

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

SEPTEMBER 8, 2022 AT 9:30 AM
VIA ZOOM

SUMMARY

1. INTRODUCTION AND ANNOUNCEMENTS

- Participants made self-introductions, a list of attendees follows.
- Bernard Aguilar advised that Bobcat Flat Phase III has had a lot of rock movement and they should be done by the end of September.
- Kevin Marr advised that they are in the midst of a very intensive pilot project in Shasta to test a piece of equipment to collect juvenile salmonids once they get above the reservoir. Their office will be busy with this for the next 9 to 10 weeks.

2. ADMINISTRATIVE ITEMS:

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

3. MONITORING/REPORTS:

- Michael Cooke advised that in the Phase 1 Bay Delta Plan update adopted in 2018, there was a provision that the Tuolumne should be on a parallel path to work on a voluntary agreement with the state to achieve the functional equivalence of the Bay Delta Plan update. Secondly, the Phase 2 folks, (Sac valley) have also been negotiating a voluntary agreement as a way to get ahead of Phase 2 of the Bay Delta Plan update. The Sac valley folks created a MOU in March of this year that most of the dignitaries and agencies signed onto. Since that time, the Mokelumne, Friant and some others have joined onto that State MOU. TID/MID Boards took action on Tuesday authorizing their General Manager's to sign onto that voluntary agreement MOU with the State of CA. That will then allow further negotiations to reach the final voluntary agreement for each tributary as well as a state wide effort. So basically the General Managers can go to the next step to sign off on the MOU and get involved with some of the small groups that are negotiating the finer and final points of the voluntary agreement. So basically, TID will participate in that and get it to the next level. There appears to be some general agreement on some kind of bookend deal points that can go into the final MOU. The state has not created that documentation yet so it won't be public until they do. Hopefully we can get that in the next week or two. There will be a document that has been officially signed and will become a part of the public record.
- Peter Drekmeier asked if there are any plans to engage NGO's in the negotiations.
- Michael said that there were originally plans to do so but we have been out of the loop since March so he doesn't know. When he knows more he will let the group know.

- Wayne Swaney went over the snorkel survey and thermograph downloads.
 - 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. FLOW OPERATIONS:
- Pat Maloney advised that the weir will be installed the week of September 26th and red surveys will begin in early October. The FERC annual reports are incomplete at this time because work is still in progress.
 - Pat Maloney went over the B120 update and the fall pulse flows.
 - Pat Maloney advised that construction is in full swing on the Infiltration Gallery. In Turlock beneath Quincy Rd., right about at the cross street of Hawkeye they are installing the pipeline to Turlock. The Ceres pipeline has had a few issues. They have had to go underneath the Ceres Main canal and back underneath it again which took a little more time to construct. Per Bill Penney they are planning to have water deliveries to Turlock late summer to early fall Of 2023.
 - Steve Tsao asked if there are any updates on the water rights petition on the infiltration gallery.
 - TID has not heard any new information on this.
5. AGENCY/NGO UPDATES:
- None
6. ADDITIONAL ITEMS:
- Pat Maloney will be putting together group floats this year during the peak of spawning. Looking at Oct. 14th thru 18th and maybe Oct. 21st thru 25th and then again in November. If you are interested please email Pat.
 - J.D. Wikert suggested doing 3 different areas during the floats.
7. NEXT MEETING DATE: DECEMBER 08, 2022

TRTAC Meeting Attendees

	<u>Name</u>	<u>Organization</u>
1.	Patrick Maloney	TID
2.	Michael Cooke	TID
3.	Steve Tsao	CDFW
4.	Chris Diviney	CDFW
5.	Gretchen Murphey	CDFW
6.	Bernard Aguilar	CDFW
7.	Suzanne DeLeon	CDFW
8.	Peter Drekmeier	TRT
9.	Sara Sacks	TRT
10.	Stephanie Milsap	USFWS
11.	J.D. Wikert	USFWS
12.	Kevin Marr	DWR
13.	Noah Hume	SWS
14.	Wayne Swaney	SWS
15.	William Sears	CCSF
16.	John Mauterer	MID
17.	Nathan Houx	City of Modesto
18.	Jason Ortega	City of Modesto
19.	Chris Carr	State Water Board
20.	Tim Caldwell	McBain & Associates
21.	Chris Guptill	9 to 99

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

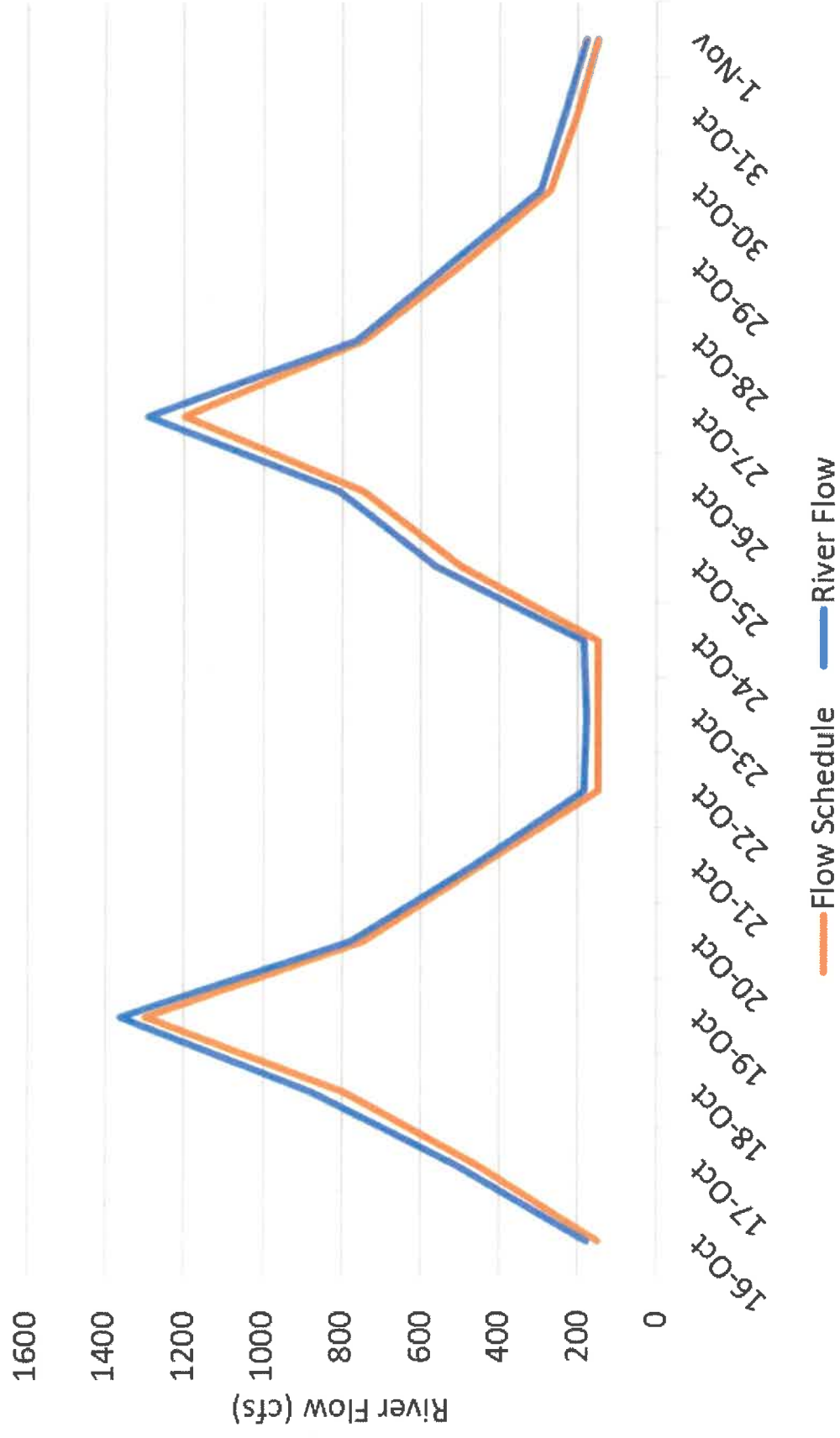
DATE		Number of DAYS	BASE FLOW ¹			PULSE FLOW ²			INTERPOLATION FLOW			Other Adjusted Flow			TOTAL FERC FLOW		Agreed Upon
From:	To:		CFS	AF	ACCUM. A.F.	CFS	AF	ACCUM. A.F.	CFS	AF	ACCUM. A.F.	CFS	AF	ACCUM. A.F.	CFS	ACCUM. A.F.	
15-Oct-2022 Sat	15-Oct-2022 Sat	1	100	198	29,058	0	0	11,092	0	0	0	0	0	0	100	40,150	No
16-Oct-2022 Sun	16-Oct-2022 Sun	1	150	298	29,355	0	0	11,092	0	0	0	0	0	0	150	40,447	No
17-Oct-2022 Mon	17-Oct-2022 Mon	1	150	298	29,653	0	0	11,092	300	595	595	0	0	0	450	41,340	No
18-Oct-2022 Tue	18-Oct-2022 Tue	1	150	298	29,950	0	0	11,092	650	1,289	1884	0	0	0	800	42,927	No
19-Oct-2022 Wed	19-Oct-2022 Wed	1	150	298	30,248	0	0	11,092	634	1,257	3141	516	1,023	1023	1,300	45,504	No
20-Oct-2022 Thu	20-Oct-2022 Thu	1	150	298	30,545	0	0	11,092	0	0	3141	600	1,190	2214	750	46,992	No
21-Oct-2022 Fri	21-Oct-2022 Fri	1	150	298	30,843	0	0	11,092	0	0	3141	300	595	2809	450	47,884	No
22-Oct-2022 Sat	22-Oct-2022 Sat	1	150	298	31,140	0	0	11,092	0	0	3141	0	0	2809	150	48,182	No
23-Oct-2022 Sun	23-Oct-2022 Sun	1	150	298	31,438	0	0	11,092	0	0	3141	0	0	2809	150	48,479	No
24-Oct-2022 Mon	24-Oct-2022 Mon	1	150	298	31,736	0	0	11,092	0	0	3141	0	0	2809	150	48,777	No
25-Oct-2022 Tue	25-Oct-2022 Tue	1	150	298	32,033	0	0	11,092	0	0	3141	350	694	3503	500	49,769	No
26-Oct-2022 Wed	26-Oct-2022 Wed	1	150	298	32,331	0	0	11,092	0	0	3141	600	1,190	4693	750	51,256	No
27-Oct-2022 Thu	27-Oct-2022 Thu	1	150	298	32,628	0	0	11,092	0	0	3141	1050	2,083	6776	1,200	53,636	No
28-Oct-2022 Fri	28-Oct-2022 Fri	1	150	298	32,926	0	0	11,092	0	0	3141	600	1,190	7966	750	55,124	No
29-Oct-2022 Sat	29-Oct-2022 Sat	1	150	298	33,223	0	0	11,092	0	0	3141	350	694	8660	500	56,116	No
30-Oct-2022 Sun	30-Oct-2022 Sun	1	150	298	33,521	0	0	11,092	0	0	3141	121	239	8899	271	56,652	No
31-Oct-2022 Mon	31-Oct-2022 Mon	1	150	298	33,818	0	0	11,092	0	0	3141	51	100	8999	201	57,050	No
01-Nov-2022 Tue	01-Nov-2022 Tue	1	150	298	34,116	0	0	11,092	0	0	3141	0	0	8999	150	57,347	No
02-Nov-2022 Wed	02-Nov-2022 Wed	1	150	298	34,413	0	0	11,092	0	0	3141	0	0	8999	150	57,645	No
13-Apr-2023 Thu	13-Apr-2023 Thu	1	150	298	82,612	0	0	11,092	0	0	3141	0	0	8999	150	105,843	No
14-Apr-2023 Fri	14-Apr-2023 Fri	1	150	298	82,909	0	0	11,092	0	0	3141	0	0	8999	150	106,141	No
No. of days			365												139406.2923		

1 cfs day = 1.983471 acre-feet (af)

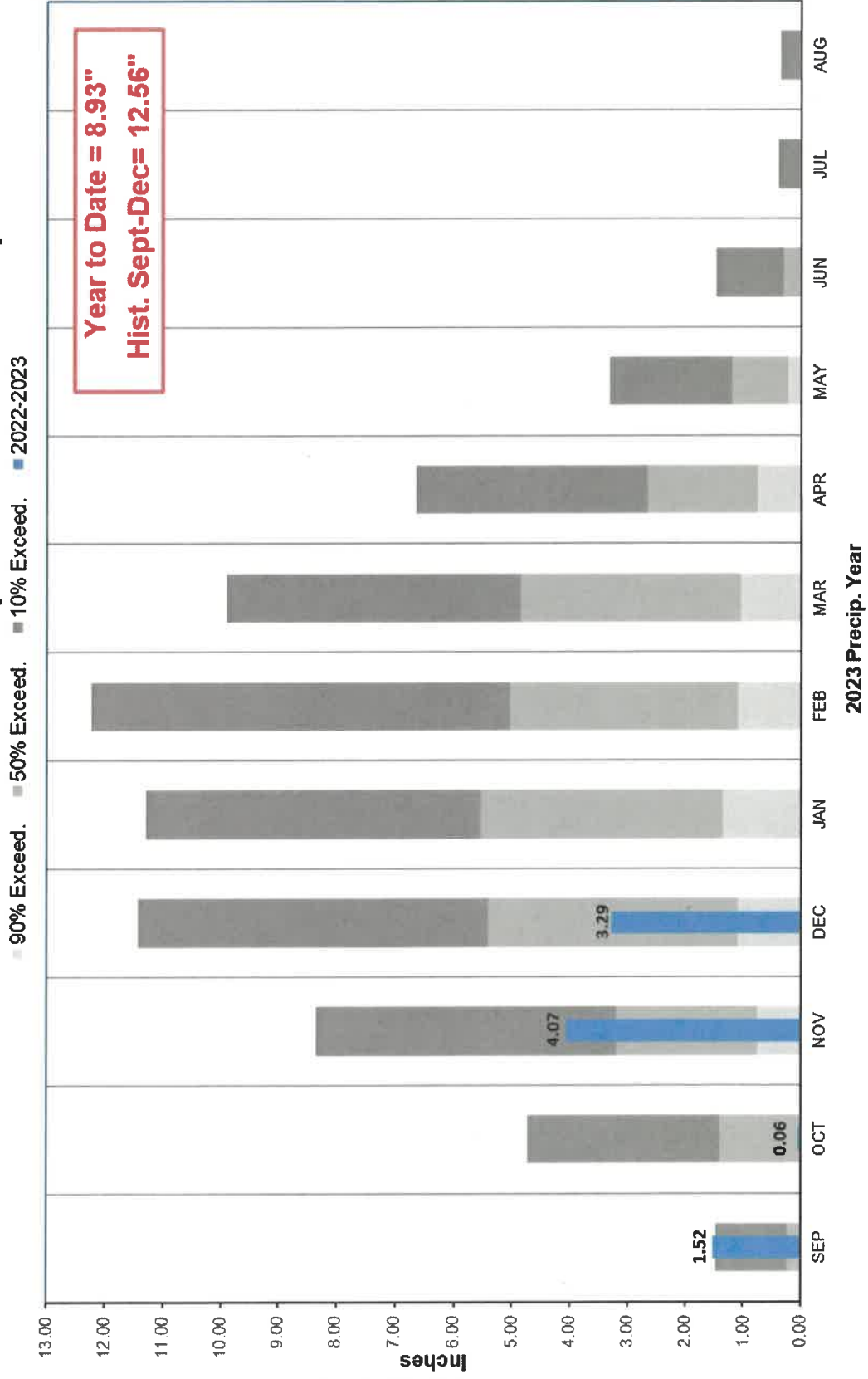
1. Total accumulation amount pertains to 2020-2021 Fish Year only.
 2. The pulse flows are a target that represents a daily average target. The actual operational data will be adjusted to attain the annual requirement.
- Based on an hourly calculation schedule for the target flows. This represents a daily average.

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

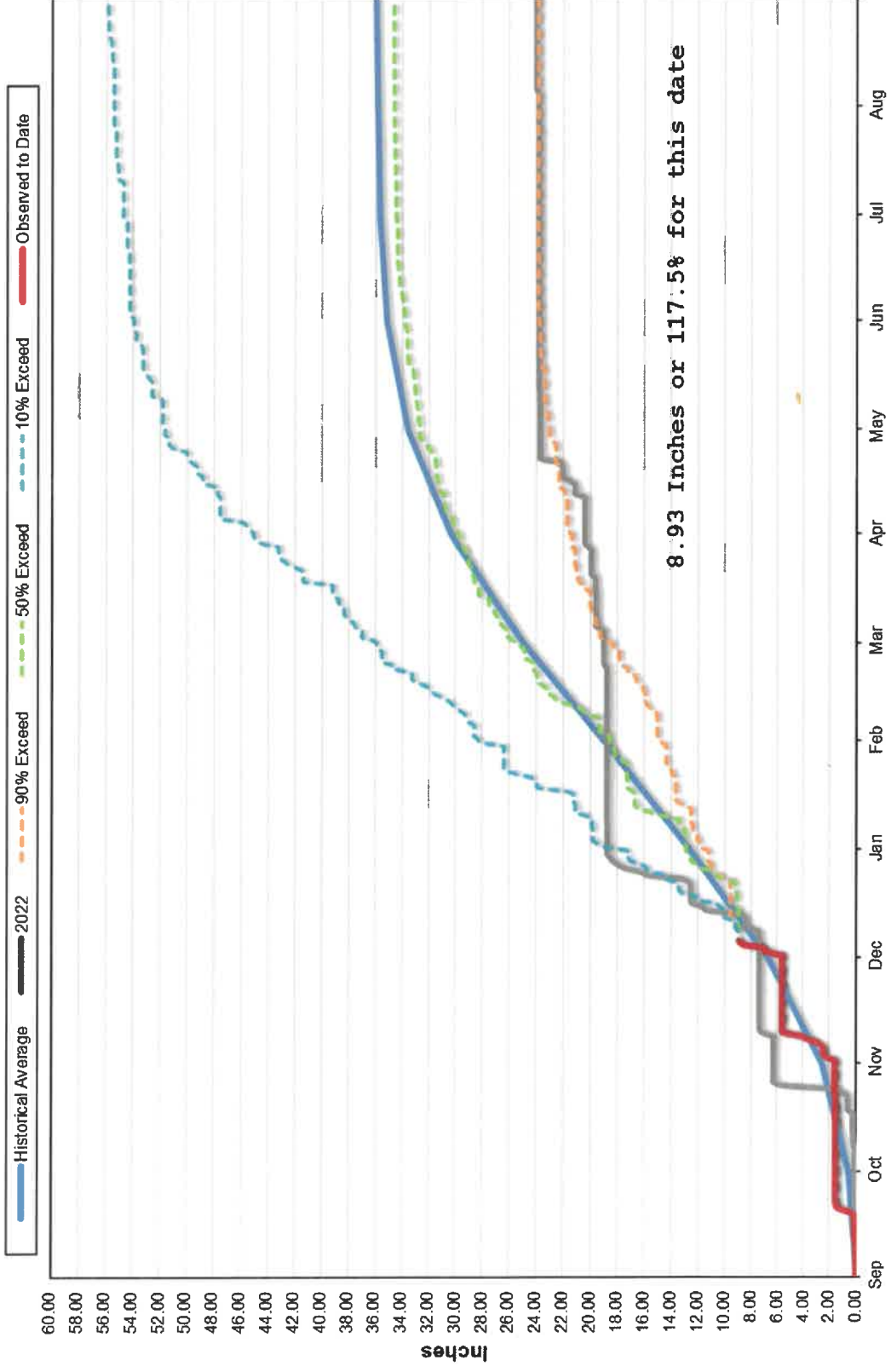
2022 Fall Pulse



Tuolumne River Watershed Monthly Accumulation of Precipitation

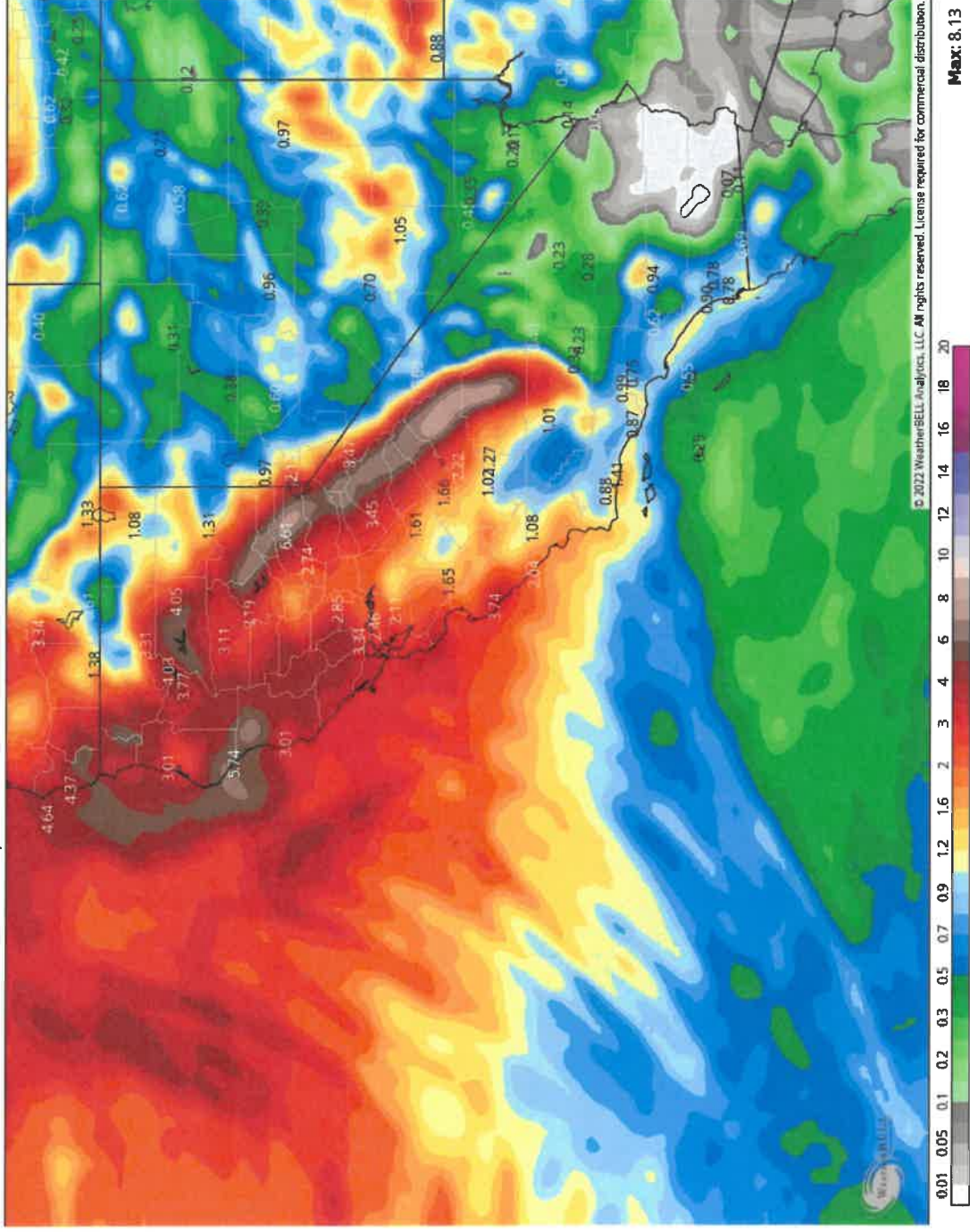


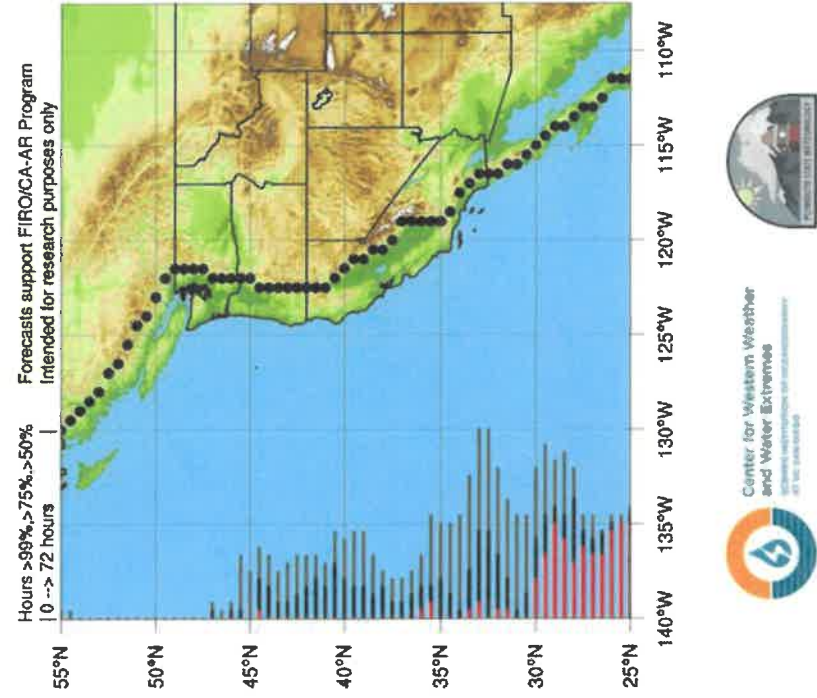
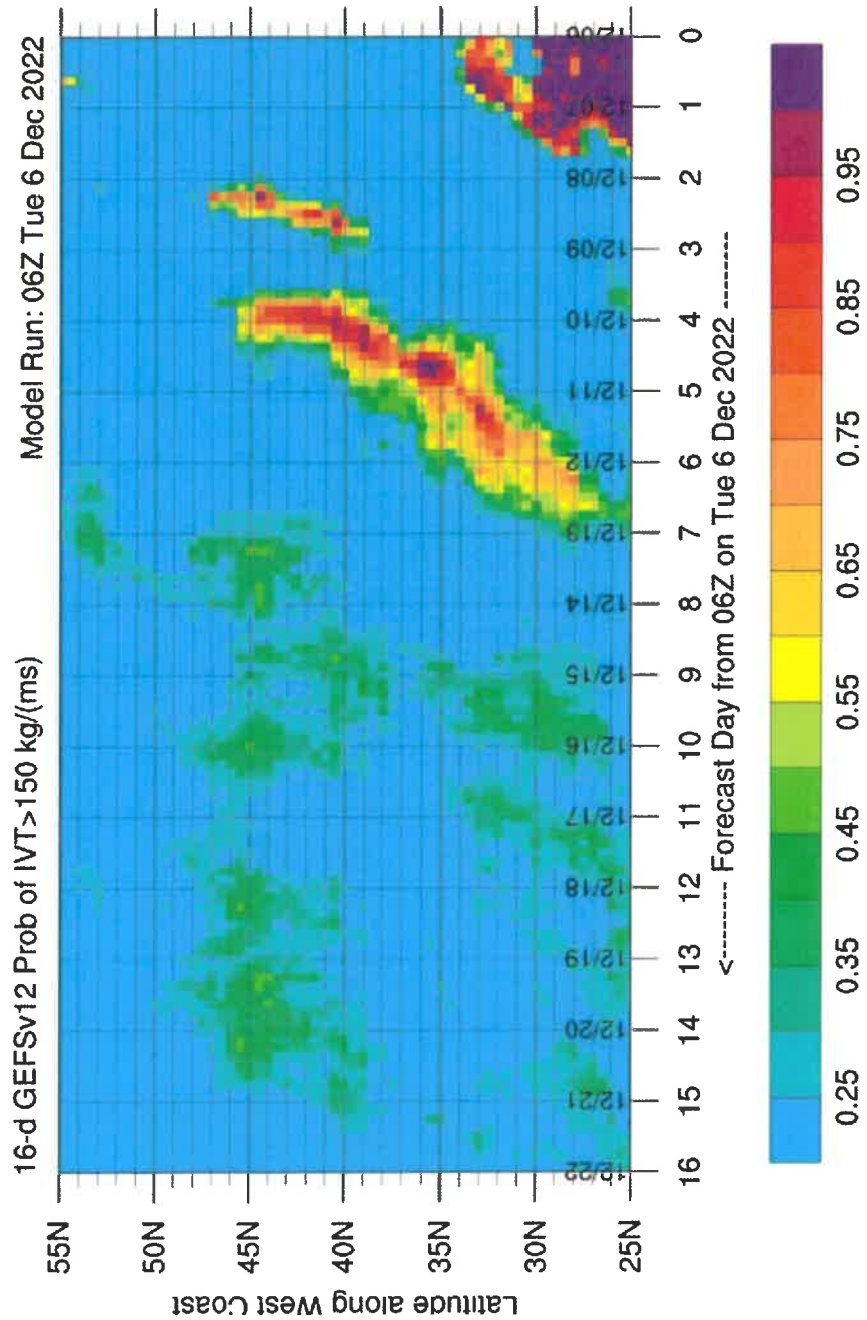
Tuolumne River Watershed Accumulated Precipitation



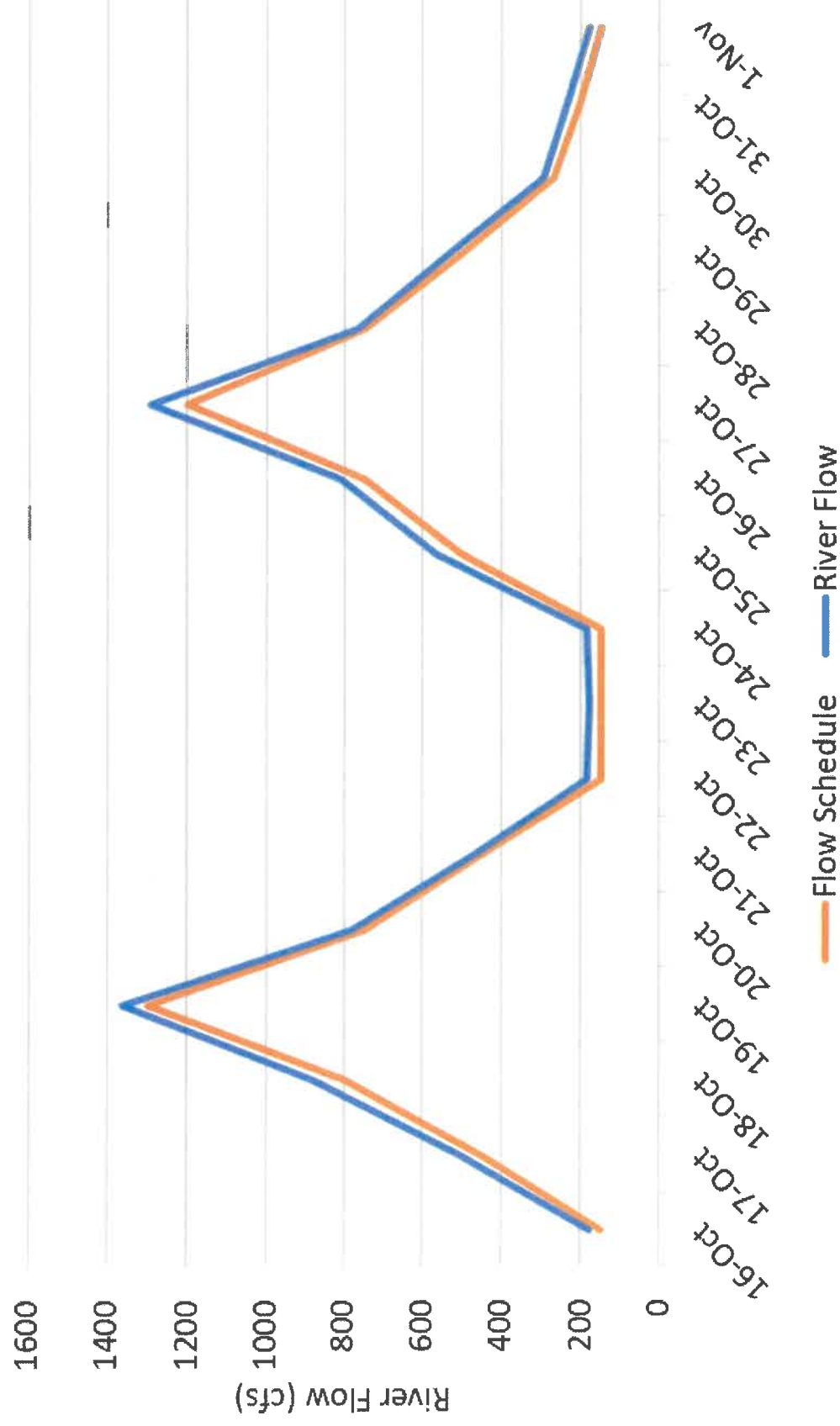
GFS 0.12° Init 12z 6 Dec 2022 • Total Precipitation (Inches)

Hour: 384 • Valid: 12z Thu 22 Dec 2022





2022 Fall Pulse



Updated Through 12/04/22

Year	Monitoring Start Date	Net Passage to Date	Season Total
2022	9/30/2022	553	553
2021	9/29/2021	494	573
2020	9/28/2020	840	1,061
2019	9/10/2019	2,053	2,123
2018	9/12/2018	2,937	3,072
2017	9/26/2017	2,445	2,769
2016	9/19/2016	3,208	3,559
2015	9/28/2015	273	436
2014	9/29/2014	557	672
2013	9/24/2013	3,495	3,738
2012	9/24/2012	2,133	2,305
2011	9/16/2011	2,648	2,891
2010	9/9/2010	792	792
2009	9/22/2009	226	299

