

Tuolumne River Technical Advisory Committee

Don Pedro Project – FERC License 2299

Modesto Irrigation District
Turlock Irrigation District
City & County of San Francisco
California Department of Fish & Wildlife
U.S. Fish & Wildlife Service

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TECHNICAL ADVISORY COMMITTEE MEETING

DECEMBER 8, 2022 AT 9:30 AM

VIA ZOOM

SUMMARY

1. INTRODUCTION AND ANNOUNCEMENTS

- Participants made self-introductions, a list of attendees follows.
- J.D. Wikert talked about Restoring the Stanislaus

2. ADMINISTRATIVE ITEMS:

- Today's agenda and notes from the September 2022 meeting were reviewed and approved.

3. FLOW OPERATIONS:

- Pat Maloney went over the flow schedule & watershed conditions and a discussion took place regarding water hyacinth blockages.
- Pat Maloney reviewed the status of the Infiltration Galleries – Galleries flow tested 2018-2019 – no restrictions and flows greater than expected. Pipe lines to Ceres and Turlock were completed in 2022 and temporary pumps were removed. Permanent pumps to be installed in the summer of 2023. Water chemistry testing is scheduled for September 2023.
- Peter Drekmeier said that a few years ago Modesto and Ceres pulled out of the project and wondered what happens if the expectation is 100 CFS and there is only a demand for ½ of that.
- Roger Masuda advised that Modesto pulled out but Ceres is in.
Per Bill Penny and Mike Cooke of TID: The Demand is 15mgd (10mgd to Turlock and 5mgd to Ceres), which equates to 17,385AF/year or 24cfs (24 hours a day all year every year). These numbers are in addition to the VA flows which would be incorporated into a new FERC license. For example, if VA/FERC flows are 200cfs, releases would be 224cfs.
- Scott asked what the higher test number was per Bill.
- Pat Maloney advised that Jake Rennert from NMFS and a FishBio technician joined in the snorkel survey. Jake also set up an additional survey. Chris Diviney from CDFW and staff from NMFS joined and they snorkeled the larger pools below the Power House. Pat went over the results, and discussion followed.

4. MONITORING/REPORTS:

- Jason Guignard went over the monitoring reports, weir status & redd surveys.
- Discussion on return to higher passage 2 ½ years after 2017 event.

5. AGENCY/NGO UPDATES:

- Megan Rooney from CDFW advised that there is \$200 million in new funding opportunities available for a variety of projects. The first round of awards will be given mid-January and then will be ongoing.
 - Kevin Marr advised that the invoices and design reviews have been submitted for _____ project.
 - Peter Drekmeier participated in the paddle with the salmon event.
6. ADITIONAL ITEMS:
- The March 9th meeting we will address the hyacinth removal issue.
7. NEXT MEETING DATE: MARCH 09, 2023

TRTAC Meeting Attendees

	<u>Name</u>	<u>Organization</u>
1.	Patrick Maloney	TID
2.	Dana Ortolan	TID
3.	Roger Masuda	TID
4.	Megan Rooney	CDFW
5.	Chris Diviney	CDFW
6.	Gretchen Murphey	CDFW
7.	Bernard Aguilar	CDFW
8.	Peter Drekmeier	TRT
9.	Sara Sacks	TRT
10.	Stephanie Milsap	USFWS
11.	J.D. Wikert	USFWS
12.	Kevin Marr	DWR
13.	Catlin Ames	SWS
14.	Wayne Swaney	SWS
15.	John Mauterer	MID
16.	Jason Ortega	City of Modesto
17.	Stephen Louie	SWRCB
18.	Scott McBain	McBain & Associates
19.	Chris Gupstill	9 to 99
20.	Bella _____	ESRCD
21.	Jason Guignard	FishBio
22.	Monica Guterrez	Fisery Services
23.	Jon Ambrose	NOAA
24.	Hilary Glenn	NOAA
25.	Neil Wilson	River Partners
26.	Michael Cane	CA State Parks Boating & Waterways

Weir Monitoring

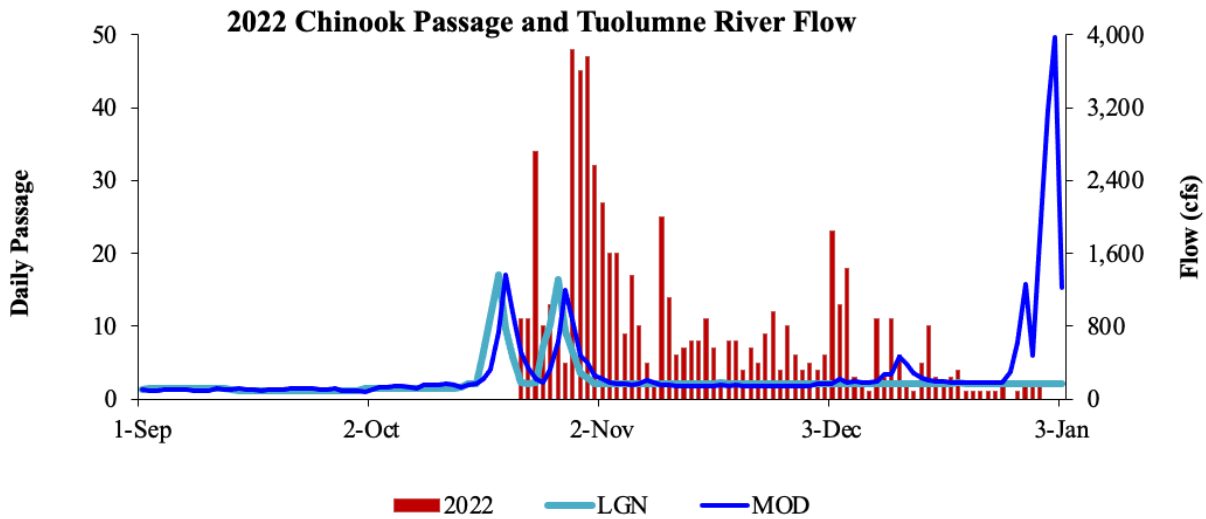


Figure 1. Daily adult Chinook salmon passage at the Tuolumne River Weir and Tuolumne River flow at La Grange (LGN) and Modesto (MOD).

- A total of 689 Chinook passed the Tuolumne River Weir between September 30, 2022, and January 6, 2023. Sampling terminated due to high flows through spring.
- No *O. mykiss* were observed passing the weir during the monitoring season.
- 21% of the salmon were adipose fin clipped (indicating hatchery origin).

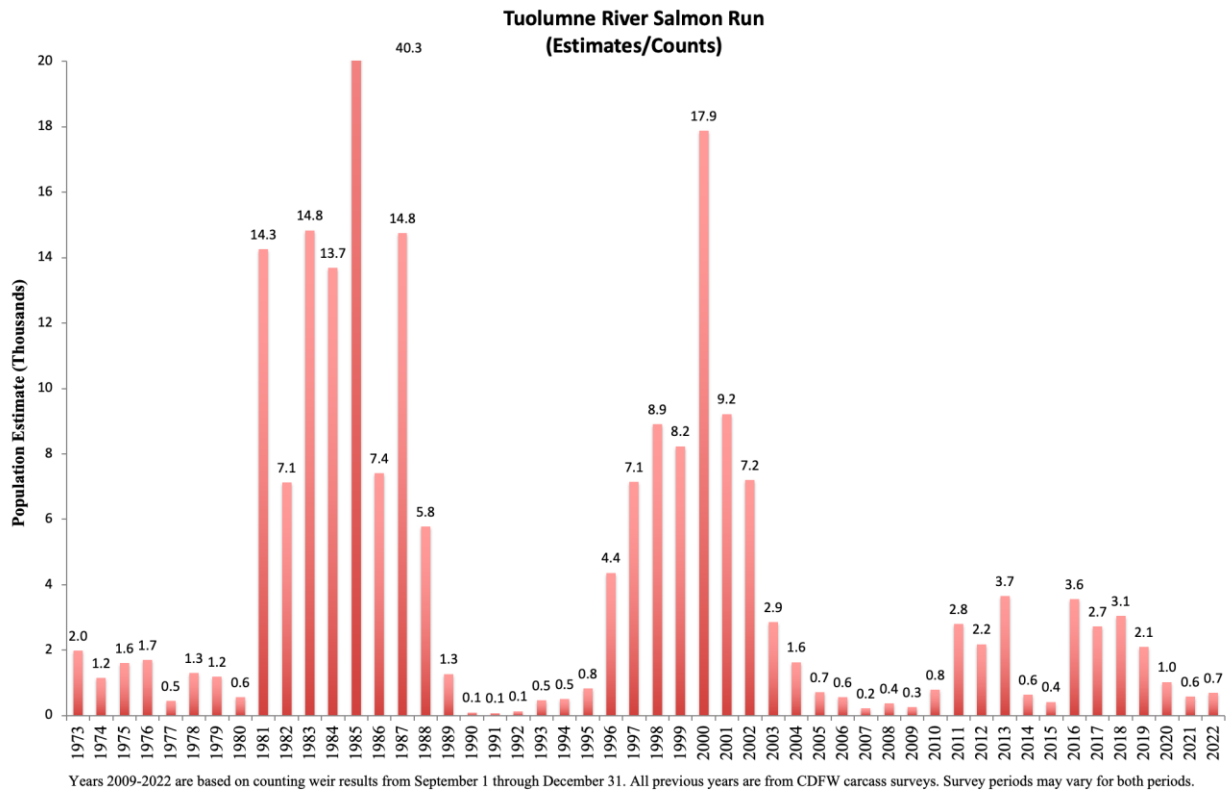


Figure 2. Total Chinook passage at the Tuolumne River Weir, 1973-2022.

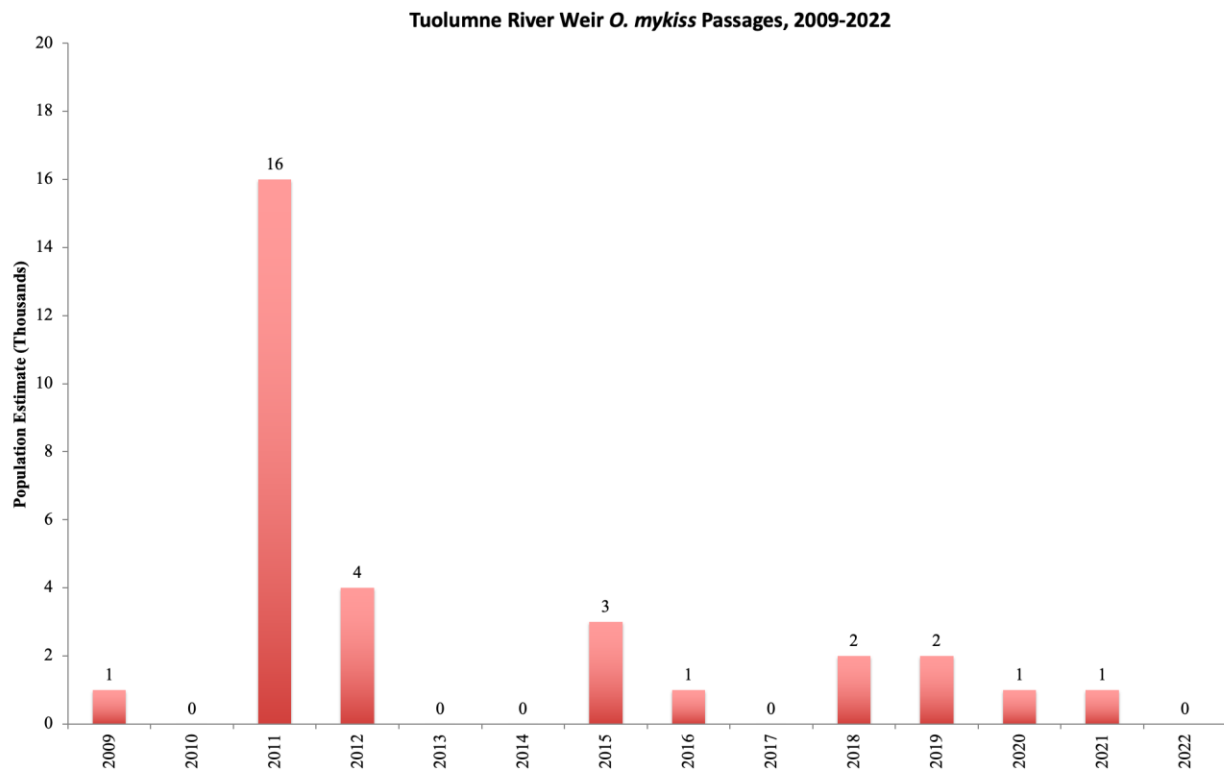


Figure 3. *O. mykiss* passages at the Tuolumne River weir during fall/winter monitoring, 2009-2022.

RST Monitoring

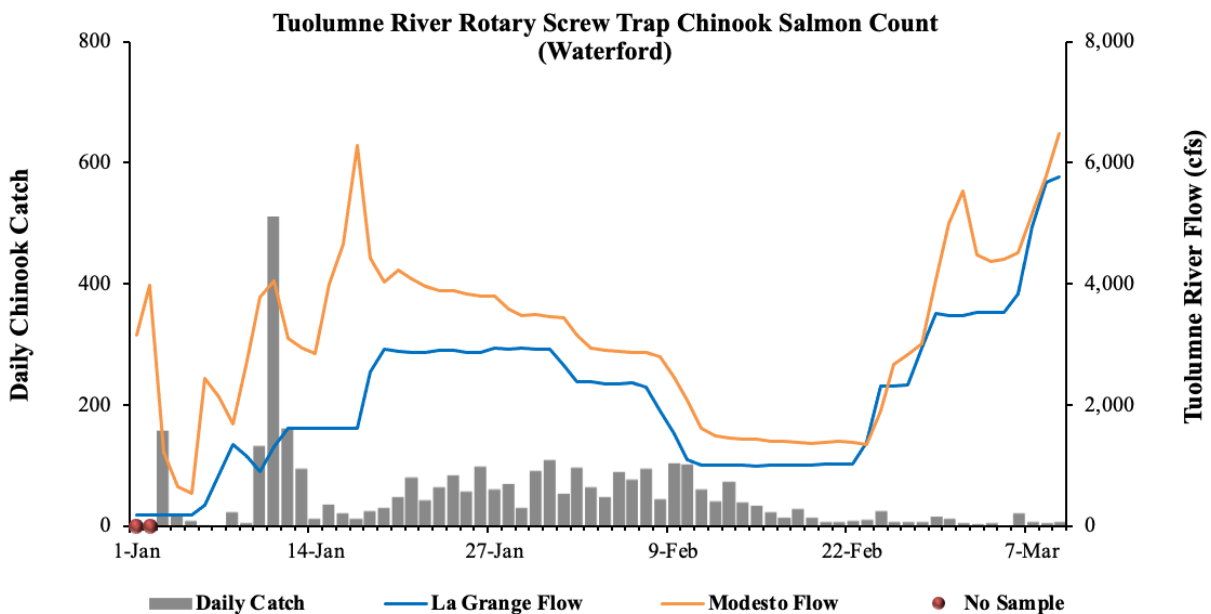


Figure 4. Daily juvenile Chinook passage at the Waterford RST and Tuolumne River flow at La Grange (LGN) and Modesto (MOD).

- A total of 3,307 juvenile Chinook salmon have been captured at Waterford through March 9, 2023.
- Four trap efficiency releases have been conducted using Chinook from Merced River Hatchery since capture of wild fish in trap is insufficient to conduct releases.

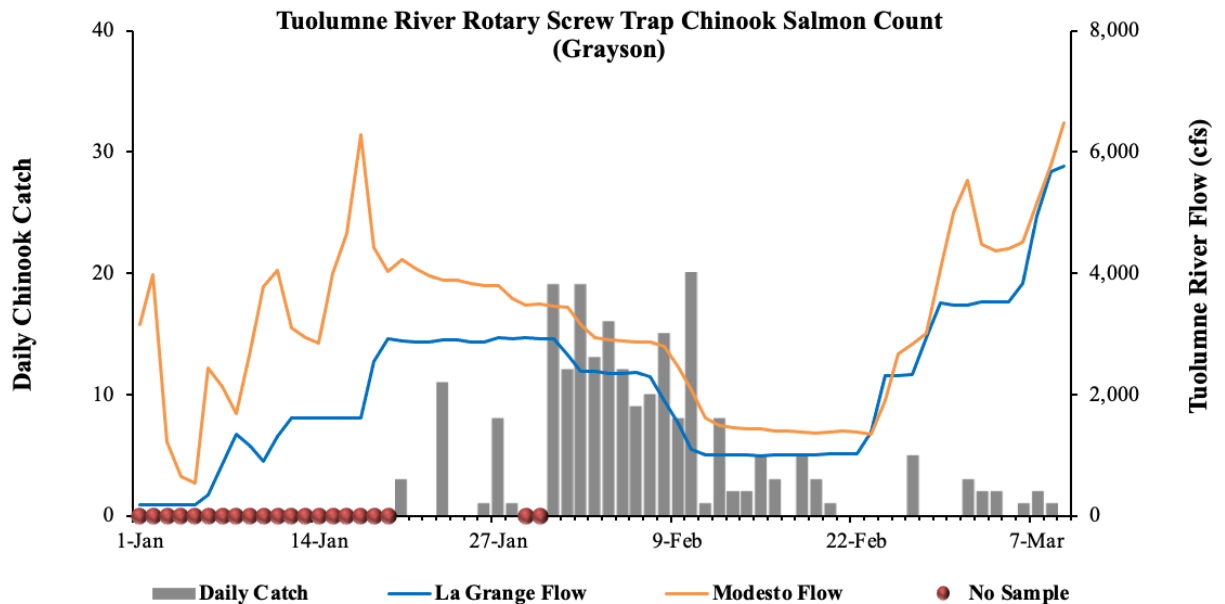


Figure 5. Daily juvenile Chinook passage at the Tuolumne RST and Tuolumne River flow at La Grange (LGN) and Modesto (MOD).

- A total of 223 juvenile Chinook salmon have been captured through March 9 at the Grayson RSTs. Traps require multiple checks per day to ensure they are sampling and not stopped from debris.
- One trap release has been conducted using Chinook from Merced River Hatchery since capture of wild fish in traps are insufficient to conduct releases.
- We are collaborating with NMFS and began collecting fin clips from juvenile Chinook at both trapping sites as part of their genetic analysis of salmon runs in the San Joaquin Basin tributaries.

Individual forklengths of Chinook captured at Waterford, 2023

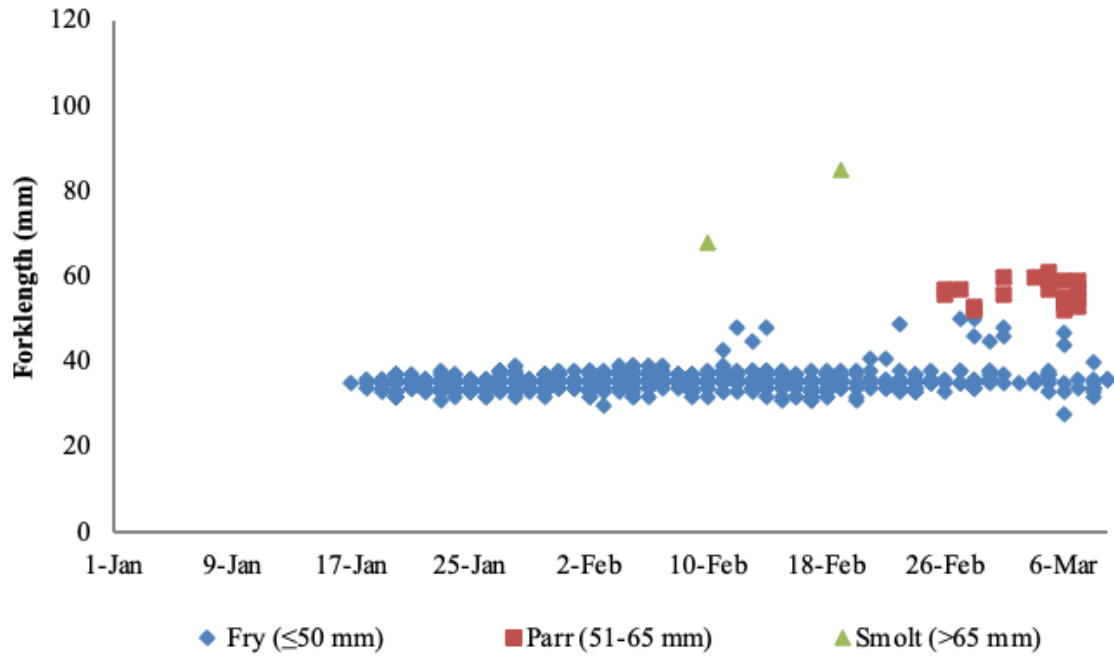


Figure 6. Individual forklengths of juvenile Chinook salmon captured at the Waterford RST, 2023.

Individual forklengths of Chinook captured at Grayson, 2023

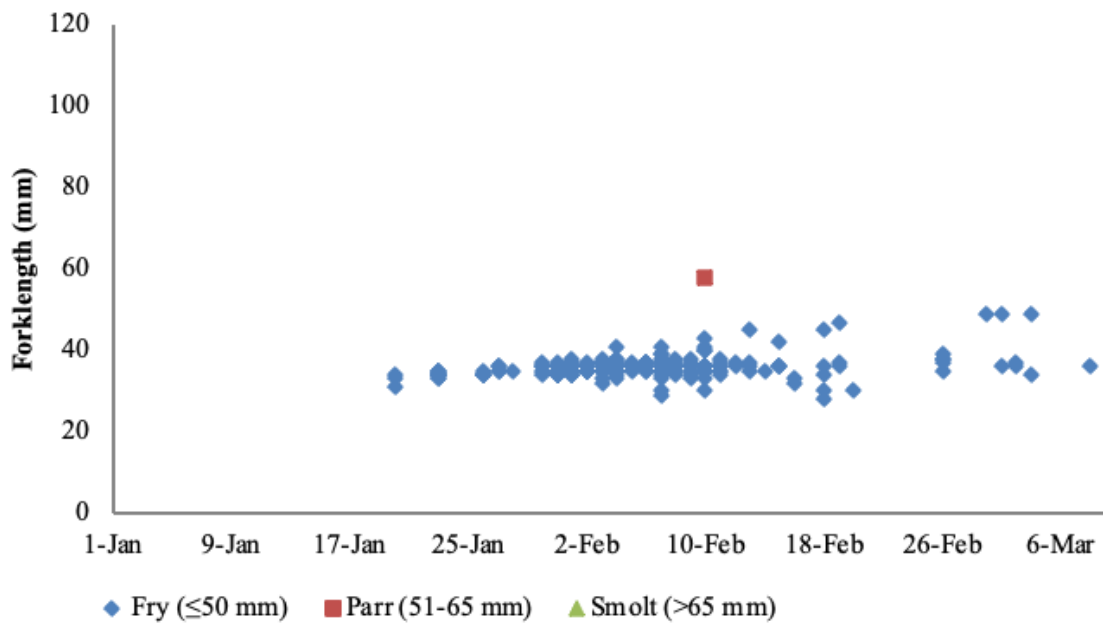


Figure 7. Individual forklengths of juvenile Chinook salmon captured at the Grayson RSTs, 2023.

Seining

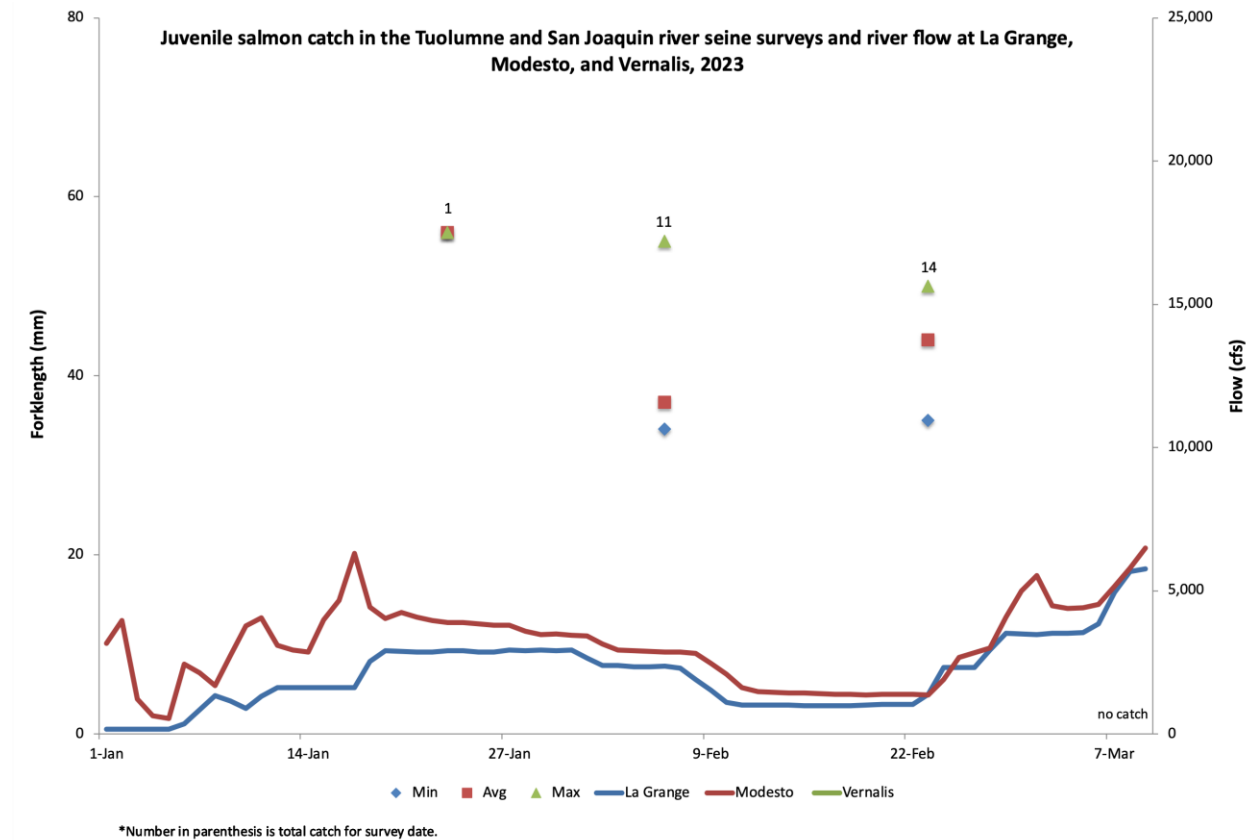
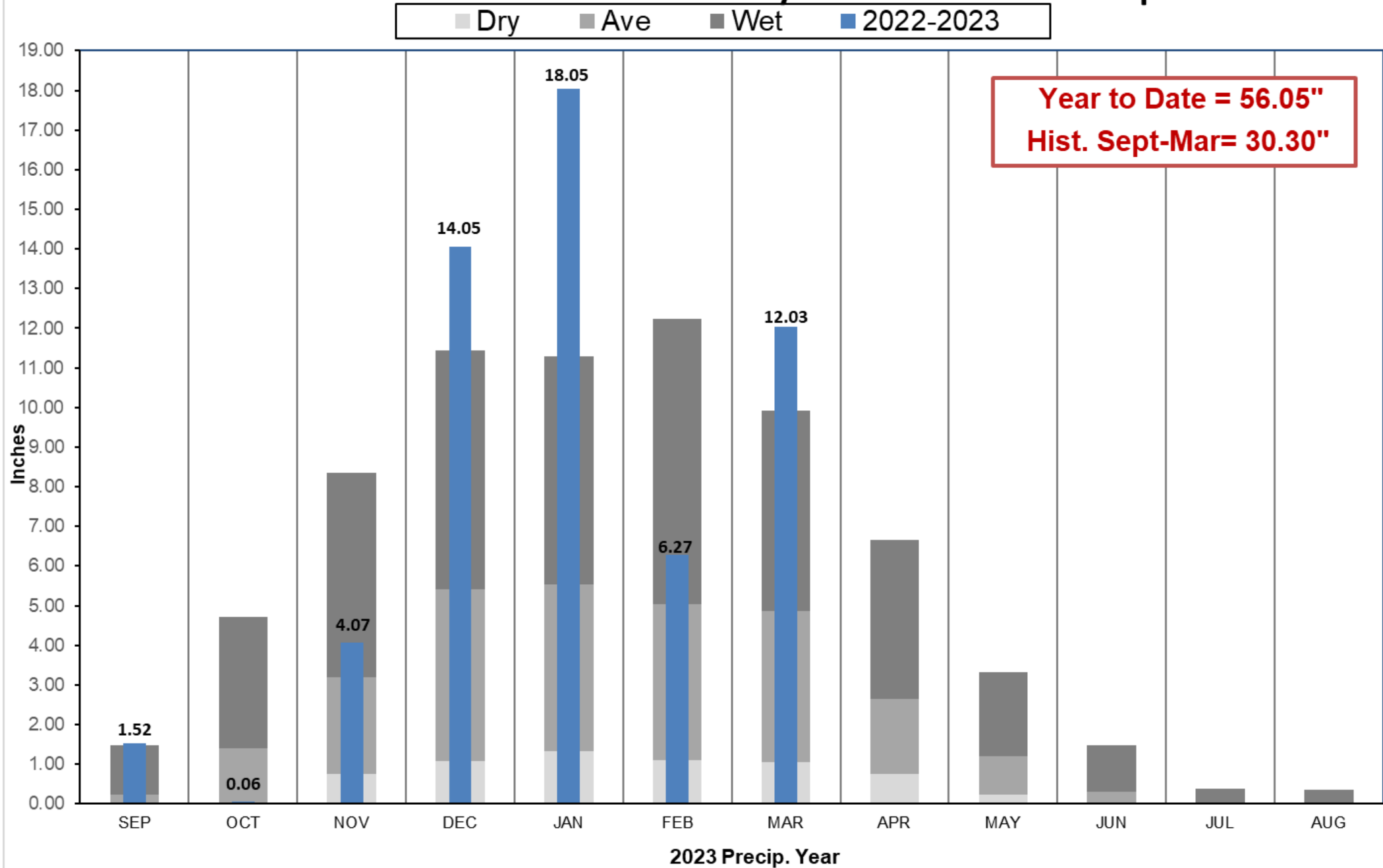


Figure 8. Juvenile salmon captured during the seine surveys and Tuolumne and San Joaquin river flow, 2023.

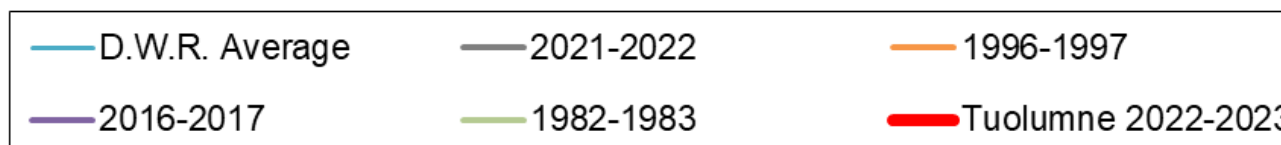
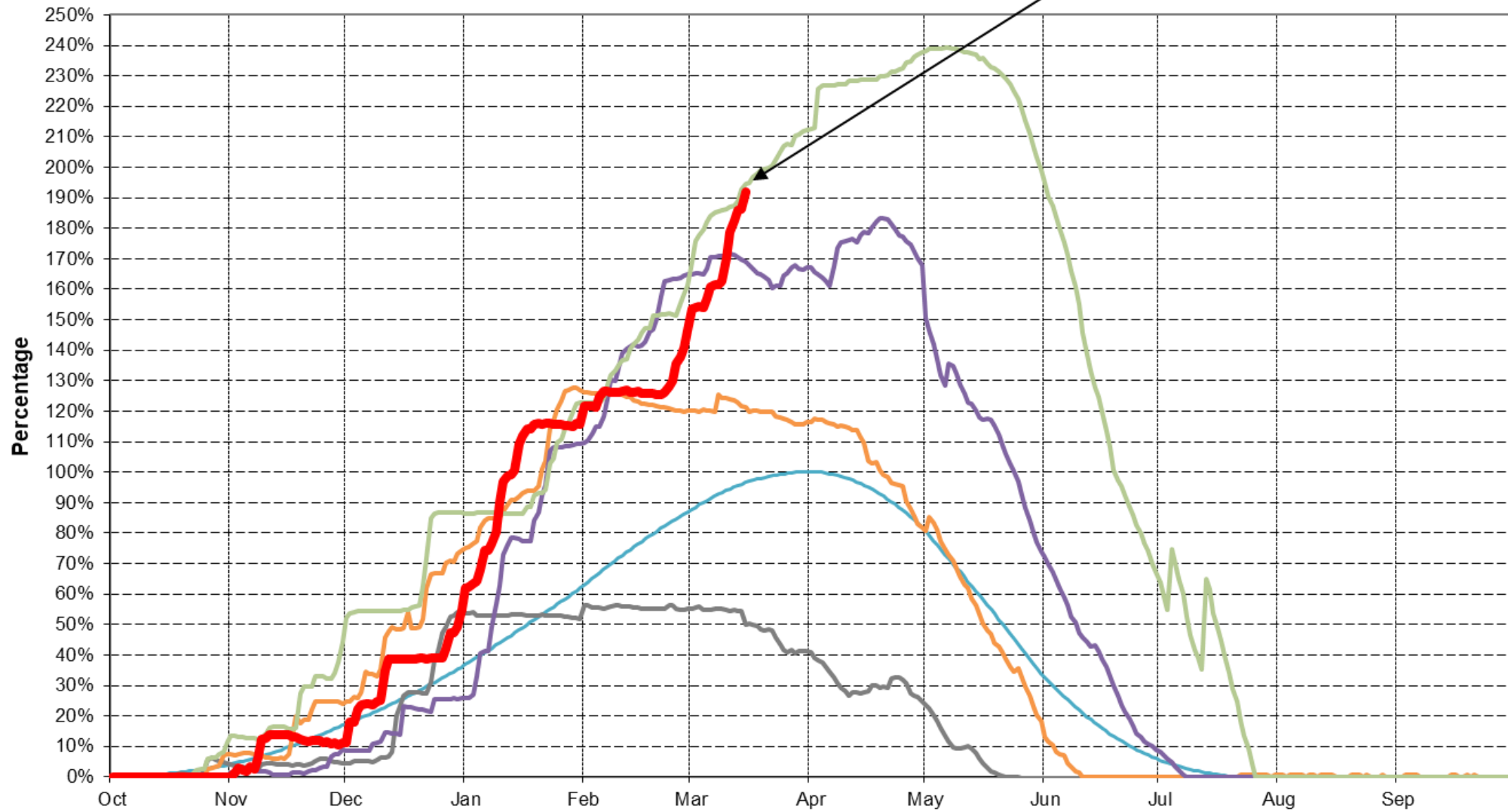
- After four surveys, a total of 14 juvenile salmon have been captured in the Tuolumne River between TRR and Charles Road. Twelve salmon have been captured in the San Joaquin River at Gardner Cove.
- Many sites were not able to be sampled at the flow during the last survey. Some floodplain habitats may be accessible at the current flows and will be attempted during the next survey.

Tuolumne River Watershed Monthly Accumulation of Precipitation

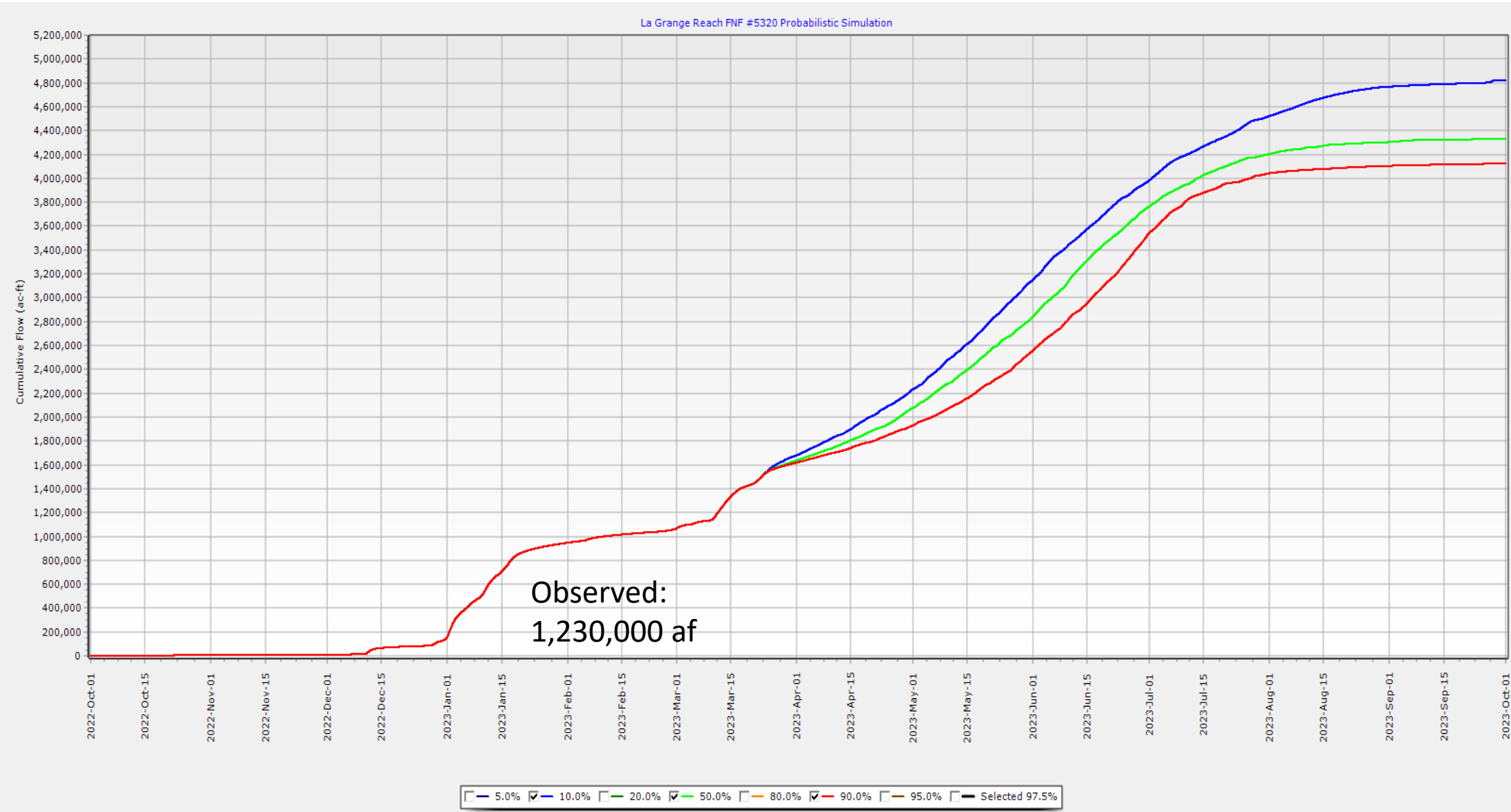


Snow Sensors Used in Tuolumne River Forecast

191.7% Average of Apr. 1 or
198.7% Average for Date



Accumulated Full Natural Flow w/ 5 day forecast



Wet

WY: 4,821,000 af
WY %: 249%
Rainfall: 15.3 in

Ave

WY: 4,331,000 af
WY %: 223%
Rainfall: 6.4 in

Dry

WY: 4,126,000 af
WY %: 212%
Rainfall: 3.2 in

Precipitation Forecasts

Precipitation (in)
during the period:

Wed, 15 MAR 2023 at 12Z

-to-

Thu, 23 MAR 2023 at 12Z

Thu, 23 MAR 2023 at 12Z

-to-

Fri, 31 MAR 2023 at 12Z

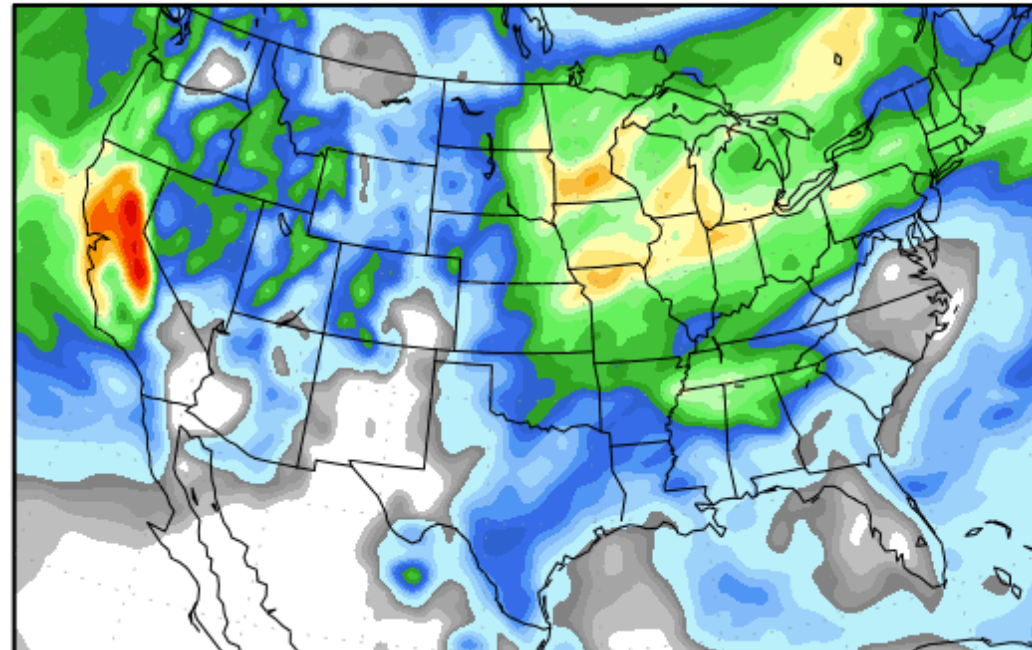
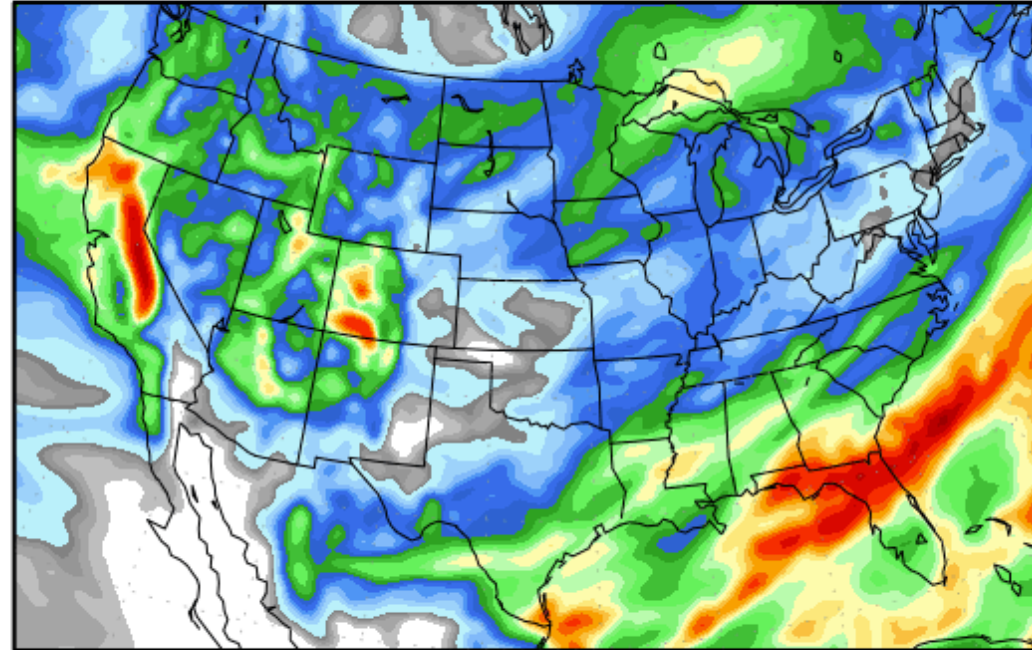
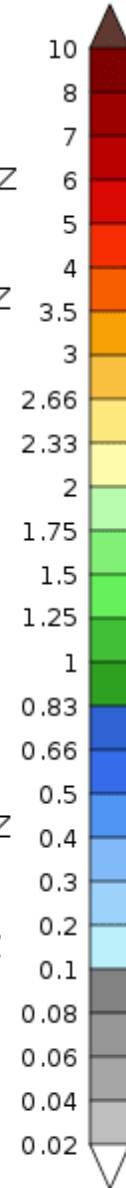


Table 2
Tuolumne River Flow Schedule
Based on DWR Values, 60-20-20 Index for 2022, Hydrologic Conditions
Schedule For 2022-2023 Fish Flow Year

15-Mar-2023 Wed	15-Mar-2023 Wed	1	150	298	73,983	0	0	11,092	0	0	3141	0	0	8,999	150	97,215
16-Mar-2023 Thu	16-Mar-2023 Thu	1	150	298	74,281	0	0	11,092	0	0	3141	0	0	8,999	150	97,513
17-Mar-2023 Fri	17-Mar-2023 Fri	1	150	298	74,579	0	0	11,092	0	0	3141	0	0	8,999	150	97,810
18-Mar-2023 Sat	18-Mar-2023 Sat	1	150	298	74,876	0	0	11,092	0	0	3141	0	0	8,999	150	98,108
19-Mar-2023 Sun	19-Mar-2023 Sun	1	150	298	75,174	0	0	11,092	0	0	3141	0	0	8,999	150	98,405
20-Mar-2023 Mon	20-Mar-2023 Mon	1	150	298	75,471	0	0	11,092	0	0	3141	0	0	8,999	150	98,703
21-Mar-2023 Tue	21-Mar-2023 Tue	1	150	298	75,769	0	0	11,092	0	0	3141	0	0	8,999	150	99,000
22-Mar-2023 Wed	22-Mar-2023 Wed	1	150	298	76,066	0	0	11,092	0	0	3141	0	0	8,999	150	99,298
23-Mar-2023 Thu	23-Mar-2023 Thu	1	150	298	76,364	0	0	11,092	0	0	3141	0	0	8,999	150	99,595
24-Mar-2023 Fri	24-Mar-2023 Fri	1	150	298	76,661	0	0	11,092	0	0	3141	0	0	8,999	150	99,893
25-Mar-2023 Sat	25-Mar-2023 Sat	1	150	298	76,959	0	0	11,092	0	0	3141	0	0	8,999	150	100,190
26-Mar-2023 Sun	26-Mar-2023 Sun	1	150	298	77,256	0	0	11,092	0	0	3141	0	0	8,999	150	100,488
27-Mar-2023 Mon	27-Mar-2023 Mon	1	150	298	77,554	0	0	11,092	0	0	3141	0	0	8,999	150	100,785
28-Mar-2023 Tue	28-Mar-2023 Tue	1	150	298	77,851	0	0	11,092	0	0	3141	0	0	8,999	150	101,083
29-Mar-2023 Wed	29-Mar-2023 Wed	1	150	298	78,149	0	0	11,092	0	0	3141	0	0	8,999	150	101,380
30-Mar-2023 Thu	30-Mar-2023 Thu	1	150	298	78,446	0	0	11,092	0	0	3141	0	0	8,999	150	101,678
31-Mar-2023 Fri	31-Mar-2023 Fri	1	150	298	78,744	0	0	11,092	0	0	3141	0	0	8,999	150	101,975
01-Apr-2023 Sat	01-Apr-2023 Sat	1	150	298	79,041	0	0	11,092	0	0	3141	0	0	8,999	150	102,273
02-Apr-2023 Sun	02-Apr-2023 Sun	1	150	298	79,339	0	0	11,092	0	0	3141	0	0	8,999	150	102,570
03-Apr-2023 Mon	03-Apr-2023 Mon	1	150	298	79,636	0	0	11,092	0	0	3141	0	0	8,999	150	102,868
04-Apr-2023 Tue	04-Apr-2023 Tue	1	150	298	79,934	0	0	11,092	0	0	3141	0	0	8,999	150	103,166
05-Apr-2023 Wed	05-Apr-2023 Wed	1	150	298	80,231	0	0	11,092	0	0	3141	0	0	8,999	150	103,463
06-Apr-2023 Thu	06-Apr-2023 Thu	1	150	298	80,529	0	0	11,092	0	0	3141	0	0	8,999	150	103,761
07-Apr-2023 Fri	07-Apr-2023 Fri	1	150	298	80,826	0	0	11,092	0	0	3141	0	0	8,999	150	104,058
08-Apr-2023 Sat	08-Apr-2023 Sat	1	150	298	81,124	0	0	11,092	0	0	3141	0	0	8,999	150	104,356
09-Apr-2023 Sun	09-Apr-2023 Sun	1	150	298	81,421	0	0	11,092	0	0	3141	0	0	8,999	150	104,653
10-Apr-2023 Mon	10-Apr-2023 Mon	1	150	298	81,719	0	0	11,092	0	0	3141	0	0	8,999	150	104,951
11-Apr-2023 Tue	11-Apr-2023 Tue	1	150	298	82,017	0	0	11,092	0	0	3141	0	0	8,999	150	105,248
12-Apr-2023 Wed	12-Apr-2023 Wed	1	150	298	82,314	0	0	11,092	0	0	3141	0	0	8,999	150	105,546
13-Apr-2023 Thu	13-Apr-2023 Thu	1	150	298	82,612	0	0	11,092	0	0	3141	0	0	8,999	150	105,843
14-Apr-2023 Fri	14-Apr-2023 Fri	1	150	298	82,909	0	0	11,092	0	0	3141	0	0	8,999	150	106,141
No. of days		365														

1 cfs day = 1983471 acre-feet(af)

- Total accumulation amount pertains to 2022-2023 Fish Year only.
- The pulse flows are a target that represents a daily average target. The actual operational data will be adjusted to attain the annual requirement.
Based on an hourly calculation schedule for the target flows. This represents a daily average.

Case	60-20-20 Index	Base Total	Pulse Total	Interpolation Total	Adjustment Total	FERC Total
90%	1,557,933	82,909	20,091	3,141		106,142
	Scheduled Above	82,909	11,092	3,141	8,999	106,141
	Difference	(0)	8,999	1	(8,999)	1

Tuolumne River B-120 Update March 2023

Tuolumne Rive Fish Flow B120 Update's																				
	April - July (AF)						Oct - March (AF)													
	60-20-20 YEAR	Stanislaus	Tuolumne	Merced	Fraint	TOTAL	Stanislaus	Tuolumne	Merced	Fraint	TOTAL	60-20-20 Index	Minimum Flow Requirement	SJWY T	FERC WYT	Base Flow Requirement	Spring Pulse Requirement	Fall Pusle Requirement	Interpolation Requirement	
	14	232,171	423,354	180,810	375,485	1,211,820	123,348	166,401	57,498	113,744	460,991	1,160,495	94,000	Critical	Critical Water Year and Below	82,909	11,091		0.00	
	15	133,081	307,952	104,627	192,518	738,178	190,977	276,982	74,324	123,674	665,957	808,197	94,000	Critical	Critical Water Year and Below	82,909	11,091		0.00	
	16	568,262	1,020,077	494,607	892,555	2,975,501	498,761	783,833	351,782	391,110	2,025,486	2,352,037	142,434	Dry	Median Dry	90,446	37,060		11,877.83	
	17	1,440,796	2,454,169	1,232,846	2,641,089	7,768,900	1,570,518	2,276,847	1,222,014	1,585,049	6,654,428	6,462,633	300,923	Wet	Median Wet/Maximum	205,091	89,882		0.00	
	18	588,162	1,011,627	459,456	947,685	3,006,930	378,596	620,658	273,637	368,411	1,641,302	3,032,418	287,999	Below N	Median Below Normal	103,240	60,027		118,106.32	
	19	1,241,334	1,990,176	1,076,834	2,034,275	6,342,619	639,508	907,414	503,118	591,514	2,641,554	4,940,366	300,923	Wet	Median Wet/Maximum	205,091	89,882		0.00	
	20	438,126	686,861	359,181	670,195	2,154,363	215,159	269,451	124,084	192,804	801,498	2,352,917	142,502	Dry	Intermediate D-BN	104,096	37,060		11,939.68	
	2021 WY	212,305	448,885	220,632	360,017	1,241,839	121,641	145,294	91,084	152,032	510,051	1,317,697	94,000	Critical	Critical Water Year and Below	82,909	11,091		0.00	
	2022 WY	313,163	535,170	258,162	524,059	1,630,554	356,911	505,423	231,362	486,610	1,580,306	1,557,933	106,142	Critical	Median Critical Water Year	82,909	20,091		0.00	
2023																				
	2023																			
	1-Mar																			
	DRY	990,000	1,890,000	1,040,000	2,120,000	6,040,000	721000	1112000	705000	965000	3,503,000	4,636,187	300,923	Wet	Median Wet/Maximum	205,091	89,882	5950	0.00	
	AVERAGE	1,390,000	2,350,000	1,300,000	2,640,000	7,680,000	761000	1147000	725000	1010000	3,643,000	5,648,187	300,923	Wet	Median Wet/Maximum	205,091	89,882	5950	0.00	
	WET	1,840,000	3,070,000	1,760,000	3,410,000	10,080,000	816000	1242000	780000	1105000	3,943,000	7,148,187	300,923	Wet	Median Wet/Maximum	205,091	89,882	5,950	0.00	

Table 2
Tuolumne River Flow Schedule
Based on DWR Values, 60-20-20 Index for 2023, Hydrologic Conditions
Schedule For 2023-2024 Fish Flow Year

DATE		Number of DAYS	BASE FLOW ¹			PULSE FLOW ²			INTERPOLATION FLOW			Other Adjusted Flow			TOTAL FERC FLOW		Agreed Upon
From:	To:		CFS	AF	ACCUM. A.F.	CFS	AF	ACCUM. A.F.	CFS	AF	ACCUM. A.F.	CFS	AF	ACCUM. A.F.	CFS	ACCUM. ¹ A.F.	
15-Apr-2023	Sat	15-Apr-2023	Sat	1	300	595	595	595	0	0	0	0	0	0	800	1,587	Yes
16-Apr-2023	Sun	16-Apr-2023	Sun	1	300	595	1,190	1,000	0	0	0	0	0	0	1,300	4,165	Yes
17-Apr-2023	Mon	17-Apr-2023	Mon	1	300	595	1,785	1,500	0	0	0	0	0	0	1,800	7,736	Yes
18-Apr-2023	Tue	18-Apr-2023	Tue	1	300	595	2,380	2,000	0	0	0	0	0	0	2,300	12,298	Yes
19-Apr-2023	Wed	19-Apr-2023	Wed	1	300	595	2,975	2,500	0	0	0	0	0	0	2,800	17,851	Yes
20-Apr-2023	Thu	20-Apr-2023	Thu	1	300	595	3,570	3,000	0	0	0	0	0	0	3,300	24,397	Yes
21-Apr-2023	Fri	21-Apr-2023	Fri	1	300	595	4,165	3,500	0	0	0	0	0	0	3,800	31,934	Yes
22-Apr-2023	Sat	22-Apr-2023	Sat	1	300	595	4,760	4,000	0	0	0	0	0	0	4,300	40,463	Yes
23-Apr-2023	Sun	23-Apr-2023	Sun	1	300	595	5,355	4,500	0	0	0	0	0	0	4,800	49,983	Yes
24-Apr-2023	Mon	24-Apr-2023	Mon	1	300	595	5,950	5,000	0	0	0	0	0	0	5,300	60,496	Yes
25-Apr-2023	Tue	25-Apr-2023	Tue	1	300	595	6,545	5,500	0	0	0	0	0	0	5,800	72,000	Yes
26-Apr-2023	Wed	26-Apr-2023	Wed	1	300	595	7,140	6,000	0	0	0	0	0	0	6,300	84,496	Yes
27-Apr-2023	Thu	27-Apr-2023	Thu	1	300	595	7,736	6,316	0	0	0	0	0	0	6,616	97,618	Yes
28-Apr-2023	Fri	28-Apr-2023	Fri	1	300	595	8,331	0	0	0	0	0	0	0	300	98,213	Yes
29-Apr-2023	Sat	29-Apr-2023	Sat	1	300	595	8,926	0	0	0	0	0	0	0	300	98,808	Yes
30-Apr-2023	Sun	30-Apr-2023	Sun	1	300	595	9,521	0	0	0	0	0	0	0	300	99,403	Yes
01-May-2023	Mon	01-May-2023	Mon	1	300	595	10,116	0	0	0	0	0	0	0	300	99,998	Yes
02-May-2023	Tue	02-May-2023	Tue	1	300	595	10,711	0	0	0	0	0	0	0	300	100,593	Yes
03-May-2023	Wed	03-May-2023	Wed	1	300	595	11,306	0	0	0	0	0	0	0	300	101,188	Yes
04-May-2023	Thu	04-May-2023	Thu	1	300	595	11,901	0	0	0	0	0	0	0	300	101,783	Yes
05-May-2023	Fri	05-May-2023	Fri	1	300	595	12,496	0	0	0	0	0	0	0	300	102,378	Yes
06-May-2023	Sat	06-May-2023	Sat	1	300	595	13,091	0	0	0	0	0	0	0	300	102,973	Yes
07-May-2023	Sun	07-May-2023	Sun	1	300	595	13,686	0	0	0	0	0	0	0	300	103,568	Yes
08-May-2023	Mon	08-May-2023	Mon	1	300	595	14,281	0	0	0	0	0	0	0	300	104,163	Yes
09-May-2023	Tue	09-May-2023	Tue	1	300	595	14,876	0	0	0	0	0	0	0	300	104,758	Yes
10-May-2023	Wed	10-May-2023	Wed	1	300	595	15,471	0	0	0	0	0	0	0	300	105,353	Yes
11-May-2023	Thu	11-May-2023	Thu	1	300	595	16,066	0	0	0	0	0	0	0	300	105,948	Yes
12-May-2023	Fri	12-May-2023	Fri	1	300	595	16,661	0	0	0	0	0	0	0	300	106,543	Yes
13-May-2023	Sat	13-May-2023	Sat	1	300	595	17,256	0	0	0	0	0	0	0	300	107,138	Yes
14-May-2023	Sun	14-May-2023	Sun	1	300	595	17,851	0	0	0	0	0	0	0	300	107,733	Yes
15-May-2023	Mon	15-May-2023	Mon	1	300	595	18,446	0	0	0	0	0	0	0	300	108,328	Yes
16-May-2023	Tue	16-May-2023	Tue	1	300	595	19,041	0	0	0	0	0	0	0	300	108,923	Yes
17-May-2023	Wed	17-May-2023	Wed	1	300	595	19,636	0	0	0	0	0	0	0	300	109,518	Yes
18-May-2023	Thu	18-May-2023	Thu	1	300	595	20,231	0	0	0	0	0	0	0	300	110,113	Yes
19-May-2023	Fri	19-May-2023	Fri	1	300	595	20,826	0	0	0	0	0	0	0	300	110,708	Yes
20-May-2023	Sat	20-May-2023	Sat	1	300	595	21,421	0	0	0	0	0	0	0	300	111,303	Yes
21-May-2023	Sun	21-May-2023	Sun	1	300	595	22,017	0	0	0	0	0	0	0	300	111,899	Yes
22-May-2023	Mon	22-May-2023	Mon	1	300	595	22,612	0	0	0	0	0	0	0	300	112,494	Yes
23-May-2023	Tue	23-May-2023	Tue	1	300	595	23,207	0	0	0	0	0	0	0	300	113,089	Yes
24-May-2023	Wed	24-May-2023	Wed	1	300	595	23,802	0	0	0	0	0	0	0	300	113,684	Yes
25-May-2023	Thu	25-May-2023	Thu	1	300	595	24,397	0	0	0	0	0	0	0	300	114,279	Yes
26-May-2023	Fri	26-May-2023	Fri	1	300	595	24,992	0	0	0	0	0	0	0	300	114,874	Yes
27-May-2023	Sat	27-May-2023	Sat	1	300	595	25,587	0	0	0	0	0	0	0	300	115,469	Yes
28-May-2023	Sun	28-May-2023	Sun	1	300	595	26,182	0	0	0	0	0	0	0	300	116,064	Yes
29-May-2023	Mon	29-May-2023	Mon	1	300	595	26,777	0	0	0	0	0	0	0	300	116,659	Yes
30-May-2023	Tue	30-May-2023	Tue	1	300	595	27,372	0	0	0	0	0	0	0	300	117,254	Yes
31-May-2023	Wed	31-May-2023	Wed	1	300	595	27,967	0	0	0	0	0	0	0	300	117,849	Yes
01-Jun-2023	Thu	01-Jun-2023	Thu	1	250	496	28,463	0	0	0	0	0	0	0	250	118,345	Yes
02-Jun-2023	Fri	02-Jun-2023	Fri	1	250	496	28,959	0	0	0	0	0	0	0	250	118,841	Yes
03-Jun-2023	Sat	03-Jun-2023	Sat	1	250	496	29,455	0	0	0	0	0	0	0	250	119,337	Yes
04-Jun-2023	Sun	04-Jun-2023	Sun	1	250	496	29,950	0	0	0	0	0	0	0	250	119,832	Yes
05-Jun-2023	Mon	05-Jun-2023	Mon	1	250	496	30,446	0	0	0	0	0	0	0	250	120,328	Yes
06-Jun-2023	Tue	06-Jun-2023	Tue	1	250	496	30,942	0	0	0	0	0	0	0	250	120,824	Yes
07-Jun-2023	Wed	07-Jun-2023	Wed	1	250	496	31,438	0	0	0	0	0	0	0	250	121,320	Yes
08-Jun-2023	Thu	30-Jun-2023	Fri	23	250	11,405	42,843	0	0	0	0	0	0	0	250	132,725	Yes
01-Jul-2023	Sat	31-Jul-2023	Mon	31	250	15,372	58,215	0	0	0	0	0	0	0	250	148,097	Yes
01-Aug-2023	Tue	31-Aug-2023	Thu	31	250	15,372	73,587	0	0	0	0	0	0	0	250	163,469	Yes
01-Sep-2023	Fri	30-Sep-2023	Sat	30	250	14,876	88,463	0	0	0	0	0	0	0	250	178,345	Yes

Table 2
Tuolumne River Flow Schedule
Based on DWR Values, 60-20-20 Index for 2023, Hydrologic Conditions
Schedule For 2023-2024 Fish Flow Year

DATE		Number of DAYS	BASE FLOW ¹			PULSE FLOW ²			INTERPOLATION FLOW			Other Adjusted Flow			TOTAL FERC FLOW		Agreed Upon
From:	To:		CFS	AF	ACCUM. A.F.	CFS	AF	ACCUM. A.F.	CFS	AF	ACCUM. A.F.	CFS	AF	ACCUM. A.F.	CFS	ACCUM. ¹ A.F.	
01-Oct-2023	Sun	01-Oct-2023	Sun	1	300	595	89,058	0	0	0	89,882	0	0	0	300	178,940	Yes
02-Oct-2023	Mon	02-Oct-2023	Mon	1	300	595	89,653	0	0	0	89,882	0	0	0	300	179,535	Yes
03-Oct-2023	Tue	03-Oct-2023	Tue	1	300	595	90,248	0	0	0	89,882	0	0	0	300	180,130	Yes
04-Oct-2023	Wed	04-Oct-2023	Wed	1	300	595	90,843	0	0	0	89,882	0	0	0	300	180,725	Yes
05-Oct-2023	Thu	05-Oct-2023	Thu	1	300	595	91,438	0	0	0	89,882	0	0	0	300	181,320	Yes
06-Oct-2023	Fri	06-Oct-2023	Fri	1	300	595	92,033	0	0	0	89,882	0	0	0	300	181,915	Yes
07-Oct-2023	Sat	07-Oct-2023	Sat	1	300	595	92,628	0	0	0	89,882	0	0	0	300	182,510	Yes
08-Oct-2023	Sun	08-Oct-2023	Sun	1	300	595	93,223	0	0	0	89,882	0	0	0	300	183,105	Yes
09-Oct-2023	Mon	09-Oct-2023	Mon	1	300	595	93,818	0	0	0	89,882	0	0	0	300	183,700	Yes
10-Oct-2023	Tue	10-Oct-2023	Tue	1	300	595	94,413	0	0	0	89,882	0	0	0	300	184,295	Yes
11-Oct-2023	Wed	11-Oct-2023	Wed	1	300	595	95,008	0	0	0	89,882	0	0	0	300	184,890	Yes
12-Oct-2023	Thu	12-Oct-2023	Thu	1	300	595	95,603	0	0	0	89,882	0	0	0	300	185,485	Yes
13-Oct-2023	Fri	13-Oct-2023	Fri	1	300	595	96,198	0	0	0	89,882	0	0	0	300	186,080	Yes
14-Oct-2023	Sat	14-Oct-2023	Sat	1	300	595	96,793	0	0	0	89,882	0	0	0	300	186,675	Yes
15-Oct-2023	Sun	15-Oct-2023	Sun	1	300	595	97,388	200	397	90,279	0	0	0	0	500	187,667	No
16-Oct-2023	Mon	16-Oct-2023	Mon	1	300	595	97,983	300	595	90,874	0	0	0	0	600	188,857	No
17-Oct-2023	Tue	17-Oct-2023	Tue	1	300	595	98,579	400	793	91,667	0	0	0	0	700	190,246	No
18-Oct-2023	Wed	18-Oct-2023	Wed	1	300	595	99,174	500	992	92,659	0	0	0	0	800	191,832	No
19-Oct-2023	Thu	19-Oct-2023	Thu	1	300	595	99,769	600	1,190	93,849	0	0	0	0	900	193,618	No
20-Oct-2023	Fri	20-Oct-2023	Fri	1	300	595	100,364	500	992	94,841	0	0	0	0	800	195,204	No
21-Oct-2023	Sat	21-Oct-2023	Sat	1	300	595	100,959	400	793	95,634	0	0	0	0	700	196,593	No
22-Oct-2023	Sun	22-Oct-2023	Sun	1	300	595	101,554	100	198	95,832	0	0	0	0	400	197,386	No
23-Oct-2023	Mon	23-Oct-2023	Mon	1	300	595	102,149	0	0	95,832	0	0	0	0	300	197,981	No
24-Oct-2023	Tue	24-Oct-2023	Tue	1	300	595	102,744	0	0	95,832	0	0	0	0	300	198,576	No
25-Oct-2023	Wed	25-Oct-2023	Wed	1	300	595	103,339	0	0	95,832	0	0	0	0	300	199,171	No
26-Oct-2023	Thu	26-Oct-2023	Thu	1	300	595	103,934	0	0	95,832	0	0	0	0	300	199,766	No
27-Oct-2023	Fri	27-Oct-2023	Fri	1	300	595	104,529	0	0	95,832	0	0	0	0	300	200,361	No
28-Oct-2023	Sat	28-Oct-2023	Sat	1	300	595	105,124	0	0	95,832	0	0	0	0	300	200,956	No
29-Oct-2023	Sun	29-Oct-2023	Sun	1	300	595	105,719	0	0	95,832	0	0	0	0	300	201,551	No
30-Oct-2023	Mon	30-Oct-2023	Mon	1	300	595	106,314	0	0	95,832	0	0	0	0	300	202,146	No
31-Oct-2023	Tue	31-Oct-2023	Tue	1	300	595	106,909	0	0	95,832	0	0	0	0	300	202,741	No
01-Nov-2023	Wed	01-Nov-2023	Wed	1	300	595	107,504	0	0	95,832	0	0	0	0	300	203,337	No
02-Nov-2023	Thu	02-Nov-2023	Thu	1	300	595	108,099	0	0	95,832	0	0	0	0	300	203,932	No
03-Nov-2023	Fri	03-Nov-2023	Fri	1	300	595	108,694	0	0	95,832	0	0	0	0	300	204,527	No
04-Nov-2023	Sat	04-Nov-2023	Sat	1	300	595	109,289	0	0	95,832	0	0	0	0	300	205,122	No
05-Nov-2023	Sun	05-Nov-2023	Sun	1	300	595	109,884	0	0	95,832	0	0	0	0	300	205,717	No
06-Nov-2023	Mon	06-Nov-2023	Mon	1	300	595	110,479	0	0	95,832	0	0	0	0	300	206,312	No
07-Nov-2023	Tue	07-Nov-2023	Tue	1	300	595	111,074	0	0	95,832	0	0	0	0	300	206,907	No
08-Nov-2023	Wed	08-Nov-2023	Wed	1	300	595	111,669	0	0	95,832	0	0	0	0	300	207,502	No
09-Nov-2023	Thu	09-Nov-2023	Thu	1	300	595	112,264	0	0	95,832	0	0	0	0	300	208,097	No
10-Nov-2023	Fri	10-Nov-2023	Fri	1	300	595	112,859	0	0	95,832	0	0	0	0	300	208,692	No
11-Nov-2023	Sat	11-Nov-2023	Sat	1	300	595	113,455	0	0	95,832	0	0	0	0	300	209,287	No
12-Nov-2023	Sun	12-Nov-2023	Sun	1	300	595	114,050	0	0	95,832	0	0	0	0	300	209,882	No
13-Nov-2023	Mon	13-Nov-2023	Mon	1	300	595	114,645	0	0	95,832	0	0	0	0	300	210,477	No
14-Nov-2023	Tue	14-Nov-2023	Tue	1	300	595	115,240	0	0	95,832	0	0	0	0	300	211,072	No
15-Nov-2023	Wed	15-Nov-2023	Wed	1	300	595	115,835	0	0	95,832	0	0	0	0	300	211,667	No
16-Nov-2023	Thu	16-Nov-2023	Thu	1	300	595	116,430	0	0	95,832	0	0	0	0	300	212,262	No
17-Nov-2023	Fri	17-Nov-2023	Fri	1	300	595	117,025	0	0	95,832	0	0	0	0	300	212,857	No
18-Nov-2023	Sat	18-Nov-2023	Sat	1	300	595	117,620	0	0	95,832	0	0	0	0	300	213,452	No
19-Nov-2023	Sun	19-Nov-2023	Sun	1	300	595	118,215	0	0	95,832	0	0	0	0	300	214,047	No
20-Nov-2023	Mon	20-Nov-2023	Mon	1	300	595	118,810	0	0	95,832	0	0	0	0	300	214,642	No
21-Nov-2023	Tue	21-Nov-2023	Tue	1	300	595	119,405	0	0	95,832	0	0	0	0	300	215,237	No
22-Nov-2023	Wed	22-Nov-2023	Wed	1	300	595	120,000	0	0	95,832	0	0	0	0	300	215,832	No
23-Nov-2023	Thu	23-Nov-2023	Thu	1	300	595	120,595	0	0	95,832	0	0	0	0	300	216,427	No
24-Nov-2023	Fri	24-Nov-2023	Fri	1	300	595	121,190	0	0	95,832	0	0	0	0	300	217,022	No
25-Nov-2023	Sat	25-Nov-2023	Sat	1	300	595	121,785	0	0	95,832	0	0	0	0	300	217,618	No
26-Nov-2023	Sun	26-Nov-2023	Sun	1	300	595	122,380	0	0	95,832	0	0	0	0	300	218,213	No

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Schedule For 2023-2024 Fish Flow Year

DATE		Number of DAYS	BASE FLOW ¹			PULSE FLOW ²			INTERPOLATION FLOW			Other Adjusted Flow			TOTAL FERC FLOW		Agreed Upon
From:	To:		CFS	AF	ACCUM. A.F.	CFS	AF	ACCUM. A.F.	CFS	AF	ACCUM. A.F.	CFS	AF	ACCUM. A.F.	CFS	ACCUM. ¹ A.F.	
27-Nov-2023	Mon	27-Nov-2023	Mon	1	300	595	122,975	0	0	0	95,832	0	0	0	300	218,808	No
28-Nov-2023	Tue	28-Nov-2023	Tue	1	300	595	123,570	0	0	0	95,832	0	0	0	300	219,403	No
29-Nov-2023	Wed	29-Nov-2023	Wed	1	300	595	124,165	0	0	0	95,832	0	0	0	300	219,998	No
30-Nov-2023	Thu	30-Nov-2023	Thu	1	300	595	124,760	0	0	0	95,832	0	0	0	300	220,593	No
01-Dec-2023	Fri	01-Dec-2023	Fri	1	300	595	125,355	0	0	0	95,832	0	0	0	300	221,188	No
02-Dec-2023	Sat	02-Dec-2023	Sat	1	300	595	125,950	0	0	0	95,832	0	0	0	300	221,783	No
03-Dec-2023	Sun	03-Dec-2023	Sun	1	300	595	126,545	0	0	0	95,832	0	0	0	300	222,378	No
04-Dec-2023	Mon	04-Dec-2023	Mon	1	300	595	127,140	0	0	0	95,832	0	0	0	300	222,973	No
05-Dec-2023	Tue	05-Dec-2023	Tue	1	300	595	127,736	0	0	0	95,832	0	0	0	300	223,568	No
06-Dec-2023	Wed	06-Dec-2023	Wed	1	300	595	128,331	0	0	0	95,832	0	0	0	300	224,163	No
07-Dec-2023	Thu	07-Dec-2023	Thu	1	300	595	128,926	0	0	0	95,832	0	0	0	300	224,758	No
08-Dec-2023	Fri	08-Dec-2023	Fri	1	300	595	129,521	0	0	0	95,832	0	0	0	300	225,353	No
09-Dec-2023	Sat	09-Dec-2023	Sat	1	300	595	130,116	0	0	0	95,832	0	0	0	300	225,948	No
10-Dec-2023	Sun	10-Dec-2023	Sun	1	300	595	130,711	0	0	0	95,832	0	0	0	300	226,543	No
11-Dec-2023	Mon	11-Dec-2023	Mon	1	300	595	131,306	0	0	0	95,832	0	0	0	300	227,138	No
12-Dec-2023	Tue	12-Dec-2023	Tue	1	300	595	131,901	0	0	0	95,832	0	0	0	300	227,733	No
13-Dec-2023	Wed	13-Dec-2023	Wed	1	300	595	132,496	0	0	0	95,832	0	0	0	300	228,328	No
14-Dec-2023	Thu	14-Dec-2023	Thu	1	300	595	133,091	0	0	0	95,832	0	0	0	300	228,923	No
15-Dec-2023	Fri	15-Dec-2023	Fri	1	300	595	133,686	0	0	0	95,832	0	0	0	300	229,518	No
16-Dec-2023	Sat	16-Dec-2023	Sat	1	300	595	134,281	0	0	0	95,832	0	0	0	300	230,113	No
17-Dec-2023	Sun	17-Dec-2023	Sun	1	300	595	134,876	0	0	0	95,832	0	0	0	300	230,708	No
18-Dec-2023	Mon	18-Dec-2023	Mon	1	300	595	135,471	0	0	0	95,832	0	0	0	300	231,303	No
19-Dec-2023	Tue	19-Dec-2023	Tue	1	300	595	136,066	0	0	0	95,832	0	0	0	300	231,899	No
20-Dec-2023	Wed	20-Dec-2023	Wed	1	300	595	136,661	0	0	0	95,832	0	0	0	300	232,494	No
21-Dec-2023	Thu	21-Dec-2023	Thu	1	300	595	137,256	0	0	0	95,832	0	0	0	300	233,089	No
22-Dec-2023	Fri	22-Dec-2023	Fri	1	300	595	137,851	0	0	0	95,832	0	0	0	300	233,684	No
23-Dec-2023	Sat	23-Dec-2023	Sat	1	300	595	138,446	0	0	0	95,832	0	0	0	300	234,279	No
24-Dec-2023	Sun	24-Dec-2023	Sun	1	300	595	139,041	0	0	0	95,832	0	0	0	300	234,874	No
25-Dec-2023	Mon	25-Dec-2023	Mon	1	300	595	139,636	0	0	0	95,832	0	0	0	300	235,469	No
26-Dec-2023	Tue	26-Dec-2023	Tue	1	300	595	140,231	0	0	0	95,832	0	0	0	300	236,064	No
27-Dec-2023	Wed	27-Dec-2023	Wed	1	300	595	140,826	0	0	0	95,832	0	0	0	300	236,659	No
28-Dec-2023	Thu	28-Dec-2023	Thu	1	300	595	141,421	0	0	0	95,832	0	0	0	300	237,254	No
29-Dec-2023	Fri	29-Dec-2023	Fri	1	300	595	142,017	0	0	0	95,832	0	0	0	300	237,849	No
30-Dec-2023	Sat	30-Dec-2023	Sat	1	300	595	142,612	0	0	0	95,832	0	0	0	300	238,444	No
31-Dec-2023	Sun	31-Dec-2023	Sun	1	300	595	143,207	0	0	0	95,832	0	0	0	300	239,039	No
01-Jan-2024	Mon	01-Jan-2024	Mon	1	300	595	143,802	0	0	0	95,832	0	0	0	300	239,634	No
02-Jan-2024	Tue	02-Jan-2024	Tue	1	300	595	144,397	0	0	0	95,832	0	0	0	300	240,229	No
03-Jan-2024	Wed	03-Jan-2024	Wed	1	300	595	144,992	0	0	0	95,832	0	0	0	300	240,824	No
04-Jan-2024	Thu	04-Jan-2024	Thu	1	300	595	145,587	0	0	0	95,832	0	0	0	300	241,419	No
05-Jan-2024	Fri	05-Jan-2024	Fri	1	300	595	146,182	0	0	0	95,832	0	0	0	300	242,014	No
06-Jan-2024	Sat	06-Jan-2024	Sat	1	300	595	146,777	0	0	0	95,832	0	0	0	300	242,609	No
07-Jan-2024	Sun	07-Jan-2024	Sun	1	300	595	147,372	0	0	0	95,832	0	0	0	300	243,204	No
08-Jan-2024	Mon	08-Jan-2024	Mon	1	300	595	147,967	0	0	0	95,832	0	0	0	300	243,799	No
09-Jan-2024	Tue	09-Jan-2024	Tue	1	300	595	148,562	0	0	0	95,832	0	0	0	300	244,394	No
10-Jan-2024	Wed	10-Jan-2024	Wed	1	300	595	149,157	0	0	0	95,832	0	0	0	300	244,989	No
11-Jan-2024	Thu	11-Jan-2024	Thu	1	300	595	149,752	0	0	0	95,832	0	0	0	300	245,584	No
12-Jan-2024	Fri	12-Jan-2024	Fri	1	300	595	150,347	0	0	0	95,832	0	0	0	300	246,179	No
13-Jan-2024	Sat	13-Jan-2024	Sat	1	300	595	150,942	0	0	0	95,832	0	0	0	300	246,775	No
14-Jan-2024	Sun	14-Jan-2024	Sun	1	300	595	151,537	0	0	0	95,832	0	0	0	300	247,370	No
15-Jan-2024	Mon	15-Jan-2024	Mon	1	300	595	152,132	0	0	0	95,832	0	0	0	300	247,965	No
16-Jan-2024	Tue	16-Jan-2024	Tue	1	300	595	152,727	0	0	0	95,832	0	0	0	300	248,560	No
17-Jan-2024	Wed	17-Jan-2024	Wed	1	300	595	153,322	0	0	0	95,832	0	0	0	300	249,155	No
18-Jan-2024	Thu	18-Jan-2024	Thu	1	300	595	153,917	0	0	0	95,832	0	0	0	300	249,750	No
19-Jan-2024	Fri	19-Jan-2024	Fri	1	300	595	154,512	0	0	0	95,832	0	0	0	300	250,345	No
20-Jan-2024	Sat	20-Jan-2024	Sat	1	300	595	155,107	0	0	0	95,832	0	0	0	300	250,940	No
21-Jan-2024	Sun	21-Jan-2024	Sun	1	300	595	155,702	0	0	0	95,832	0	0	0	300	251,535	No
22-Jan-2024	Mon	22-Jan-2024	Mon	1	300	595	156,298	0	0	0	95,832	0	0	0	300	252,130	No
23-Jan-2024	Tue	23-Jan-2024	Tue	1	300	595	156,893	0	0	0	95,832	0	0	0	300	252,725	No

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Based on DWR Values, 60-20-20 Index for 2023, Hydrologic Conditions
Schedule For 2023-2024 Fish Flow Year

DATE		Number of DAYS	BASE FLOW ¹			PULSE FLOW ²			INTERPOLATION FLOW			Other Adjusted Flow			TOTAL FERC FLOW		Agreed Upon
From:	To:		CFS	AF	ACCUM. A.F.	CFS	AF	ACCUM. A.F.	CFS	AF	ACCUM. A.F.	CFS	AF	ACCUM. A.F.	CFS	ACCUM. ¹ A.F.	
24-Jan-2024	Wed	24-Jan-2024	Wed	1	300	595	157,488	0	0	0	95,832	0	0	0	300	253,320	No
25-Jan-2024	Thu	25-Jan-2024	Thu	1	300	595	158,083	0	0	0	95,832	0	0	0	300	253,915	No
26-Jan-2024	Fri	26-Jan-2024	Fri	1	300	595	158,678	0	0	0	95,832	0	0	0	300	254,510	No
27-Jan-2024	Sat	27-Jan-2024	Sat	1	300	595	159,273	0	0	0	95,832	0	0	0	300	255,105	No
28-Jan-2024	Sun	28-Jan-2024	Sun	1	300	595	159,868	0	0	0	95,832	0	0	0	300	255,700	No
29-Jan-2024	Mon	29-Jan-2024	Mon	1	300	595	160,463	0	0	0	95,832	0	0	0	300	256,295	No
30-Jan-2024	Tue	30-Jan-2024	Tue	1	300	595	161,058	0	0	0	95,832	0	0	0	300	256,890	No
31-Jan-2024	Wed	31-Jan-2024	Wed	1	300	595	161,653	0	0	0	95,832	0	0	0	300	257,485	No
01-Feb-2024	Thu	01-Feb-2024	Thu	1	300	595	162,248	0	0	0	95,832	0	0	0	300	258,080	No
02-Feb-2024	Fri	02-Feb-2024	Fri	1	300	595	162,843	0	0	0	95,832	0	0	0	300	258,675	No
03-Feb-2024	Sat	03-Feb-2024	Sat	1	300	595	163,438	0	0	0	95,832	0	0	0	300	259,270	No
04-Feb-2024	Sun	04-Feb-2024	Sun	1	300	595	164,033	0	0	0	95,832	0	0	0	300	259,865	No
05-Feb-2024	Mon	05-Feb-2024	Mon	1	300	595	164,628	0	0	0	95,832	0	0	0	300	260,460	No
06-Feb-2024	Tue	06-Feb-2024	Tue	1	300	595	165,223	0	0	0	95,832	0	0	0	300	261,056	No
07-Feb-2024	Wed	07-Feb-2024	Wed	1	300	595	165,818	0	0	0	95,832	0	0	0	300	261,651	No
08-Feb-2024	Thu	08-Feb-2024	Thu	1	300	595	166,413	0	0	0	95,832	0	0	0	300	262,246	No
09-Feb-2024	Fri	09-Feb-2024	Fri	1	300	595	167,008	0	0	0	95,832	0	0	0	300	262,841	No
10-Feb-2024	Sat	10-Feb-2024	Sat	1	300	595	167,603	0	0	0	95,832	0	0	0	300	263,436	No
11-Feb-2024	Sun	11-Feb-2024	Sun	1	300	595	168,198	0	0	0	95,832	0	0	0	300	264,031	No
12-Feb-2024	Mon	12-Feb-2024	Mon	1	300	595	168,793	0	0	0	95,832	0	0	0	300	264,626	No
13-Feb-2024	Tue	13-Feb-2024	Tue	1	300	595	169,388	0	0	0	95,832	0	0	0	300	265,221	No
14-Feb-2024	Wed	14-Feb-2024	Wed	1	300	595	169,983	0	0	0	95,832	0	0	0	300	265,816	No
15-Feb-2024	Thu	15-Feb-2024	Thu	1	300	595	170,579	0	0	0	95,832	0	0	0	300	266,411	No
16-Feb-2024	Fri	16-Feb-2024	Fri	1	300	595	171,174	0	0	0	95,832	0	0	0	300	267,006	No
17-Feb-2024	Sat	17-Feb-2024	Sat	1	300	595	171,769	0	0	0	95,832	0	0	0	300	267,601	No
18-Feb-2024	Sun	18-Feb-2024	Sun	1	300	595	172,364	0	0	0	95,832	0	0	0	300	268,196	No
19-Feb-2024	Mon	19-Feb-2024	Mon	1	300	595	172,959	0	0	0	95,832	0	0	0	300	268,791	No
20-Feb-2024	Tue	20-Feb-2024	Tue	1	300	595	173,554	0	0	0	95,832	0	0	0	300	269,386	No
21-Feb-2024	Wed	21-Feb-2024	Wed	1	300	595	174,149	0	0	0	95,832	0	0	0	300	269,981	No
22-Feb-2024	Thu	22-Feb-2024	Thu	1	300	595	174,744	0	0	0	95,832	0	0	0	300	270,576	No
23-Feb-2024	Fri	23-Feb-2024	Fri	1	300	595	175,339	0	0	0	95,832	0	0	0	300	271,171	No
24-Feb-2024	Sat	24-Feb-2024	Sat	1	300	595	175,934	0	0	0	95,832	0	0	0	300	271,766	No
25-Feb-2024	Sun	25-Feb-2024	Sun	1	300	595	176,529	0	0	0	95,832	0	0	0	300	272,361	No
26-Feb-2024	Mon	26-Feb-2024	Mon	1	300	595	177,124	0	0	0	95,832	0	0	0	300	272,956	No
27-Feb-2024	Tue	27-Feb-2024	Tue	1	300	595	177,719	0	0	0	95,832	0	0	0	300	273,551	No
28-Feb-2024	Wed	28-Feb-2024	Wed	1	300	595	178,314	0	0	0	95,832	0	0	0	300	274,146	No
29-Feb-2024	Thu	29-Feb-2024	Thu	1	300	595	178,909	0	0	0	95,832	0	0	0	300	274,741	No
01-Mar-2024	Fri	01-Mar-2024	Fri	1	300	595	179,504	0	0	0	95,832	0	0	0	300	275,337	No
02-Mar-2024	Sat	02-Mar-2024	Sat	1	300	595	180,099	0	0	0	95,832	0	0	0	300	275,932	No
03-Mar-2024	Sun	03-Mar-2024	Sun	1	300	595	180,694	0	0	0	95,832	0	0	0	300	276,527	No
04-Mar-2024	Mon	04-Mar-2024	Mon	1	300	595	181,289	0	0	0	95,832	0	0	0	300	277,122	No
05-Mar-2024	Tue	05-Mar-2024	Tue	1	300	595	181,884	0	0	0	95,832	0	0	0	300	277,717	No
06-Mar-2024	Wed	06-Mar-2024	Wed	1	300	595	182,479	0	0	0	95,832	0	0	0	300	278,312	No
07-Mar-2024	Thu	07-Mar-2024	Thu	1	300	595	183,074	0	0	0	95,832	0	0	0	300	278,907	No
08-Mar-2024	Fri	08-Mar-2024	Fri	1	300	595	183,669	0	0	0	95,832	0	0	0	300	279,502	No
09-Mar-2024	Sat	09-Mar-2024	Sat	1	300	595	184,264	0	0	0	95,832	0	0	0	300	280,097	No
10-Mar-2024	Sun	10-Mar-2024	Sun	1	300	595	184,859	0	0	0	95,832	0	0	0	300	280,692	No
11-Mar-2024	Mon	11-Mar-2024	Mon	1	300	595	185,455	0	0	0	95,832	0	0	0	300	281,287	No
12-Mar-2024	Tue	12-Mar-2024	Tue	1	300	595	186,050	0	0	0	95,832	0	0	0	300	281,882	No
13-Mar-2024	Wed	13-Mar-2024	Wed	1	300	595	186,645	0	0	0	95,832	0	0	0	300	282,477	No
14-Mar-2024	Thu	14-Mar-2024	Thu	1	300	595	187,240	0	0	0	95,832	0	0	0	300	283,072	No
15-Mar-2024	Fri	15-Mar-2024	Fri	1	300	595	187,835	0	0	0	95,832	0	0	0	300	283,667	No
16-Mar-2024	Sat	16-Mar-2024	Sat	1	300	595	188,430	0	0	0	95,832	0	0	0	300	284,262	No
17-Mar-2024	Sun	17-Mar-2024	Sun	1	300	595	189,025	0	0	0	95,832	0	0	0	300	284,857	No
18-Mar-2024	Mon	18-Mar-2024	Mon	1	300	595	189,620	0	0	0	95,832	0	0	0	300	285,452	No
19-Mar-2024	Tue	19-Mar-2024	Tue	1	300	595	190,215	0	0	0	95,832	0	0	0	300	286,047	No
20-Mar-2024	Wed	20-Mar-2024	Wed	1	300	595	190,810	0	0	0	95,832	0	0	0	300	286,642	No
21-Mar-2024	Thu	21-Mar-2024	Thu	1	300	595	191,405	0	0	0	95,832	0	0	0	300	287,237	No

Table 2
Tuolumne River Flow Schedule
Based on DWR Values, 60-20-20 Index for 2023, Hydrologic Conditions
Schedule For 2023-2024 Fish Flow Year

DATE		Number of DAYS	BASE FLOW ¹			PULSE FLOW ²			INTERPOLATION FLOW			Other Adjusted Flow			TOTAL FERC FLOW		Agreed Upon
From:	To:		CFS	AF	ACCUM. A.F.	CFS	AF	ACCUM. A.F.	CFS	AF	ACCUM. A.F.	CFS	AF	ACCUM. A.F.	CFS	ACCUM. ¹ A.F.	
22-Mar-2024 Fri	22-Mar-2024 Fri	1	300	595	192,000	0	0	95,832	0	0	0	0	0	0	300	287,832	No
23-Mar-2024 Sat	23-Mar-2024 Sat	1	300	595	192,595	0	0	95,832	0	0	0	0	0	0	300	288,427	No
24-Mar-2024 Sun	24-Mar-2024 Sun	1	300	595	193,190	0	0	95,832	0	0	0	0	0	0	300	289,022	No
25-Mar-2024 Mon	25-Mar-2024 Mon	1	300	595	193,785	0	0	95,832	0	0	0	0	0	0	300	289,618	No
26-Mar-2024 Tue	26-Mar-2024 Tue	1	300	595	194,380	0	0	95,832	0	0	0	0	0	0	300	290,213	No
27-Mar-2024 Wed	27-Mar-2024 Wed	1	300	595	194,975	0	0	95,832	0	0	0	0	0	0	300	290,808	No
28-Mar-2024 Thu	28-Mar-2024 Thu	1	300	595	195,570	0	0	95,832	0	0	0	0	0	0	300	291,403	No
29-Mar-2024 Fri	29-Mar-2024 Fri	1	300	595	196,165	0	0	95,832	0	0	0	0	0	0	300	291,998	No
30-Mar-2024 Sat	30-Mar-2024 Sat	1	300	595	196,760	0	0	95,832	0	0	0	0	0	0	300	292,593	No
31-Mar-2024 Sun	31-Mar-2024 Sun	1	300	595	197,355	0	0	95,832	0	0	0	0	0	0	300	293,188	No
01-Apr-2024 Mon	01-Apr-2024 Mon	1	300	595	197,950	0	0	95,832	0	0	0	0	0	0	300	293,783	No
02-Apr-2024 Tue	02-Apr-2024 Tue	1	300	595	198,545	0	0	95,832	0	0	0	0	0	0	300	294,378	No
03-Apr-2024 Wed	03-Apr-2024 Wed	1	300	595	199,140	0	0	95,832	0	0	0	0	0	0	300	294,973	No
04-Apr-2024 Thu	04-Apr-2024 Thu	1	300	595	199,736	0	0	95,832	0	0	0	0	0	0	300	295,568	No
05-Apr-2024 Fri	05-Apr-2024 Fri	1	300	595	200,331	0	0	95,832	0	0	0	0	0	0	300	296,163	No
06-Apr-2024 Sat	06-Apr-2024 Sat	1	300	595	200,926	0	0	95,832	0	0	0	0	0	0	300	296,758	No
07-Apr-2024 Sun	07-Apr-2024 Sun	1	300	595	201,521	0	0	95,832	0	0	0	0	0	0	300	297,353	No
08-Apr-2024 Mon	08-Apr-2024 Mon	1	300	595	202,116	0	0	95,832	0	0	0	0	0	0	300	297,948	No
09-Apr-2024 Tue	09-Apr-2024 Tue	1	300	595	202,711	0	0	95,832	0	0	0	0	0	0	300	298,543	No
10-Apr-2024 Wed	10-Apr-2024 Wed	1	300	595	203,306	0	0	95,832	0	0	0	0	0	0	300	299,138	No
11-Apr-2024 Thu	11-Apr-2024 Thu	1	300	595	203,901	0	0	95,832	0	0	0	0	0	0	300	299,733	No
12-Apr-2024 Fri	12-Apr-2024 Fri	1	300	595	204,496	0	0	95,832	0	0	0	0	0	0	300	300,328	No
13-Apr-2024 Sat	13-Apr-2024 Sat	1	300	595	205,091	0	0	95,832	0	0	0	0	0	0	300	300,923	No
No. of days		365															

1 cfs day = 1.983471 acre-feet (af)

- Total accumulation amount pertains to 2023-2024 Fish Year only.
- The pulse flows are a target that represents a daily average target. The actual operational data will be adjusted to attain the annual requirement.
Based on an hourly calculation schedule for the target flows. This represents a daily average.

Case	60-20-20 Index		Base Total		Pulse Total		Interpolation Total		Adjustment Total		FERC Total
90%	4,636,187	60-20-20 Index	205,091		95,832		-				300,923
		Scheduled Above	205,091		95,832		-		-		300,923
		Difference	0		(0)		-		-		(0)

SRWA Drinking Water Project – February 2023 Update

February Status

- Acceptance Test (AT) Plan prepared by the contractor.
 - The contractor is required to ensure the water treatment plant processes are functioning properly by performing an AT.
 - The AT is planned to begin in August and be completed in October 2023.

Water Treatment Plant and Raw Water Pump Station General Overview

Water Treatment Plant (WTP)

- The WTP will initially treat up to 15 million gallons per day (MGD), with roughly 10 MGD delivered to Turlock and 5 MGD to Ceres.
- Approximately 7 and 5 miles of pipeline will be installed from the WTP to new potable water storage tanks in Turlock and Ceres, respectively.

Raw Water Pump Station

- The Raw Water Pump Station site will include installation of pumps to convey water from the Tuolumne River through the infiltration gallery that was installed in the early 2000s.
- The pumps will be placed on top of the concrete wet well that was installed in 2019.
- A new building, staff parking, landscaping, and other site improvements will also be constructed.



General Location of Water Treatment Plant



Aerial View of Water Treatment Plant Site (looking northwest)



Finished Water Pumps



Interior of the Raw Water Pump Station Building



Ceres Main Canal Outfall Structure



Raw Water Pump Piping



Administration and Operations Building



Flocculation and Sedimentation Basin



Ozone and Filter Piping