

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

MARCH 16, 2023 AT 9:30 AM

VIA ZOOM

SUMMARY

1. INTRODUCTION AND ANNOUNCEMENTS

- Participants made self-introductions, a list of attendees follows.
- Gretchen Murphey advised that with the high flows through the summer, river restoration will be challenging.
- Allison Boucher said that in 2011 they worked in flows over 3,000cfs for the entire period and the flows go down the last week of September which when they can build the riffles. Contractor is ready to do it again and is happy for the high flows because it will help with his turbidity limitation. Discussion followed.

2. ADMINISTRATIVE ITEMS:

- Today's agenda and notes from the December 2022 meeting were reviewed and corrections made and approved.

3. MONITORING REPORTS:

- Chrissy Sonke went over the monitoring reports, weir status, RST monitoring, Rotary Screw Trap & Seining. Discussion took place.
- Chrissy will update graphs and send to Pat and he will send out to the group.
- Wayne Swaney advised that the FERC report is on schedule and the summer monitoring reports & thermograph downloads will most likely be postponed until September due to high flows.

4. FLOW OPERATIONS:

- Pat Maloney went over the Daily Monitoring Report, Current Watershed Conditions, Runoff & Flow Volume Forecasts, Tuolumne River Flow Schedule and Spring Flow Schedule. Discussion took place.
- Stephanie Millsap asked if there might be some way to proactively work with all agencies to get a variance with the Core to hold onto some of the water to be able to do a fall pulse flow later in the season past the October 7th date. There would be greater biological and temperature benefits to bring fish into the system. Discussion followed.
- Pat shared the Infiltration Gallery & SRWA photos and Projects updates.
- Stacie Smith advised that the long term operations plan still hasn't been submitted and is required.
- Pat will advise Bill Penney.
- Peter Drekmeier said that while we are waiting for the details on the new Tuolumne River Voluntary Agreement, that there was some preliminary information suggesting there would be

about \$64 million of investments and of that \$13 million was associated with the infiltration gallery and he is curious how that \$13 million would be spent.

- Noah Hume said that he believes that might have been for a second infiltration gallery, to build additional capacity for higher summer base flows.
- Pat Maloney concurred and said he does not know where that stands or where the \$13 million was allocated and will look into it.

5. AGENCY/NGO UPDATES:

- Kevin Marr advised they have submitted 65% of designs to DWR and comments were provided for the Basso La Grange Project. They are still reviewing the monitoring & maintenance plan and hope to have those comments out to TRT soon. Also the CEQA exemption justification has been submitted and they are working on how to concur with CDFW on that.
- Chrissy Sonke advised that the water levels on the Tuolumne are too high for overhead at Waterford so they had to take it down for safety purposes and they are trying to figure out a backup plan to secure the trap.
- Chris Diviney asked if we can plan on another 9,000cfs for a few weeks.
- Pat advised that we are actively reacting to the Dry Creek flows so this will be extended most likely until September, but not necessarily at 9,000cfs. Discussion followed.
- Kevin Marr asked how the Dennett Dam removal project is holding up.
- Pat advised that prior to the flood event it looked fantastic.
- Chris Guptill said that the two outfalls on both sides of the 9th St. Bridge from the south side have carved fairly large gashes down toward the river, about 10' to 15' deep. The east side is worse than the west side with significant erosion. Discussion followed.
- Kevin Marr advised that the Fish Passage Project received a \$6 million grant to continue the study of reintroducing winter run chinook above the Shasta reservoir.

6. ADITIONAL ITEMS:

- none

7. NEXT MEETING DATE: JUNE 8, 2023

TRTAC Meeting Attendees

	<u>Name</u>	<u>Organization</u>
1.	Patrick Maloney	TID
2.	Dana Ortolan	TID
3.	Chris Diviney	CDFW
4.	Gretchen Murphey	CDFW
5.	Suzanne Deleon	CDFW
6.	Peter Drekmeier	TRT
7.	Stephanie Milsap	USFWS
8.	Kevin Marr	DWR
9.	Wayne Swaney	SWS
10.	Noah Hume	SWS
11.	Allison & Dave Boucher	TRC
12.	John Mauterer	MID
13.	Fred Meyer	McBain & Associates
14.	Chris Gupstill	9 to 99
15.	Bella Cardenas	ESRCD
16.	Chrissy Sonke	FishBio
17.	Jon Ambrose	NMFS
18.	Hilary Glenn	NMFS
19.	Stacie Smith	NMFS

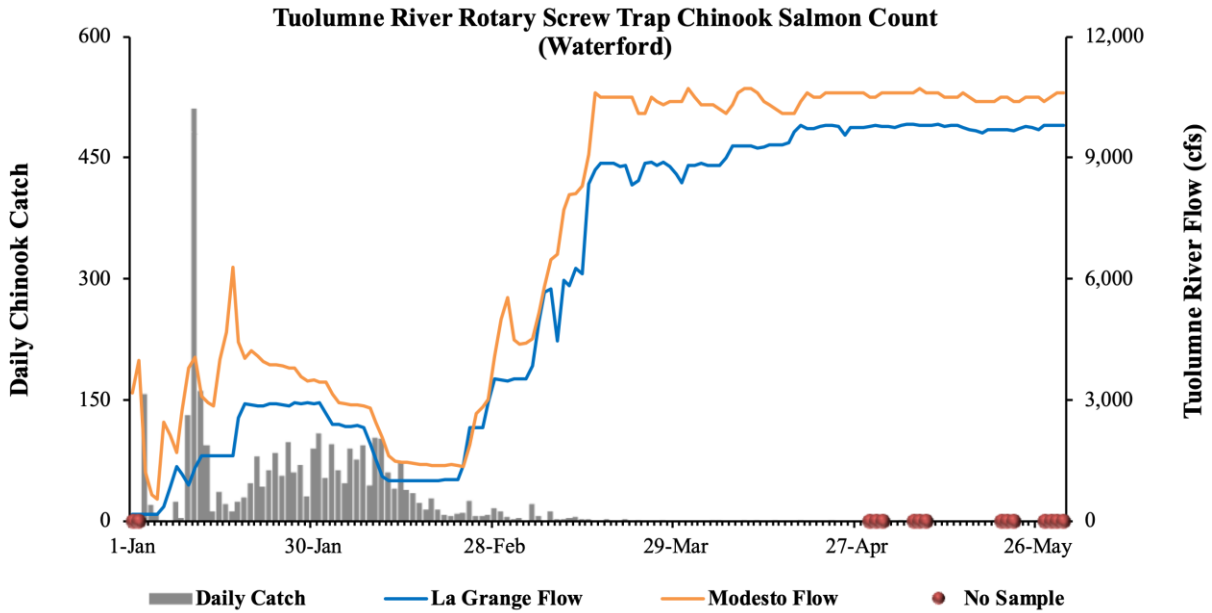


Figure 1. Daily juvenile Chinook salmon catch at the Waterford RST and Tuolumne River flow at La Grange and Modesto, 2023.

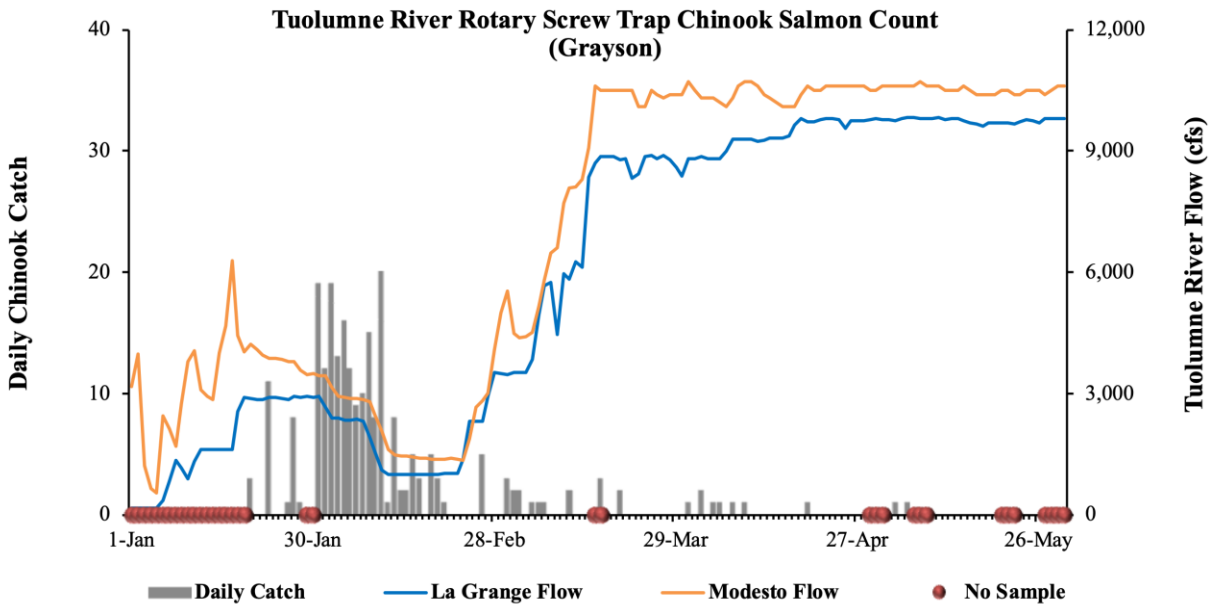


Figure 2. Daily juvenile Chinook salmon catch at the Grayson RST and Tuolumne River flow at La Grange and Modesto, 2022.

- Sampling at Waterford and Grayson RSTs is on-going, but the cones are raised for the weekend on Fridays and lowered on Monday.
- Total Chinook salmon catch through the end of May 2023 is 3,338 fish at Waterford and 239 fish at Grayson.

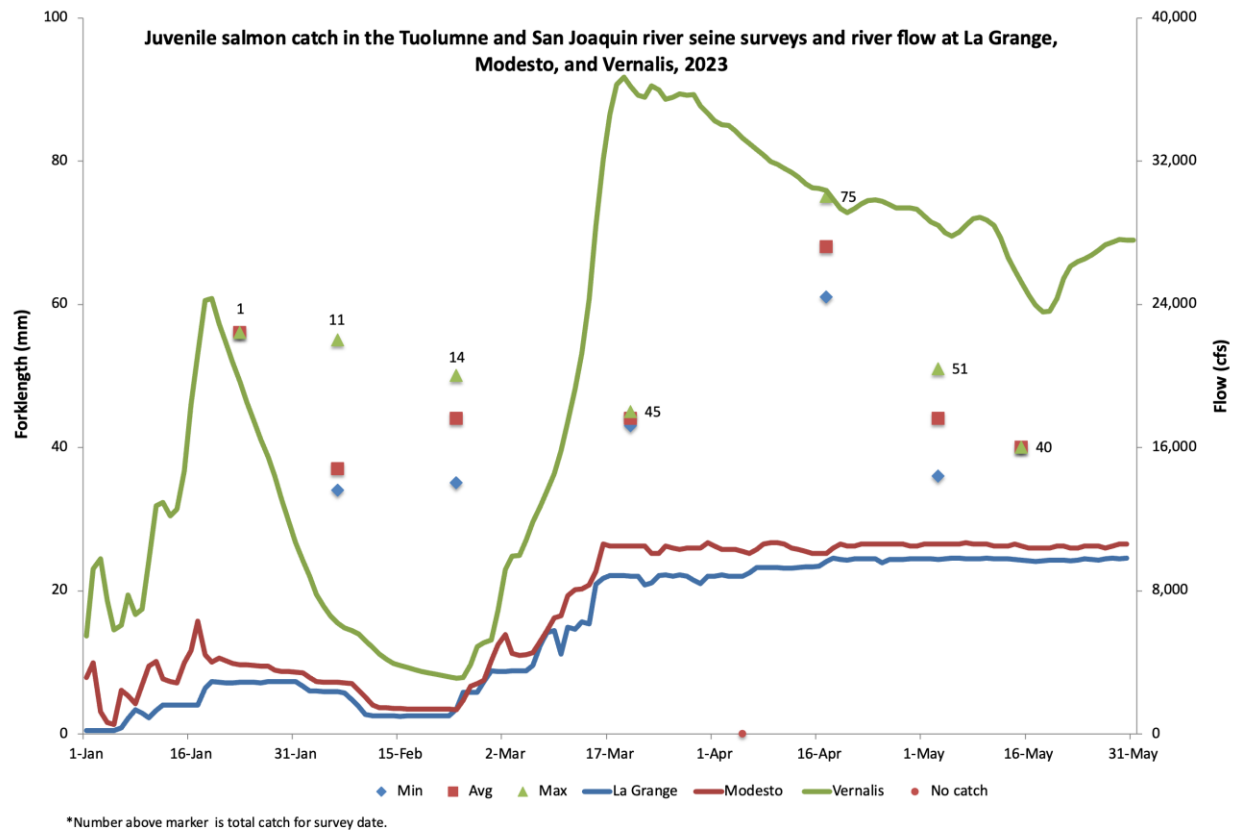


Figure 3. Juvenile salmon captured during the seine surveys and Tuolumne and San Joaquin River flow, 2023.

- Sampling still on-going. Alternate sites chosen for many sampling locations due to high flows. Hauls in flood-plain areas of sites. Some sites did not get sampled due to high flows and lack of alternate site. Temperature threshold (70°F) hit at Laird site during both sampling events in May.
- A total of 33 salmon were captured through May. Salmon were captured down to Riverdale/Service Rd. on the Tuolumne River and Gardner Cove in the San Joaquin River. Overall, catch numbers are low and likely underestimated due to extremely high flows on the Tuolumne and San Joaquin rivers.
- Trout fry have been captured at Old La Grange Bridge during March, April and May surveys.

	5/9/2023					Turlock Irrigation District						(PEM)								
Table 2																				
SAN JOAQUIN VALLEY WATER YEAR HYDROLOGIC CLASSIFICATION																				
602020 INDEX																				
		April - July Runoff (AF)					Oct - March Runoff (AF)													
60-20-20 YEAR	Stanislaus	Tuolumne	Merced	Fraint	TOTAL	Stanislaus	Tuolumne	Merced	Fraint	TOTAL	60-20-20 Index	Tuolumne River Minimum Flow Requirement	SJWYT	FERC WYT	Base Flow Requirement	Spring Pulse Requirement	Fall Pulse Requirement	Interpolation Requirement		
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 WY	1,500,000	2,660,000	1,470,000	2,970,000	8,600,000	963,000	1,488,000	1,038,000	1,274,000	4,763,000	6,424,187	300,923	Wet	Median Wet/Maximum	205,091	89,882	5950	0.00		
2023 WY																				
1-May																				
DRY	1,450,000	2,610,000	1,420,000	2,930,000	8,410,000	963,000	1,488,000	1,038,000	1,274,000	4,763,000	6,310,187	300,923	Wet	Median Wet/Maximum	205,091	89,882	5950	0.00		
AVERAGE	1,630,000	2,750,000	1,550,000	3,130,000	9,060,000	963,000	1,488,000	1,038,000	1,274,000	4,763,000	6,700,187	300,923	Wet	Median Wet/Maximum	205,091	89,882	5950	0.00		
WET	1,820,000	2,970,000	1,700,000	3,380,000	9,870,000	963,000	1,488,000	1,038,000	1,274,000	4,763,000	7,186,187	300,923	Wet	Median Wet/Maximum	205,091	89,882	5,950	0.00		
9-May																				
DRY	1,450,000	2,620,000	1,440,000	2,940,000	8,450,000	963,000	1,488,000	1,038,000	1,274,000	4,763,000	6,334,187	300,923	Wet	Median Wet/Maximum	205,091	89,882	5950	0.00		
AVERAGE	1,620,000	2,750,000	1,550,000	3,130,000	9,050,000	963,000	1,488,000	1,038,000	1,274,000	4,763,000	6,694,187	300,923	Wet	Median Wet/Maximum	205,091	89,882	5950	0.00		
WET	1,790,000	2,940,000	1,680,000	3,340,000	9,750,000	963,000	1,488,000	1,038,000	1,274,000	4,763,000	7,114,187	300,923	Wet	Median Wet/Maximum	205,091	89,882	5,950	0.00		
16-May																				
DRY	1,460,000	2,630,000	1,440,000	2,940,000	8,470,000	963,000	1,488,000	1,038,000	1,274,000	4,763,000	6,346,187	300,923	Wet	Median Wet/Maximum	205,091	89,882	5950	0.00		
AVERAGE	1,610,000	2,740,000	1,540,000	3,120,000	9,010,000	963,000	1,488,000	1,038,000	1,274,000	4,763,000	6,670,187	300,923	Wet	Median Wet/Maximum	205,091	89,882	5950	0.00		
WET	1,770,000	2,890,000	1,660,000	3,320,000	9,640,000	963,000	1,488,000	1,038,000	1,274,000	4,763,000	7,048,187	300,923	Wet	Median Wet/Maximum	205,091	89,882	5,950	0.00		
23-May																				
DRY	1,480,000	2,650,000	1,460,000	2,950,000	8,540,000	963,000	1,488,000	1,038,000	1,274,000	4,763,000	6,388,187	300,923	Wet	Median Wet/Maximum	205,091	89,882	5950	0.00		
AVERAGE	1,620,000	2,740,000	1,540,000	3,120,000	9,020,000	963,000	1,488,000	1,038,000	1,274,000	4,763,000	6,676,187	300,923	Wet	Median Wet/Maximum	205,091	89,882	5950	0.00		
WET	1,760,000	2,890,000	1,650,000	3,310,000	9,610,000	963,000	1,488,000	1,038,000	1,274,000	4,763,000	7,030,187	300,923	Wet	Median Wet/Maximum	205,091	89,882	5,950	0.00		
30-May																				
DRY	1,500,000	2,660,000	1,470,000	2,970,000	8,600,000	963,000	1,488,000	1,038,000	1,274,000	4,763,000	6,424,187	300,923	Wet	Median Wet/Maximum	205,091	89,882	5950	0.00		
AVERAGE	1,620,000	2,770,000	1,540,000	3,120,000	9,050,000	963,000	1,488,000	1,038,000	1,274,000	4,763,000	6,694,187	300,923	Wet	Median Wet/Maximum	205,091	89,882	5950	0.00		
WET	1,750,000	2,910,000	1,640,000	3,300,000	9,600,000	963,000	1,488,000	1,038,000	1,274,000	4,763,000	7,024,187	300,923	Wet	Median Wet/Maximum	205,091	89,882	5,950	0.00		

Table 3
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	0	0	0	0	0	0	0	300	595	No
16-Apr-2023	Sun	16-Apr-2023	Sun	1	300	595	1,190	300	595	595	0	0	0	0	600	1,785	No
17-Apr-2023	Mon	17-Apr-2023	Mon	1	300	595	1,785	600	1,190	1,785	0	0	0	0	900	3,570	No
18-Apr-2023	Tue	18-Apr-2023	Tue	1	300	595	2,380	900	1,785	3,570	0	0	0	0	1,200	5,950	No
19-Apr-2023	Wed	19-Apr-2023	Wed	1	300	595	2,975	1,200	2,380	5,950	0	0	0	0	1,500	8,926	No
20-Apr-2023	Thu	20-Apr-2023	Thu	1	300	595	3,570	1,500	2,975	8,926	0	0	0	0	1,800	12,496	No
21-Apr-2023	Fri	21-Apr-2023	Fri	1	300	595	4,165	1,800	3,570	12,496	0	0	0	0	2,100	16,661	No
22-Apr-2023	Sat	22-Apr-2023	Sat	1	300	595	4,760	2,100	4,165	16,661	0	0	0	0	2,400	21,421	No
23-Apr-2023	Sun	23-Apr-2023	Sun	1	300	595	5,355	2,400	4,760	21,421	0	0	0	0	2,700	26,777	No
24-Apr-2023	Mon	24-Apr-2023	Mon	1	300	595	5,950	2,700	5,355	26,777	0	0	0	0	3,000	32,727	No
25-Apr-2023	Tue	25-Apr-2023	Tue	1	300	595	6,545	3,000	5,950	32,727	0	0	0	0	3,300	39,273	No
26-Apr-2023	Wed	26-Apr-2023	Wed	1	300	595	7,140	3,000	5,950	38,678	0	0	0	0	3,300	45,818	No
27-Apr-2023	Thu	27-Apr-2023	Thu	1	300	595	7,736	3,000	5,950	44,628	0	0	0	0	3,300	52,364	No
28-Apr-2023	Fri	28-Apr-2023	Fri	1	300	595	8,331	2,490	4,939	49,567	0	0	0	0	2,790	57,898	No
29-Apr-2023	Sat	29-Apr-2023	Sat	1	300	595	8,926	2,070	4,106	53,673	0	0	0	0	2,370	62,598	No
30-Apr-2023	Sun	30-Apr-2023	Sun	1	300	595	9,521	1,690	3,352	57,025	0	0	0	0	1,990	66,545	No
01-May-2023	Mon	01-May-2023	Mon	1	300	595	10,116	1,350	2,678	59,702	0	0	0	0	1,650	69,818	No
02-May-2023	Tue	02-May-2023	Tue	1	300	595	10,711	1,050	2,083	61,785	0	0	0	0	1,350	72,496	No
03-May-2023	Wed	03-May-2023	Wed	1	300	595	11,306	750	1,488	63,273	0	0	0	0	1,050	74,579	No
04-May-2023	Thu	04-May-2023	Thu	1	300	595	11,901	490	972	64,245	0	0	0	0	790	76,145	No
05-May-2023	Fri	05-May-2023	Fri	1	300	595	12,496	790	1,567	65,812	0	0	0	0	1,090	78,307	No
06-May-2023	Sat	06-May-2023	Sat	1	300	595	13,091	1,090	2,162	67,974	0	0	0	0	1,390	81,064	No
07-May-2023	Sun	07-May-2023	Sun	1	300	595	13,686	1,390	2,757	70,731	0	0	0	0	1,690	84,417	No
08-May-2023	Mon	08-May-2023	Mon	1	300	595	14,281	1,690	3,352	74,083	0	0	0	0	1,990	88,364	No
09-May-2023	Tue	09-May-2023	Tue	1	300	595	14,876	1,690	3,352	77,435	0	0	0	0	1,990	92,311	No
10-May-2023	Wed	10-May-2023	Wed	1	300	595	15,471	1,350	2,678	80,112	0	0	0	0	1,650	95,583	No
11-May-2023	Thu	11-May-2023	Thu	1	300	595	16,066	1,010	2,003	82,116	0	0	0	0	1,310	98,182	No
12-May-2023	Fri	12-May-2023	Fri	1	300	595	16,661	710	1,408	83,524	0	0	0	0	1,010	100,185	No
13-May-2023	Sat	13-May-2023	Sat	1	300	595	17,256	490	972	84,496	0	0	0	0	790	101,752	No
14-May-2023	Sun	14-May-2023	Sun	1	300	595	17,851	310	615	85,111	0	0	0	0	610	102,962	No
15-May-2023	Mon	15-May-2023	Mon	1	300	595	18,446	170	337	85,448	0	0	0	0	470	103,894	No
16-May-2023	Tue	16-May-2023	Tue	1	300	595	19,041	40	79	85,527	0	0	0	0	340	104,569	No
17-May-2023	Wed	17-May-2023	Wed	1	300	595	19,636	300	595	86,122	0	0	0	0	600	105,759	No
18-May-2023	Thu	18-May-2023	Thu	1	300	595	20,231	600	1,190	87,312	0	0	0	0	900	107,544	No
19-May-2023	Fri	19-May-2023	Fri	1	300	595	20,826	600	1,190	88,502	0	0	0	0	900	109,329	No
20-May-2023	Sat	20-May-2023	Sat	1	300	595	21,421	380	754	89,256	0	0	0	0	680	110,678	No
21-May-2023	Sun	21-May-2023	Sun	1	300	595	22,017	240	476	89,732	0	0	0	0	540	111,749	No
22-May-2023	Mon	22-May-2023	Mon	1	300	595	22,612	50	99	89,831	0	0	0	0	350	112,443	No
23-May-2023	Tue	23-May-2023	Tue	1	300	595	23,207	26	51	89,882	0	0	0	0	326	113,089	No
24-May-2023	Wed	24-May-2023	Wed	1	300	595	23,802	0	0	89,882	0	0	0	0	300	113,684	No
25-May-2023	Thu	25-May-2023	Thu	1	300	595	24,397	0	0	89,882	0	0	0	0	300	114,279	No
26-May-2023	Fri	26-May-2023	Fri	1	300	595	24,992	0	0	89,882	0	0	0	0	300	114,874	No
27-May-2023	Sat	27-May-2023	Sat	1	300	595	25,587	0	0	89,882	0	0	0	0	300	115,469	No
28-May-2023	Sun	28-May-2023	Sun	1	300	595	26,182	0	0	89,882	0	0	0	0	300	116,064	No
29-May-2023	Mon	29-May-2023	Mon	1	300	595	26,777	0	0	89,882	0	0	0	0	300	116,659	No
30-May-2023	Tue	30-May-2023	Tue	1	300	595	27,372	0	0	89,882	0	0	0	0	300	117,254	No
31-May-2023	Wed	31-May-2023	Wed	1	300	595	27,967	0	0	89,882	0	0	0	0	300	117,849	No
01-Jun-2023	Thu	01-Jun-2023	Thu	1	250	496	28,463	0	0	89,882	0	0	0	0	250	118,345	No
02-Jun-2023	Fri	02-Jun-2023	Fri	1	250	496	28,959	0	0	89,882	0	0	0	0	250	118,841	No
03-Jun-2023	Sat	03-Jun-2023	Sat	1	250	496	29,455	0	0	89,882	0	0	0	0	250	119,337	No
04-Jun-2023	Sun	04-Jun-2023	Sun	1	250	496	29,950	0	0	89,882	0	0	0	0	250	119,832	No
05-Jun-2023	Mon	05-Jun-2023	Mon	1	250	496	30,446	0	0	89,882	0	0	0	0	250	120,328	No
06-Jun-2023	Tue	06-Jun-2023	Tue	1	250	496	30,942	0	0	89,882	0	0	0	0	250	120,824	No
07-Jun-2023	Wed	07-Jun-2023	Wed	1	250	496	31,438	0	0	89,882	0	0	0	0	250	121,320	No
08-Jun-2023	Thu	30-Jun-2023	Fri	23	250	11,405	42,843	0	0	89,882	0	0	0	0	250	132,725	No
01-Jul-2023	Sat	31-Jul-2023	Mon	31	250	15,372	58,215	0	0	89,882	0	0	0	0	250	148,097	No
01-Aug-2023	Tue	31-Aug-2023	Thu	31	250	15,372	73,587	0	0	89,882	0	0	0	0	250	163,469	No
01-Sep-2023	Fri	30-Sep-2023	Sat	30	250	14,876	88,463	0	0	89,882	0	0	0	0	250	178,345	No

Table 3
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	89,882	0	0	0	0	0	0	300	178,940	No
02-Oct-2023 Mon	02-Oct-2023 Mon	1	300	595	89,653	0	0	89,882	0	0	0	0	0	0	300	179,535	No
03-Oct-2023 Tue	03-Oct-2023 Tue	1	300	595	90,248	0	0	89,882	0	0	0	0	0	0	300	180,130	No
04-Oct-2023 Wed	04-Oct-2023 Wed	1	300	595	90,843	0	0	89,882	0	0	0	0	0	0	300	180,725	No
05-Oct-2023 Thu	05-Oct-2023 Thu	1	300	595	91,438	0	0	89,882	0	0	0	0	0	0	300	181,320	No
06-Oct-2023 Fri	06-Oct-2023 Fri	1	300	595	92,033	0	0	89,882	0	0	0	0	0	0	300	181,915	No
07-Oct-2023 Sat	07-Oct-2023 Sat	1	300	595	92,628	0	0	89,882	0	0	0	0	0	0	300	182,510	No
08-Oct-2023 Sun	08-Oct-2023 Sun	1	300	595	93,223	0	0	89,882	0	0	0	0	0	0	300	183,105	No
09-Oct-2023 Mon	09-Oct-2023 Mon	1	300	595	93,818	0	0	89,882	0	0	0	0	0	0	300	183,700	No
10-Oct-2023 Tue	10-Oct-2023 Tue	1	300	595	94,413	0	0	89,882	0	0	0	0	0	0	300	184,295	No
11-Oct-2023 Wed	11-Oct-2023 Wed	1	300	595	95,008	0	0	89,882	0	0	0	0	0	0	300	184,890	No
12-Oct-2023 Thu	12-Oct-2023 Thu	1	300	595	95,603	0	0	89,882	0	0	0	0	0	0	300	185,485	No
13-Oct-2023 Fri	13-Oct-2023 Fri	1	300	595	96,198	0	0	89,882	0	0	0	0	0	0	300	186,080	No
14-Oct-2023 Sat	14-Oct-2023 Sat	1	300	595	96,793	0	0	89,882	0	0	0	0	0	0	300	186,675	No
15-Oct-2023 Sun	15-Oct-2023 Sun	1	300	595	97,388	200	397	90,279	0	0	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	0	0	300	218,213	No

Table 3
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.	
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

Table 3
Tuolumne River Flow Schedule
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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.	
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 3
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															

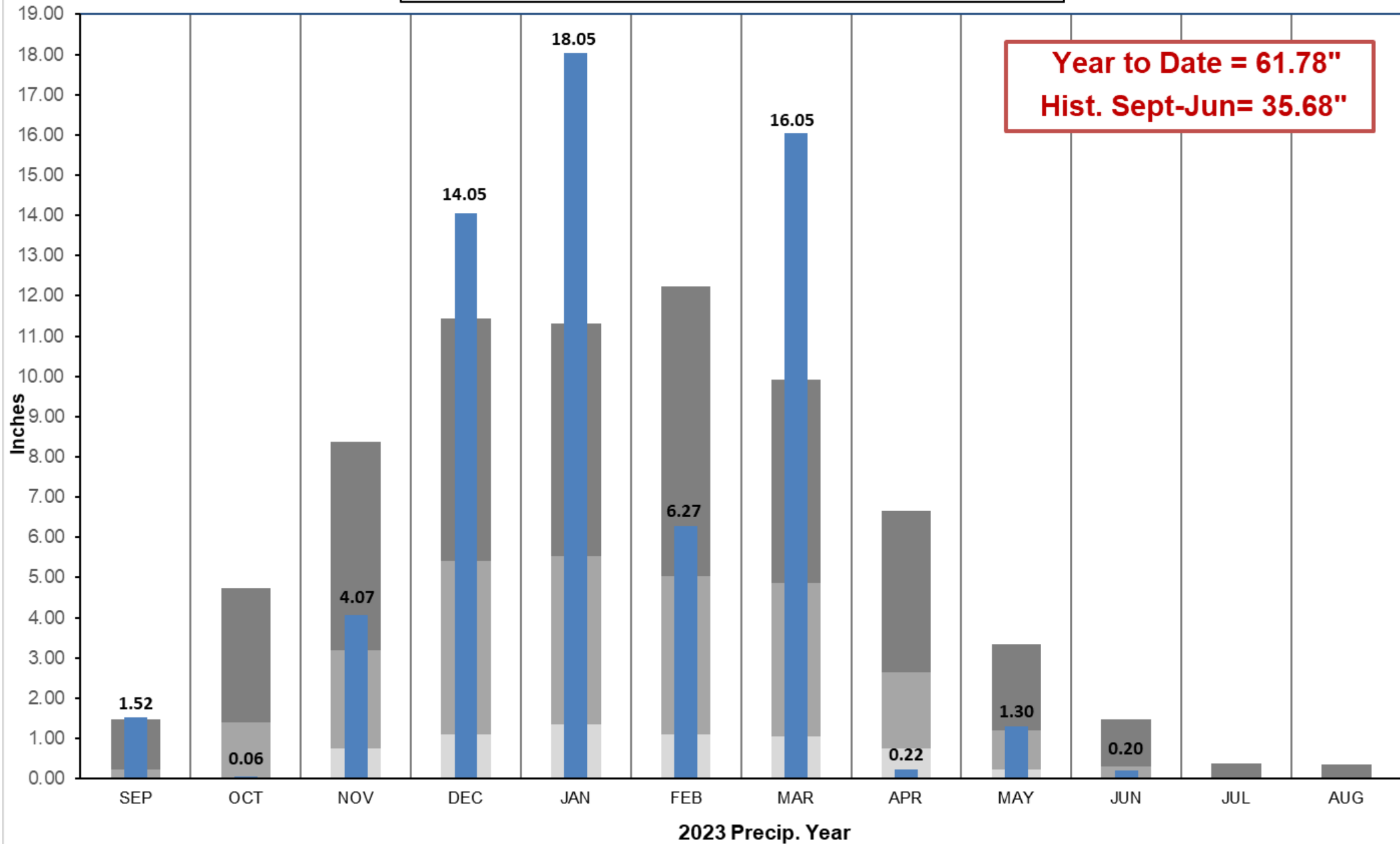
1 cfs day = 1.983471 acre-feet (af)

1. Total accumulation amount pertains to 2023-2024 Fish Year only.
2. 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.

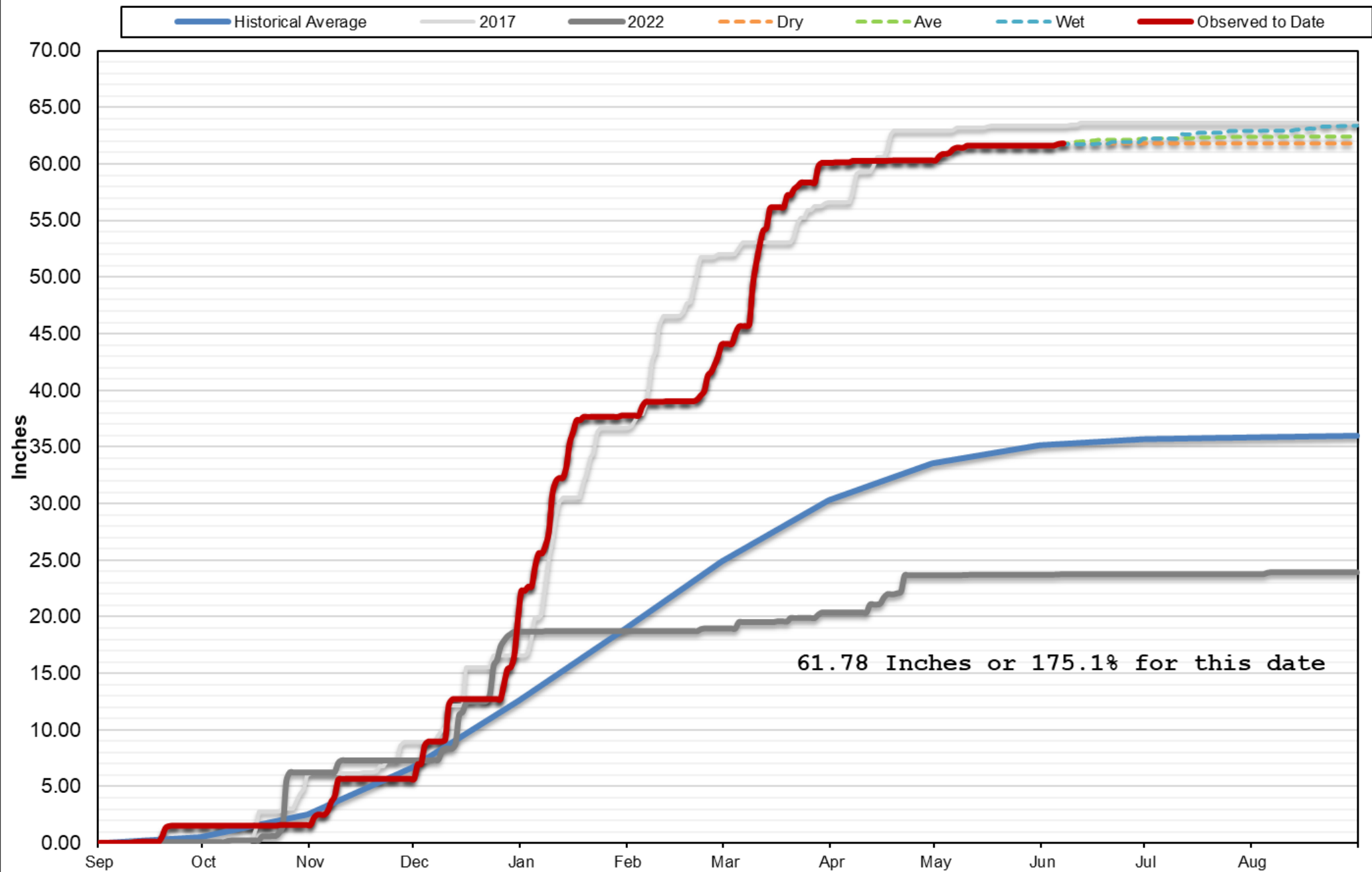
Case	60-20-20 Index		Base Total		Pulse Total		Interpolation Total		Adjustment Total		FERC Total
90%	6,232,187	60-20-20 Index	205,091		95,832		-				300,923
		Scheduled Above	205,091		95,832		-		-		300,923
		Difference	0		(0)		-		-		(0)

Tuolumne River Watershed Monthly Accumulation of Precipitation

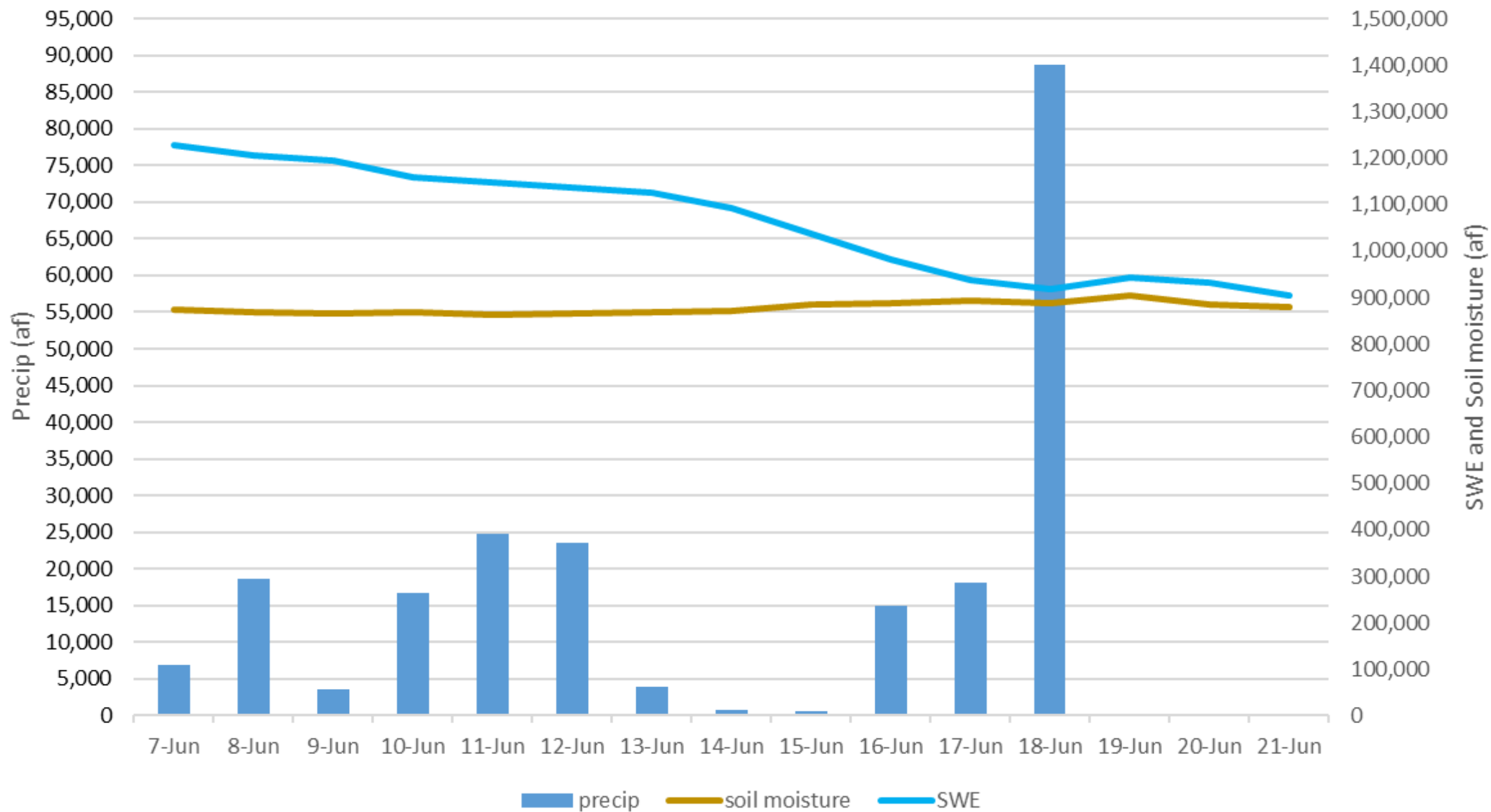
Dry Ave Wet 2022-2023



Tuolumne River Watershed Accumulated Precipitation

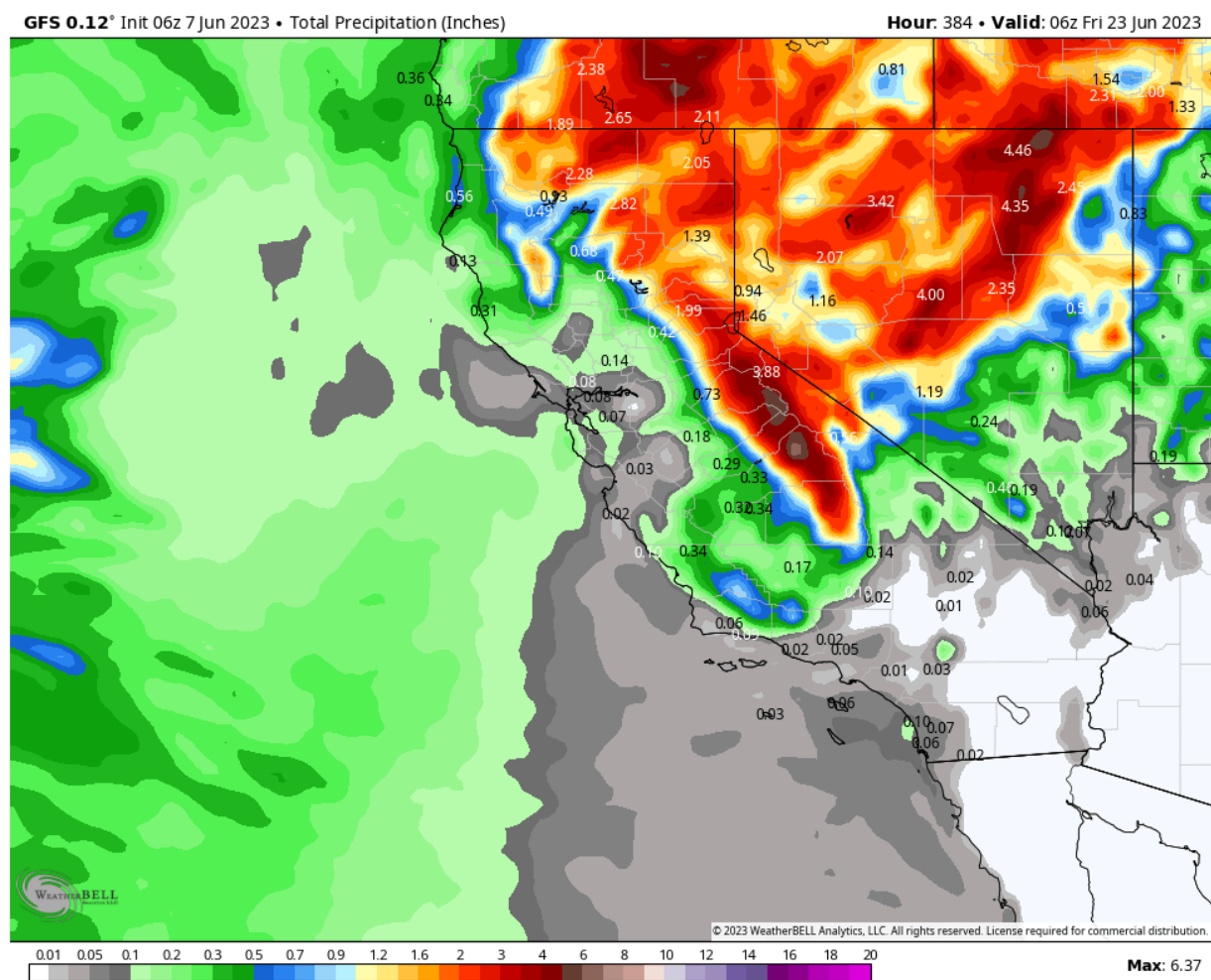


TID HFAM Forecasted Watershed Conditions

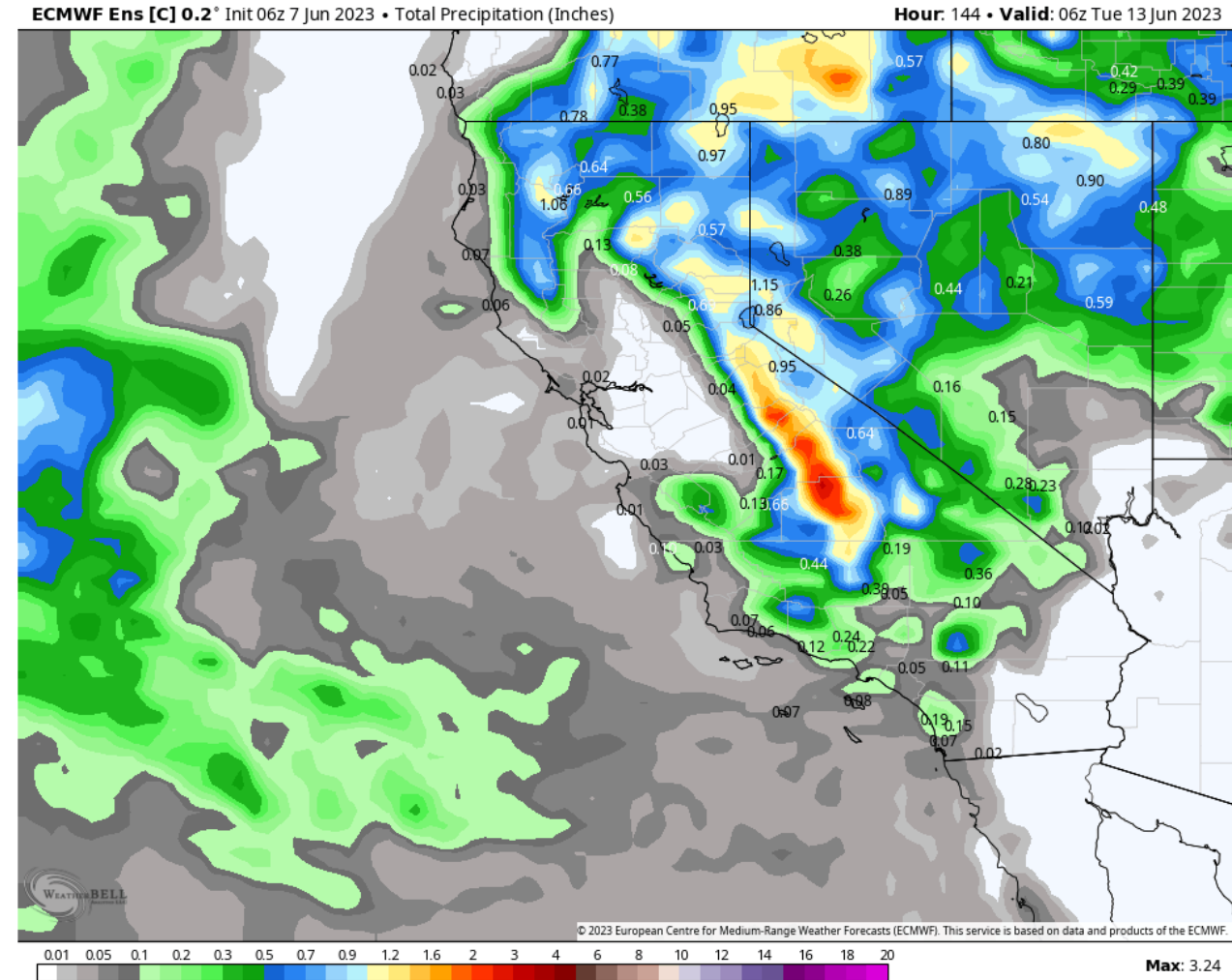


16 Day Precipitation Forecast

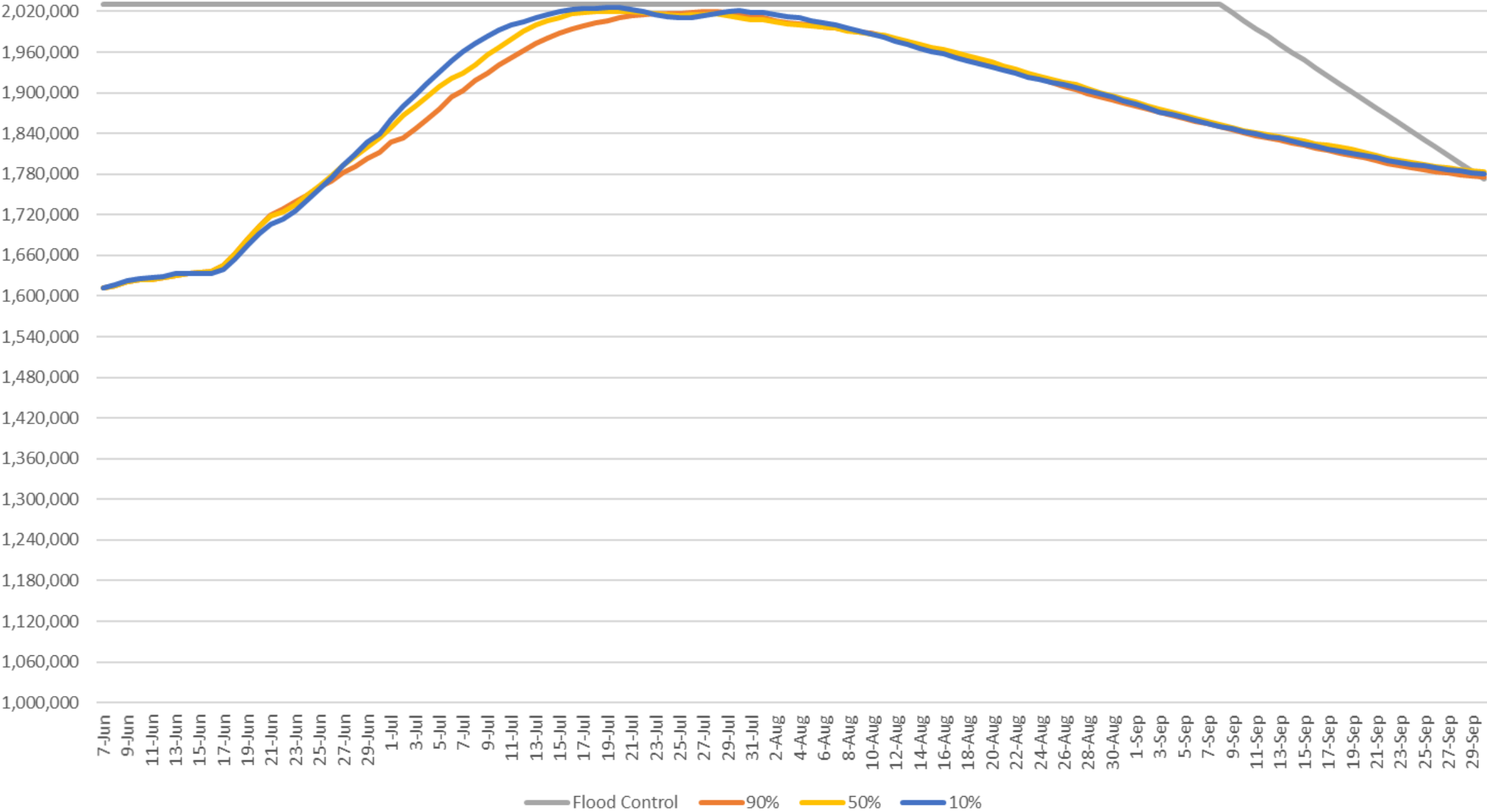
US MODEL



EURO MODEL

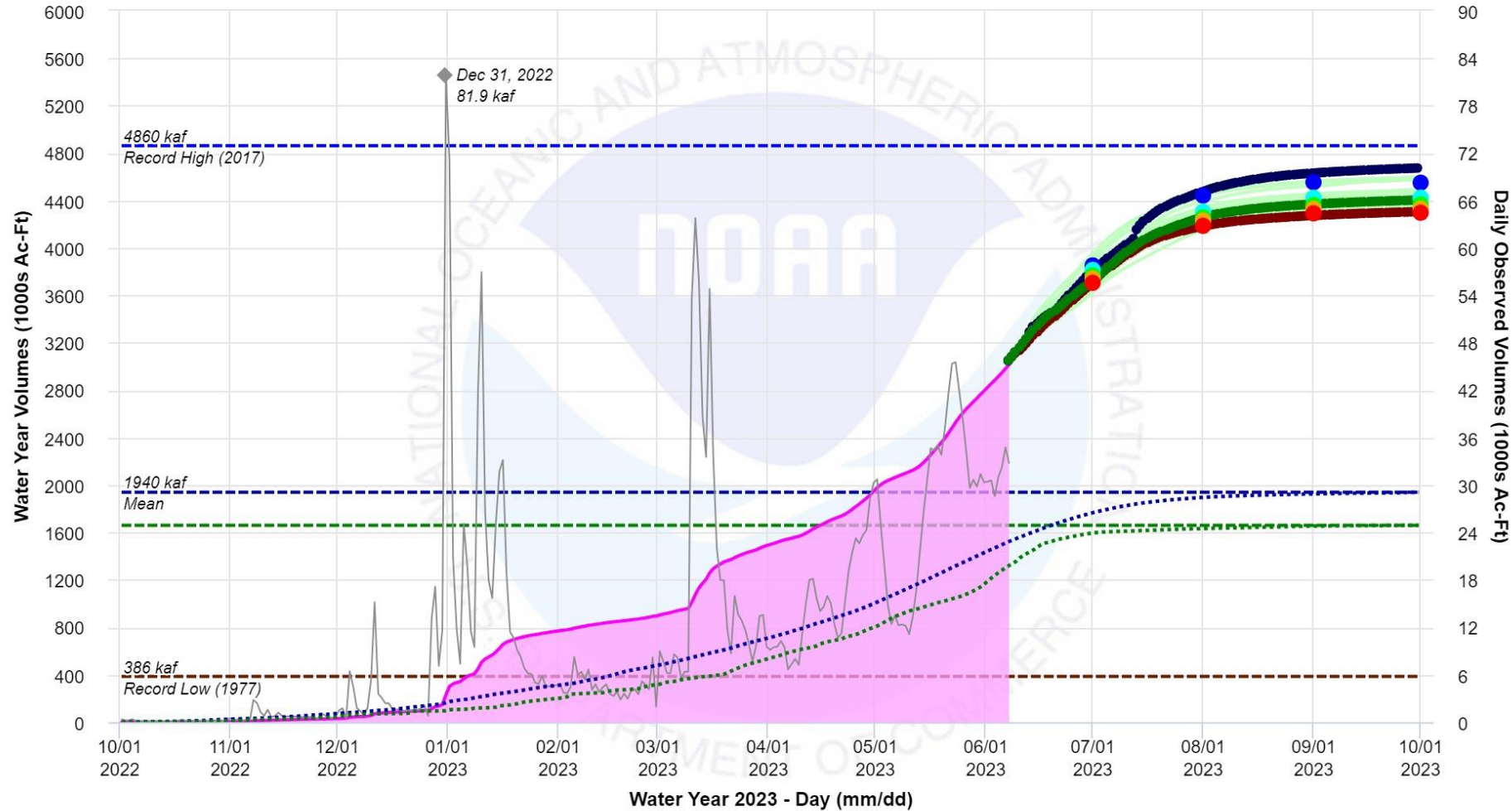


Don Pedro Storage



TUOLUMNE - LA GRANGE, NR (NDPC1) 06/07/2023
Median Forecast: 4370 kaf | 225% of Mean | 263% of Median

Created: 06/07/2023 at 08:42 AM PDT



10% exceedance
 WY: 4,550,000 af
 WY %: 235%

50% exceedance
 WY: 4,370,000 af
 WY %: 225%

90% exceedance
 WY: 4,300,000 af
 WY %: 222%

Observed to Date Percent of Mean: 198% (3010 kaf) Water Year to Date Mean: 1520 kaf
This product only considers meteorological uncertainty and does not account for hydrologic uncertainty.
Means/medians are based on the period of Water Years 1980 through 2021.

Legend entries below can be toggled on/off.

- | | | | |
|-----------------|------------------------------|---------------------------------|------------------------------|
| ● 90%: 4300 kaf | ● 75%: 4330 kaf | ● 50%: 4370 kaf | ● 25%: 4420 kaf |
| ● 10%: 4550 kaf | — Min Trace (1999: 4310 kaf) | — Median Trace (1996: 4400 kaf) | — Max Trace (1992: 4670 kaf) |
| — Volume Med | — Volume Mean | — Traces (1980-2021) | — Record High |
| — Record Low | ● Accum to Date Mean | ◆ Accum to Date Median | ● Accum to Date Obs |
| — Daily Obs | ◆ Obs Peak | | |

DON PEDRO / TUOLUMNE RIVER WATERSHED

	6/6/2023 Tuesday	6/5/2023 Monday	6/4/2023 Sunday	6/3/2023 Saturday	6/2/2023 Friday	6/1/2023 Thursday	5/31/2023 Wednesday
* Computed Natural Flow (cfs)	17,784	15,859	15,783	14,348	15,442	15,360	14,970
Don Pedro							
Elevation (Feet) ^{^(Max = 830.0, Min = 600.0)}	794.8	794.2	793.6	793.0	792.5	791.9	791.4
Storage (AF) ^{^(Max = 2,000,000, Min = 0,000,000)}	1,611,760	1,605,256	1,598,772	1,592,308	1,586,937	1,580,510	1,575,169
Gain/(-Loss) (AF)	6,504	6,484	6,464	5,371	6,427	5,341	3,198
** Avg. Inflow (cfs)	13,963	13,986	14,004	13,423	14,004	13,740	13,188
Avg. Flows at La Grange							
TID Canal (cfs) ^{^(Max = 2500)}	1,379	1,326	1,437	1,468	1,540	1,502	1,400
MID Canal (cfs) ^{^(Max = 1800)}	585	584	583	582	565	566	571
River (cfs) ^{^(Max = 9000)}	8,720	8,807	8,725	8,665	8,659	8,979	9,604
Total (cfs)	10,684	10,717	10,745	10,715	10,764	11,047	11,575
Hetch Hetchy Reservoir							
Elevation (Feet) ^{^(Max = 3800, Min = 3520)}	3,776.5	3,774.6	3,773.8	3,773.1	3,773.0	3,772.7	3,772.2
Storage (AF) ^{^(Max = 360,360, Min = 410)}	303,850	300,320	298,840	297,545	297,360	296,808	295,888
Gain/(-Loss) (AF)	3,530	1,480	1,295	185	552	920	1,840
Avg. Release (cfs)	8,040	8,006	7,973	7,966	7,954	7,939	7,876
** Avg. Inflow (cfs)	9,820	8,752	8,626	8,059	8,232	8,403	8,804
Cherry Valley Reservoir							
Elevation (Feet) ^{^(Max = 4700, Min = 4440)}	4,664.0	4,662.2	4,661.4	4,660.6	4,660.1	4,659.3	4,658.5
Storage (AF) ^{^(Max = 27,000,000, Min = 0)}	207,606	204,677	203,375	202,073	201,259	199,983	198,711
Gain/(-Loss) (AF)	2,929	1,302	1,302	814	1,276	1,272	954
Avg. Release (cfs)	2,061	2,054	2,059	2,054	2,047	1,976	2,050
** Avg. Inflow (cfs)	3,538	2,710	2,715	2,464	2,690	2,617	2,531
Lake Eleanor Reservoir							
Elevation (Feet) ^{^(Max = 4600, Min = 4620.9)}	4,658.9	4,658.7	4,658.7	4,658.7	4,658.8	4,658.7	4,658.6
Storage (AF) ^{^(Max = 27,000,000, Min = 0)}	25,123	24,937	24,937	24,937	25,030	24,937	24,844
Gain/(-Loss) (AF)	186	0	0	-93	93	93	-93
Avg. Release (cfs)	1,766	1,643	1,569	1,643	1,630	1,563	1,608
** Avg. Inflow (cfs)	1,860	1,643	1,569	1,596	1,677	1,610	1,561
Avg. Div. to S.F. Pipeline (mgd) ^{^(Max = 300)}	208	208	208	208	208	208	208
Rain Fall (Inches)							
Hetch Hetchy	0.21	0.25	0.00	0.00	0.00	0.00	0.00
Cherry Valley	0.10	0.00	0.00	0.00	0.00	0.00	0.00
Moccasin	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sonora	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yosemite	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Don Pedro	0.00	0.00	0.00	0.00	0.00	0.00	0.00

* Computed Natural Flow is a calculated value representing what the flow in the river at La Grange would be without human diversion, storage, or release. Due to the nature of the calculation, this value may be negative.

** Inflow is a calculated value representing the flow of water into a reservoir. Inflow to a reservoir is not necessarily equal to the Computed Natural Flow. Due to the nature of the calculation, this value may be negative.

Note: cfs is a rate of flow in **cubic feet per second**; a flow of 1 cfs over a 24-hour period (cfs/day) $\approx$ 1.98 **acre-feet (AF)**; mgd is a rate of flow in **million gallons per day** (megagallons per day); a flow rate of 1 mgd $\approx$ 1.55 cfs; a flow of 1 mgd over a 24-hour period $\approx$ 3.1 AF.