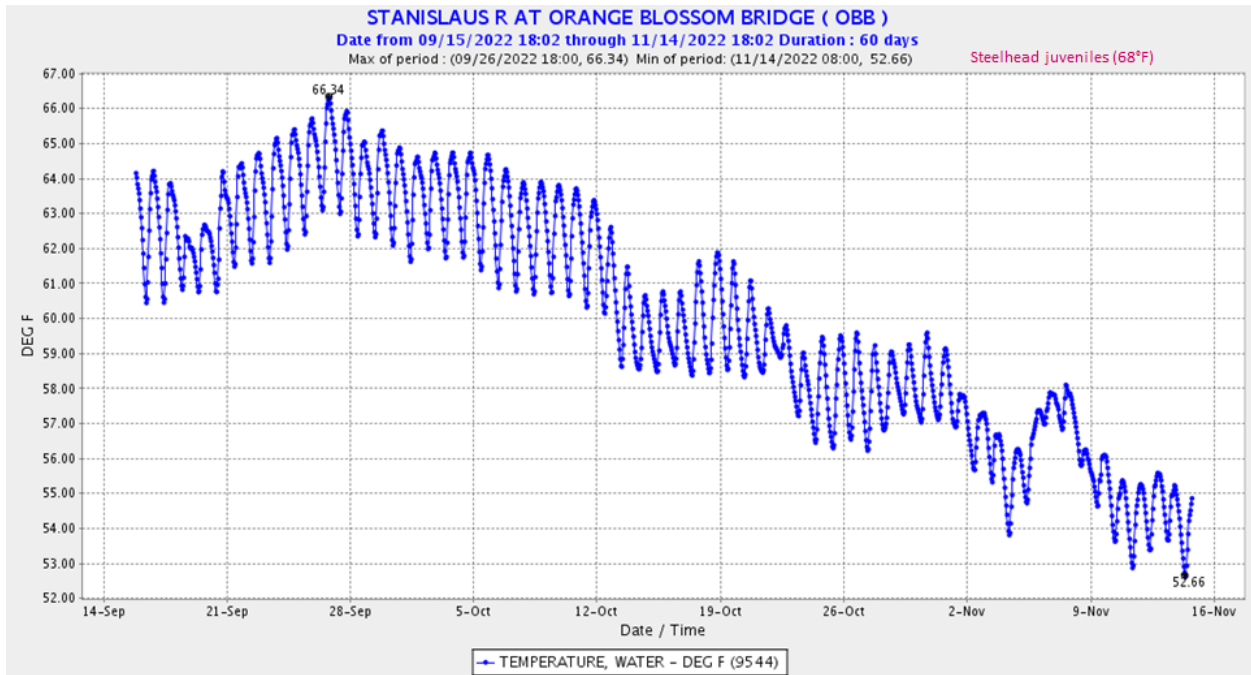


Figure 3. Stanislaus (hourly) water temperatures at Orange Blossom Bridge since September 15, 2022. Data from OBB station on CDEC; temperature threshold reference line added by SWT.

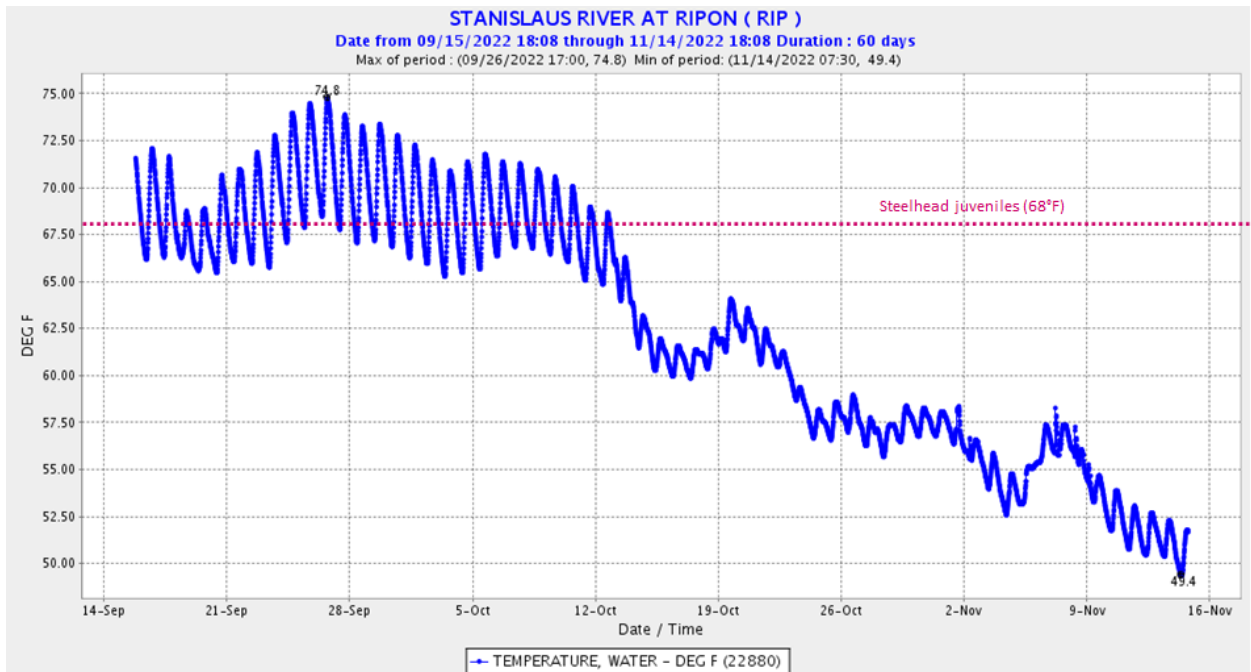


Figure 4. Stanislaus (15-minute) water temperatures at Ripon since September 15, 2022. Data from RIP station on CDEC.



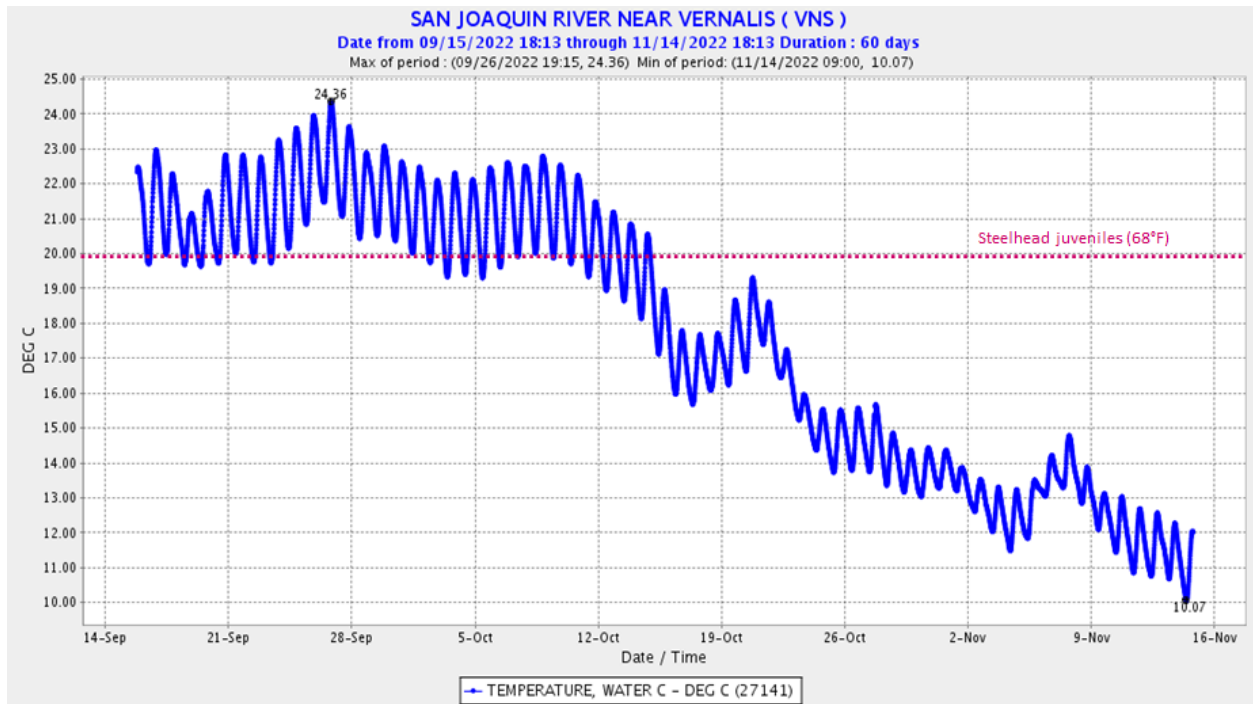


Figure 5. San Joaquin River (15-minute) water temperatures at Vernalis since September 1, 2022. Data from VNS station on CDEC. Note that, unlike in the previous figures, temperature is reported in degrees Celsius. 8°C=46.4°F; 10°C=50°F; 12°C=53.6°F; 14°C=57.2°F; 16°C=60.8°F; 18°C=64.4°F; 20°C=68.0°F; 22°C=71.6°F; 24°C=75.2°F; 26°C=78.8°F; 28°C=82.4°F.

WY 2001-2023 OBB Stanislaus R at Orange Blossom Bridge  
Daily Average Water Temperature (F)  
Observed Range 43.02-68.41

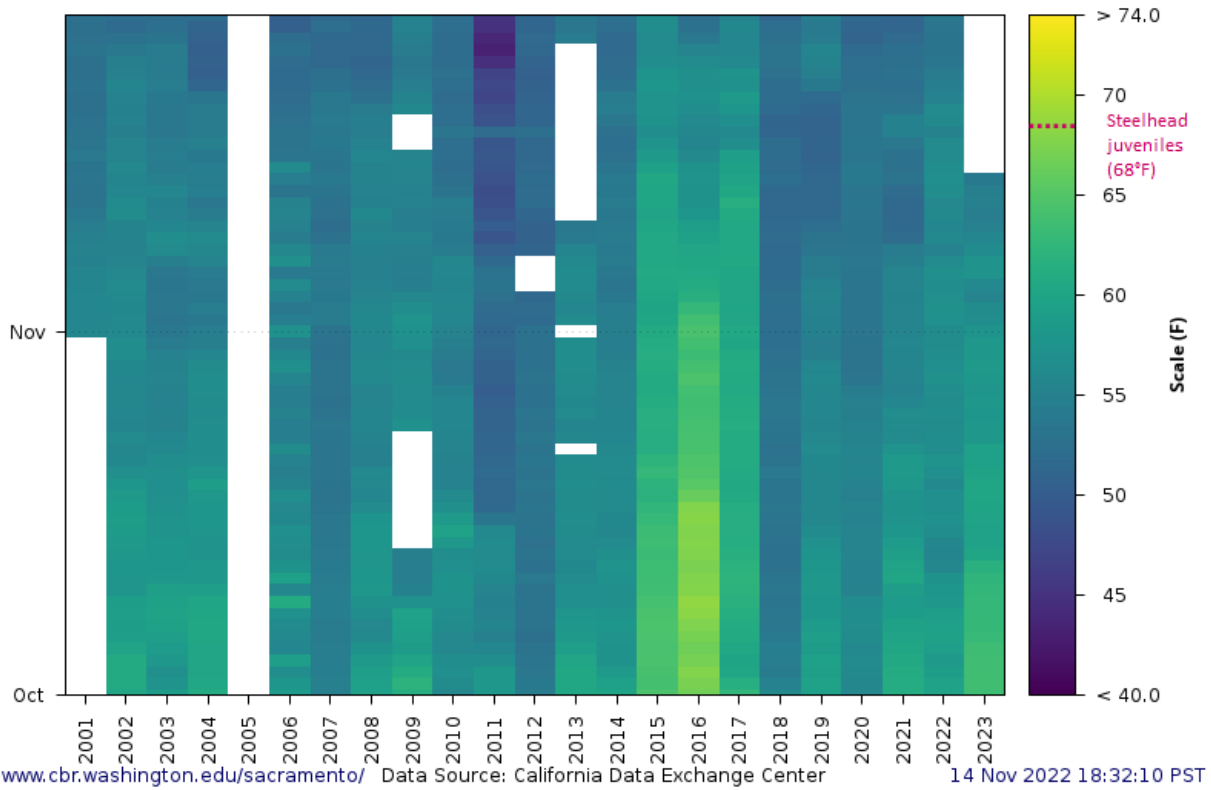


Figure 6. Stanislaus River water temperatures at Orange Blossom Bridge for October to November from WY 2022 to present. Data from SacPAS; temperature threshold reference lines added by SWT. [http://www.cbr.washington.edu/sacramento/data/query\\_river\\_allyears.html](http://www.cbr.washington.edu/sacramento/data/query_river_allyears.html)

WY 2000-2023 RPN Stanislaus R at Ripon  
Daily Average Water Temperature (F)  
Observed Range 46.88-71.84

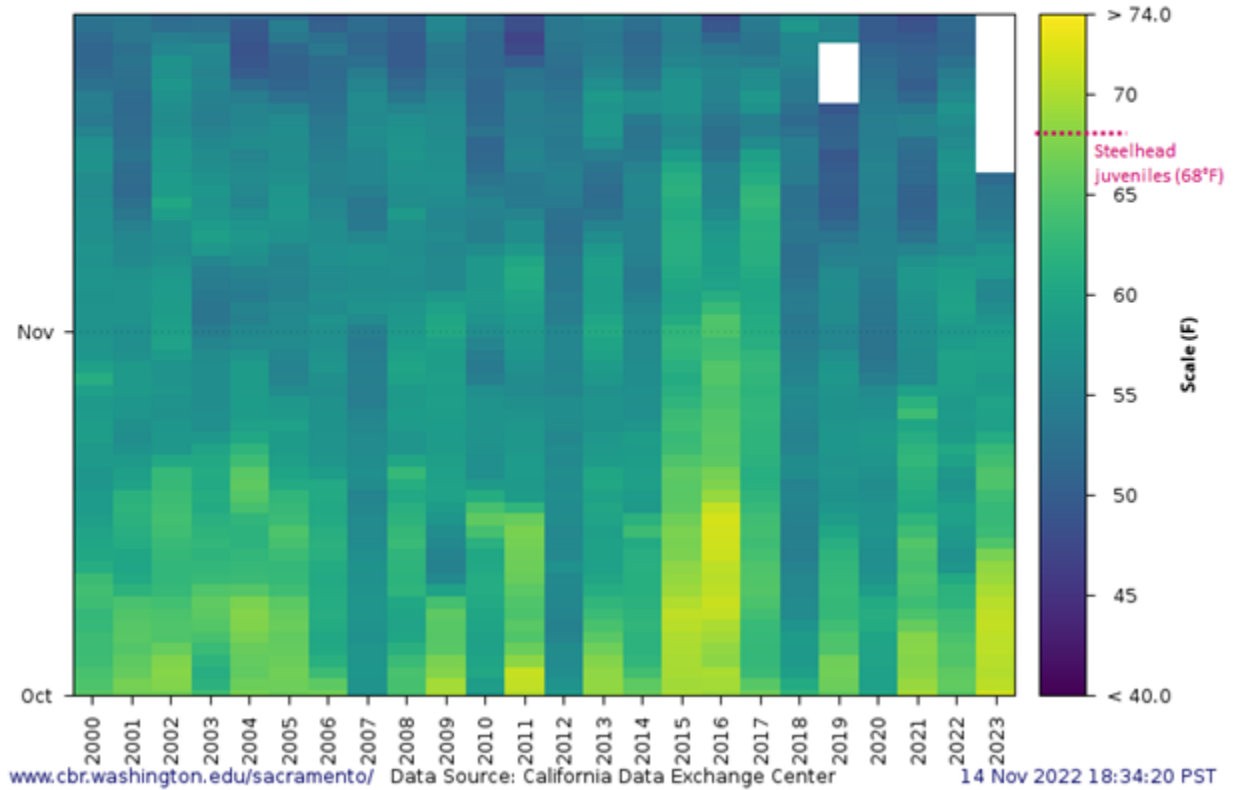


Figure 7. Stanislaus River water temperatures at Ripon for October through November from Water Year 2000 to present. Figure from SacPAS using RIP station data from CDEC; temperature threshold reference line added by SWT.

[http://www.cbr.washington.edu/sacramento/data/query\\_river\\_allyears.html](http://www.cbr.washington.edu/sacramento/data/query_river_allyears.html)

WY 2015-2023 VNS San Joaquin R nr Vernalis  
Daily Average Water Temperature (F)  
Observed Range 47.71-73.36

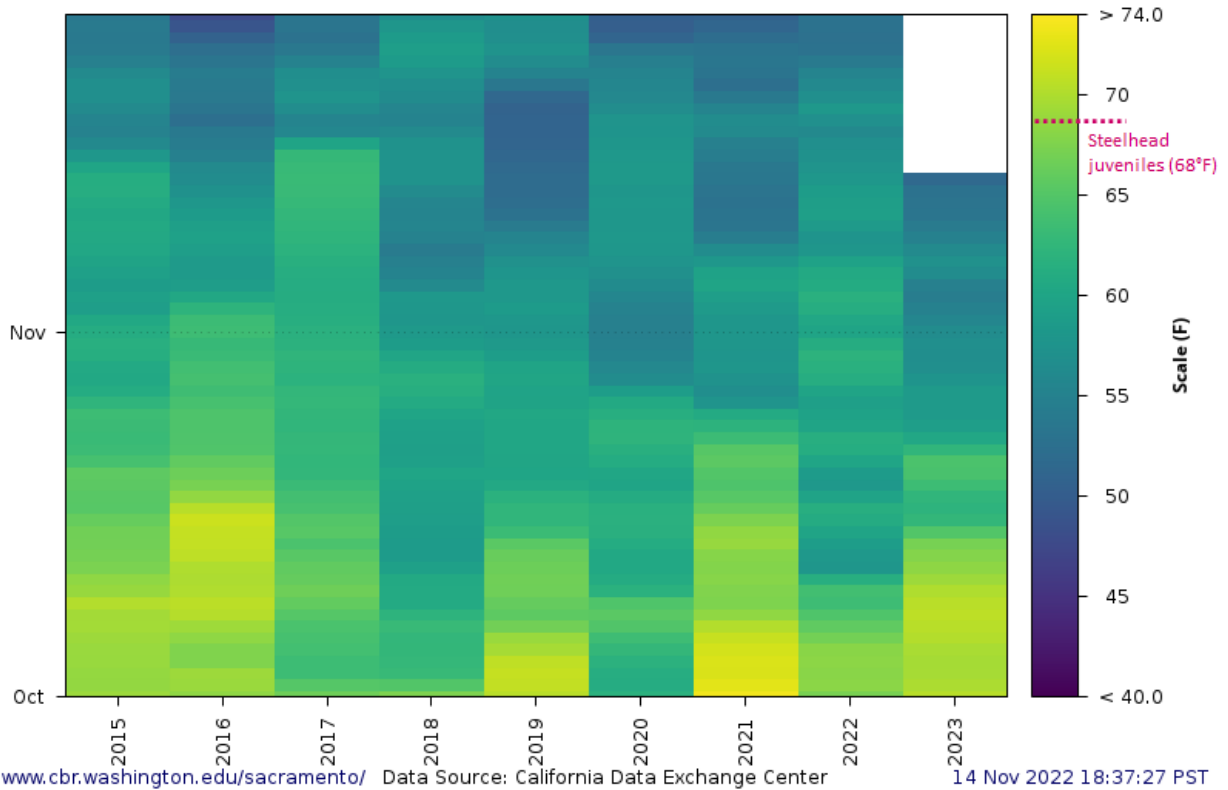
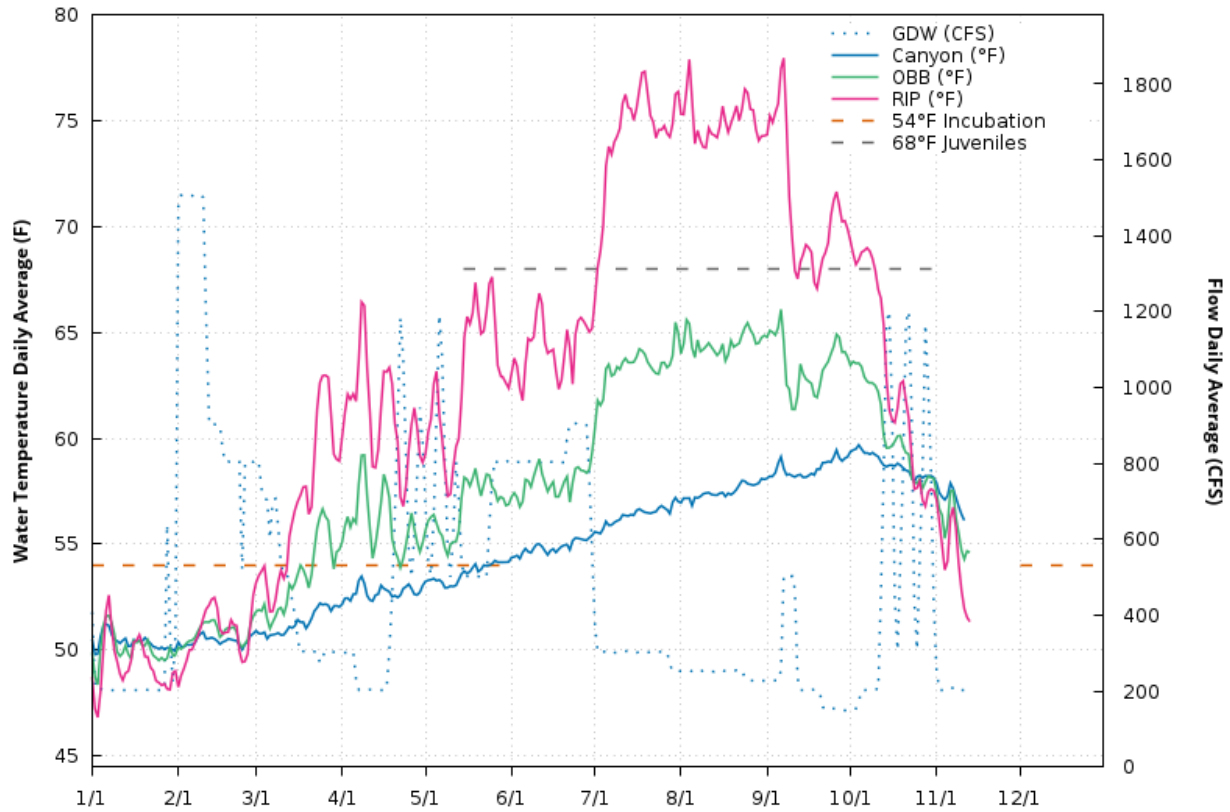


Figure 8. San Joaquin River water temperatures at Vernalis for October through November from Water Year 2015 to present. Figure from SacPAS using VNS station data from CDEC; temperature threshold reference line added by SWT.  
[http://www.cbr.washington.edu/sacramento/data/query\\_river\\_allyears.html](http://www.cbr.washington.edu/sacramento/data/query_river_allyears.html)

### 2022 Stanislaus River Flow and Temperature



[www.cbr.washington.edu/sacramento/](http://www.cbr.washington.edu/sacramento/)

14 Nov 2022 06:45:24 PST

Figure 9. Stanislaus River flow and water temperatures from January 1, 2022 to present. Data (including temperature threshold reference lines) from SacPAS: [http://www.cbr.washington.edu/sacramento/data/tc\\_stanislaus.html](http://www.cbr.washington.edu/sacramento/data/tc_stanislaus.html)

### 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 October 3, 2022 for the Stanislaus River and Merced River. The Tuolumne carcass survey started on September 26. Carcass survey data for all three San Joaquin River tributaries through the week of October 9, 2022 are reported in Table 1.

Table 1. Data from the fall 2022 CDFW carcass survey for the San Joaquin tributaries.

River	Week	Date	# Live	# Redds	# Skeletons	# Tagged	# Ad-Clipped	# Scale Samples	# Recovered	Average Flow (cfs)
Stanislaus	1	10/3/2022	1	7	0	0	0	0	0	190*
Stanislaus	2	10/10/2022	26	9	0	0	0	0	0	487*
Stanislaus	3	10/18/2022	43	4	0	0	0	0	0	529
Stanislaus	4	10/24/2022	32	8	0	0	0	0	0	371
Stanislaus	5	10/31/2022	417	216	1	10	0	9	0	289
Stanislaus	6	11/7/2022	738	389	8	26	9	29	1	200
Tuolumne	1	9/26/2022	5	7	0	1	1	1	0	91

River	Week	Date	# Live	# Redds	# Skeletons	# Tagged	# Ad-Clipped	# Scale Samples	# Recovered	Average Flow (cfs)
Tuolumne	2	10/3/2022	8	5	1	1	2	1	0	117
Tuolumne	3	10/10/2022	5	9	1	0	0	0	0	114
Tuolumne	4	10/17/2022	1	2	0	0	0	0	0	425
Tuolumne	5	10/24/2022	5	1	1	0	0	0	0	369
Tuolumne	6	10/31/2022	18	3	0	0	0	0	0	275
Tuolumne	7	11/7/2022	218	101	0	0	0	0	0	177
Merced	1	10/5/2022	0	0	0	0	0	0	0	205*
Merced	2	10/12/2022	0	0	0	0	0	0	0	235
Merced	3	10/18/2022	0	0	0	0	0	0	0	989
Merced	4	10/25/2022	4	0	0	0	0	0	0	205
Merced	5	11/1/2022	3	1	0	0	0	0	0	150
Merced	6	11/8/2022	65	29	0	0	0	0	0	156

\*Revised since the October update

### Steelhead redd surveys

CDFW expects to start the steelhead redd surveys begin in January 2023.

### Weir

Fishbio installed the weir near Riverbank and began monitoring for upstream passage of adult salmonids on September 15, 2022. The cumulative net upstream passage through November 13, 2022 is 1,798 Chinook (22% were ad-clipped, indicating a hatchery origin) and one *Oncorhynchus mykiss*. The single *O. mykiss* observed was greater than 16" (indicating possible anadromy) and ad-clipped (indicating a hatchery origin). Data highlights provided by Fishbio on November 13, 2022 in their "Stanislaus River Weir Update through 11/13/22" are provided below in Figure 10 and Figure 11.

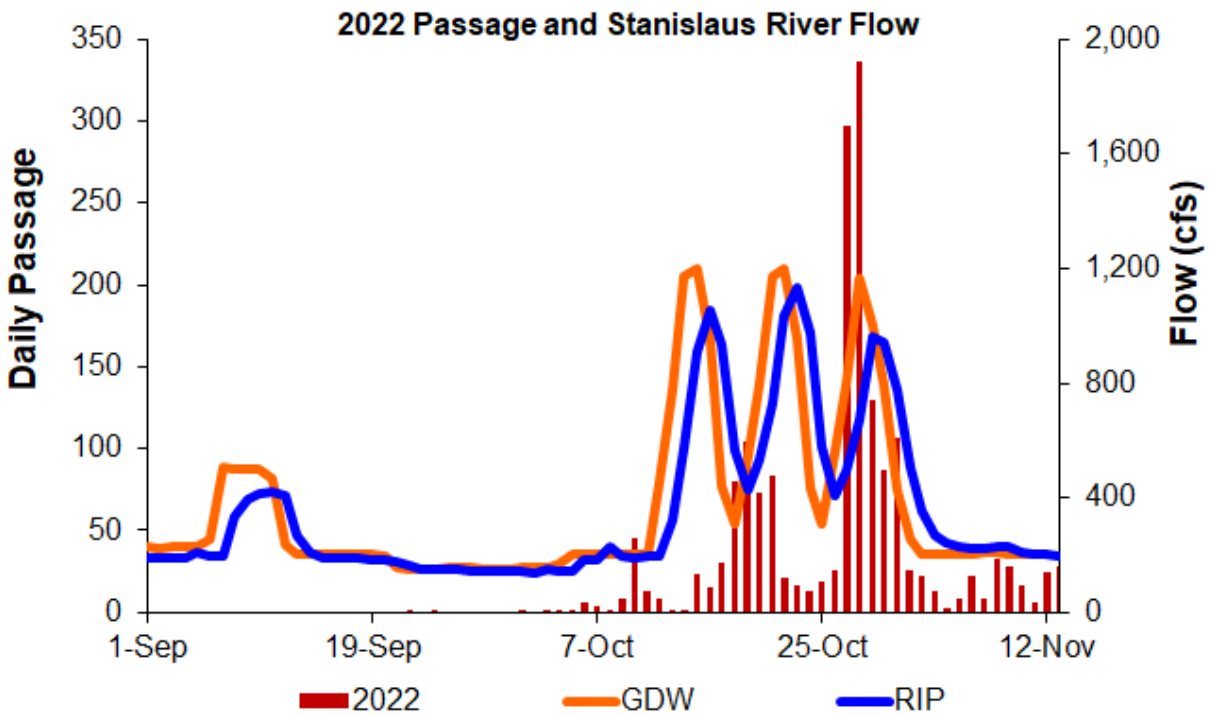


Figure 10. Daily Chinook salmon passage through November 13, 2022, at the Stanislaus River weir near Riverbank. *Data courtesy of Fishbio.*

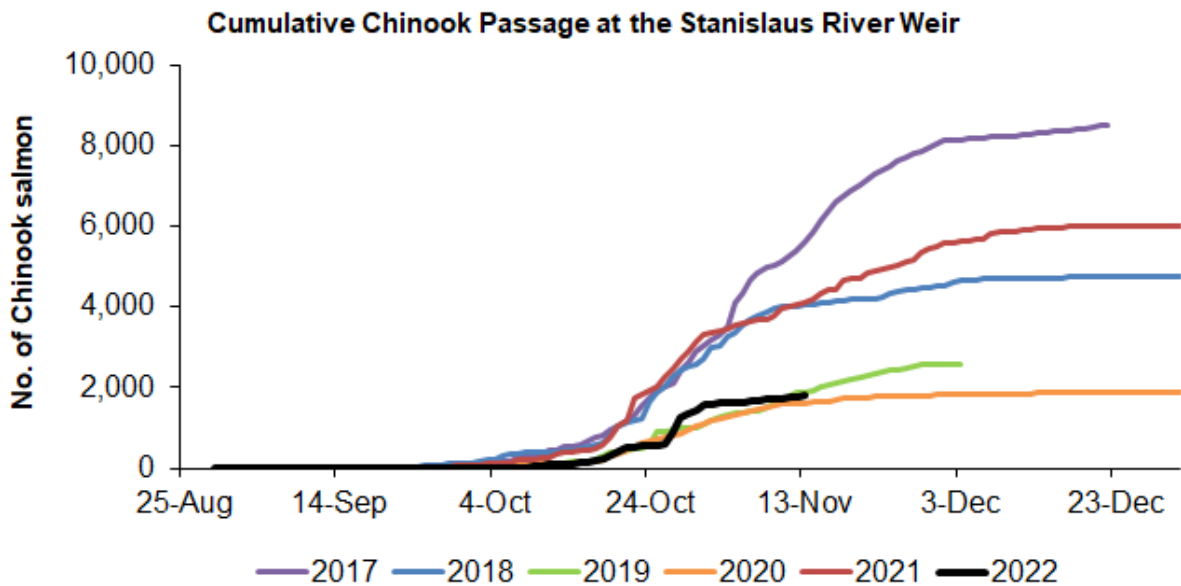


Figure 11. Cumulative Chinook salmon passage in the current year through November 13, 2022, at the Stanislaus River weir near Riverbank, along with cumulative passage for the previous five years. *Data courtesy of Fishbio.*

## Update on Fish Monitoring (Juveniles)

### Mossdale Trawl

No salmonids have been caught in the Mossdale trawl sampling since May 14,2022. While Mossdale trawl sampling is ongoing, catch is rare outside of the spring months so reporting on the Mossdale Trawl will not resume until March 2023.

### Green Sturgeon Update

On November 3,2022 CDFW crews successfully recovered and tagged the Sturgeon observed near Horseshow Recreation Area in October. The fish was positively identified as a Green Sturgeon and implanted with an acoustic tag. The Sturgeon was released in the same location as it was captured, and we hope to track any movements on acoustic receivers setup by USFWS and CDFW.



Figure 12. CDFW crew tagging the Green Sturgeon 11/3/2022