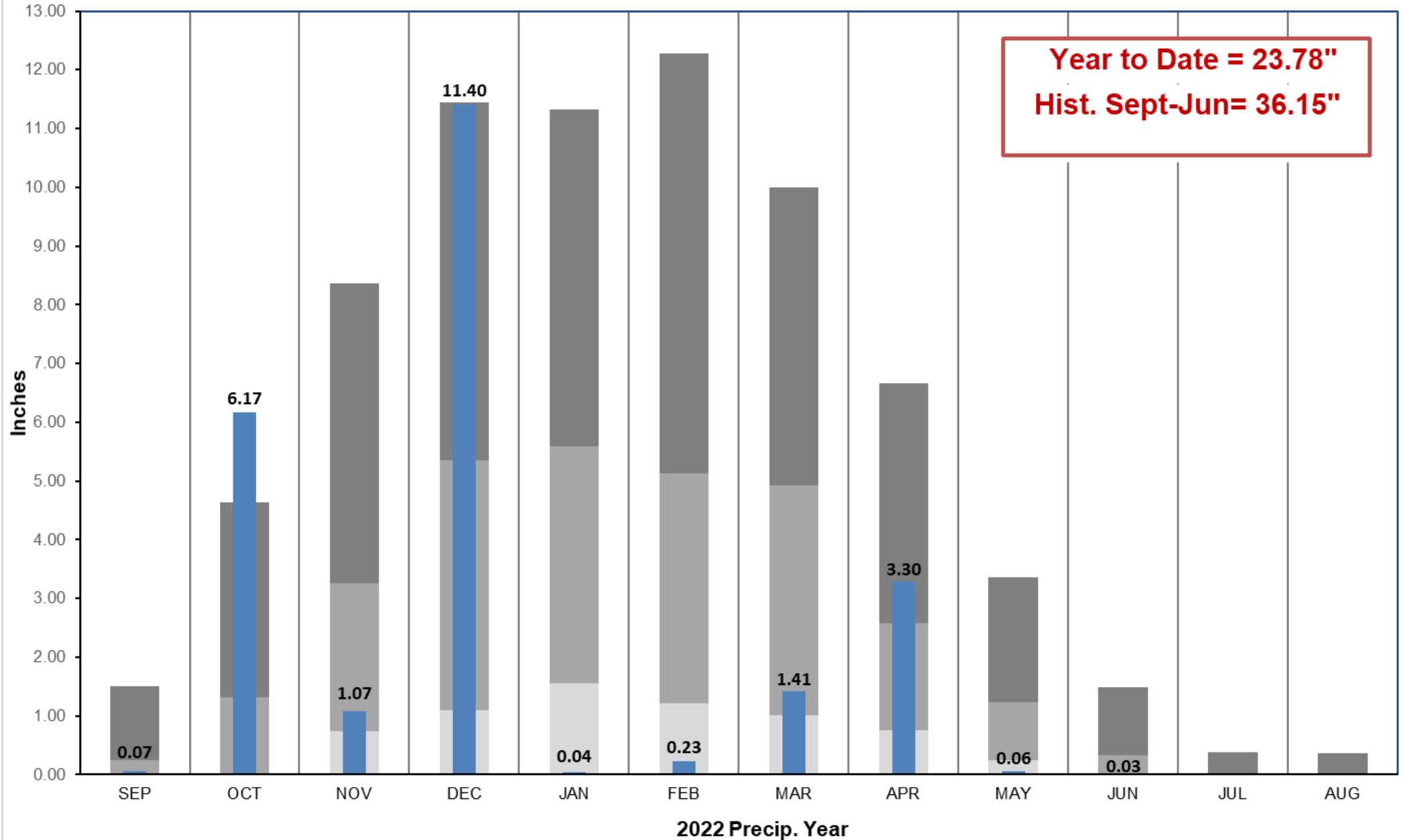
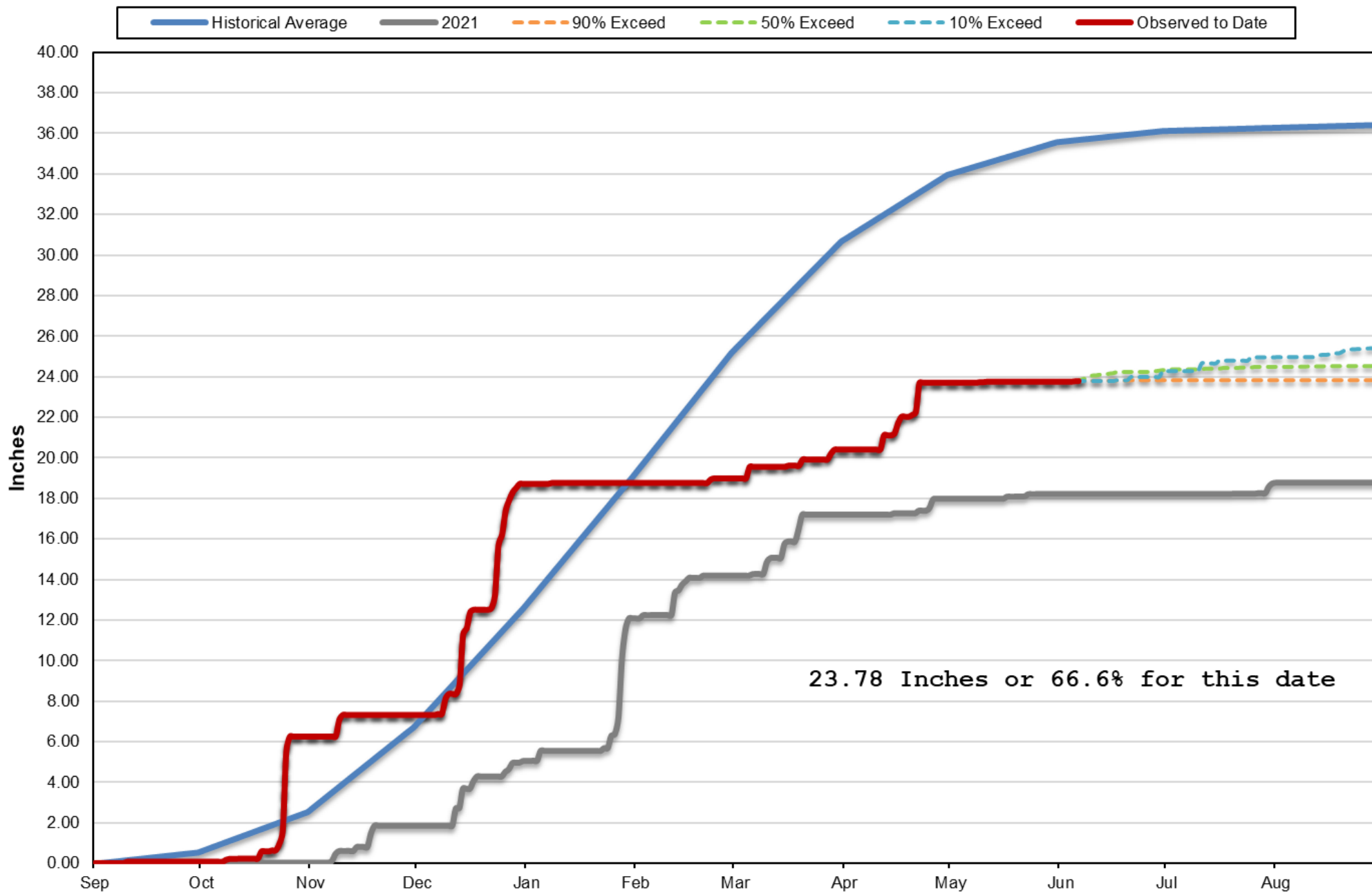


Tuolumne River Watershed Monthly Accumulation of Precipitation

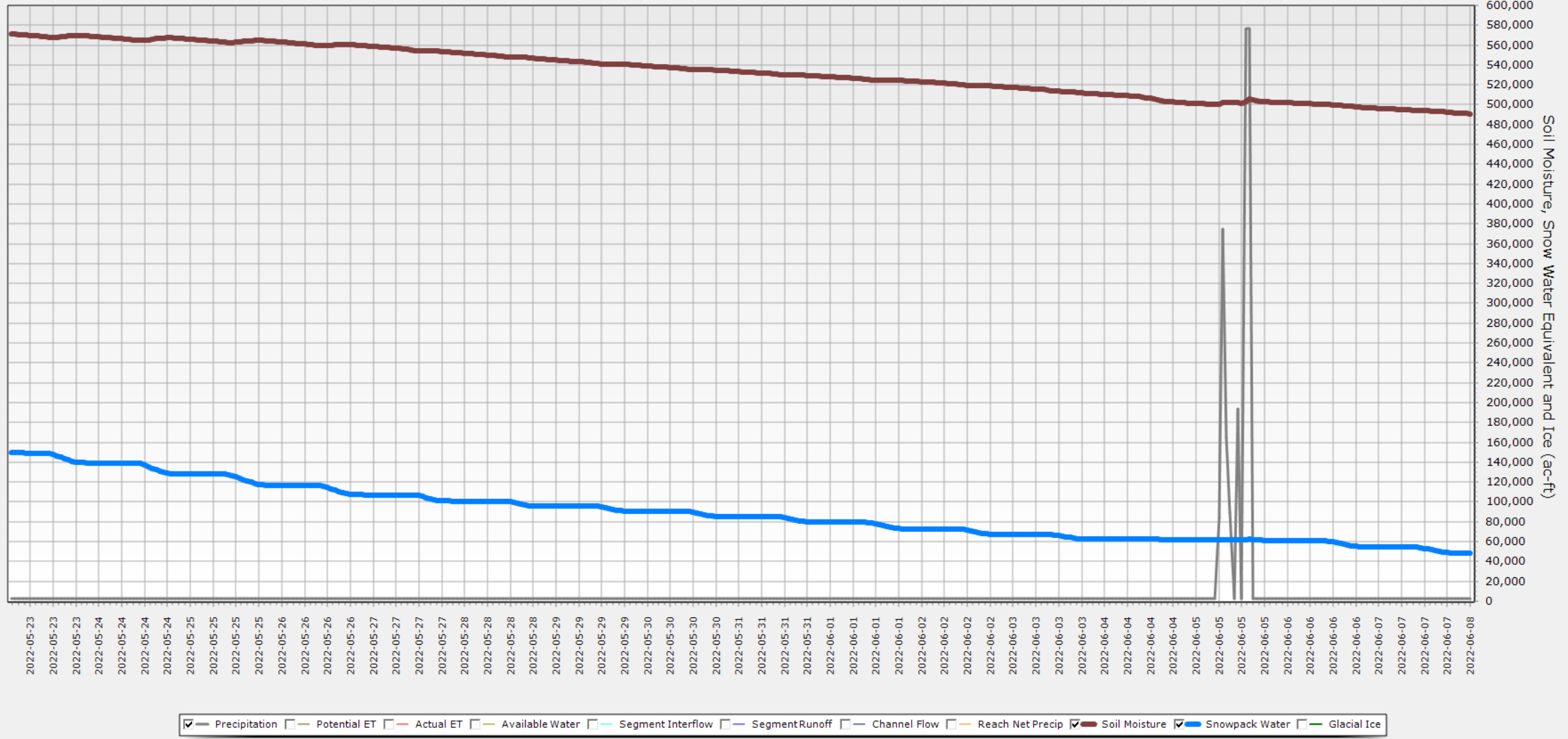
90% Exceed. 50% Exceed. 10% Exceed. 2021-2022



Tuolumne River Watershed Accumulated Precipitation

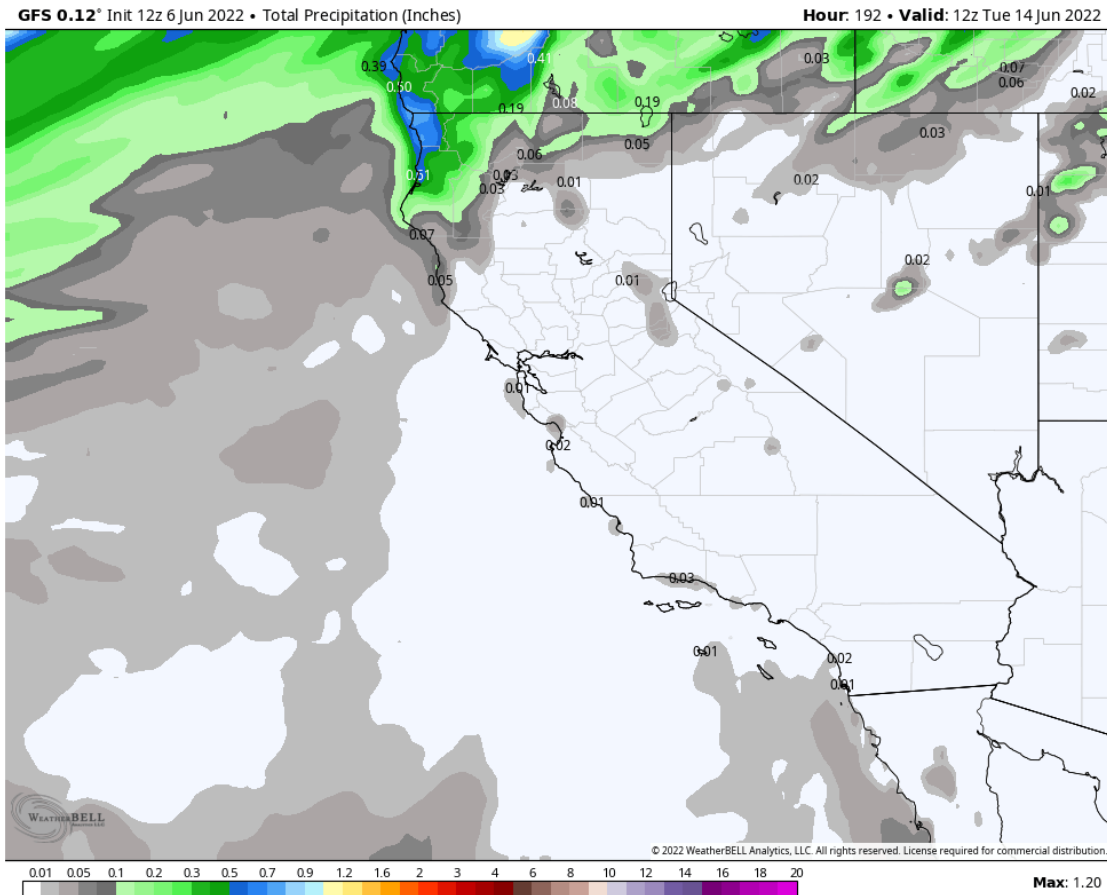


Tuolumne Watershed

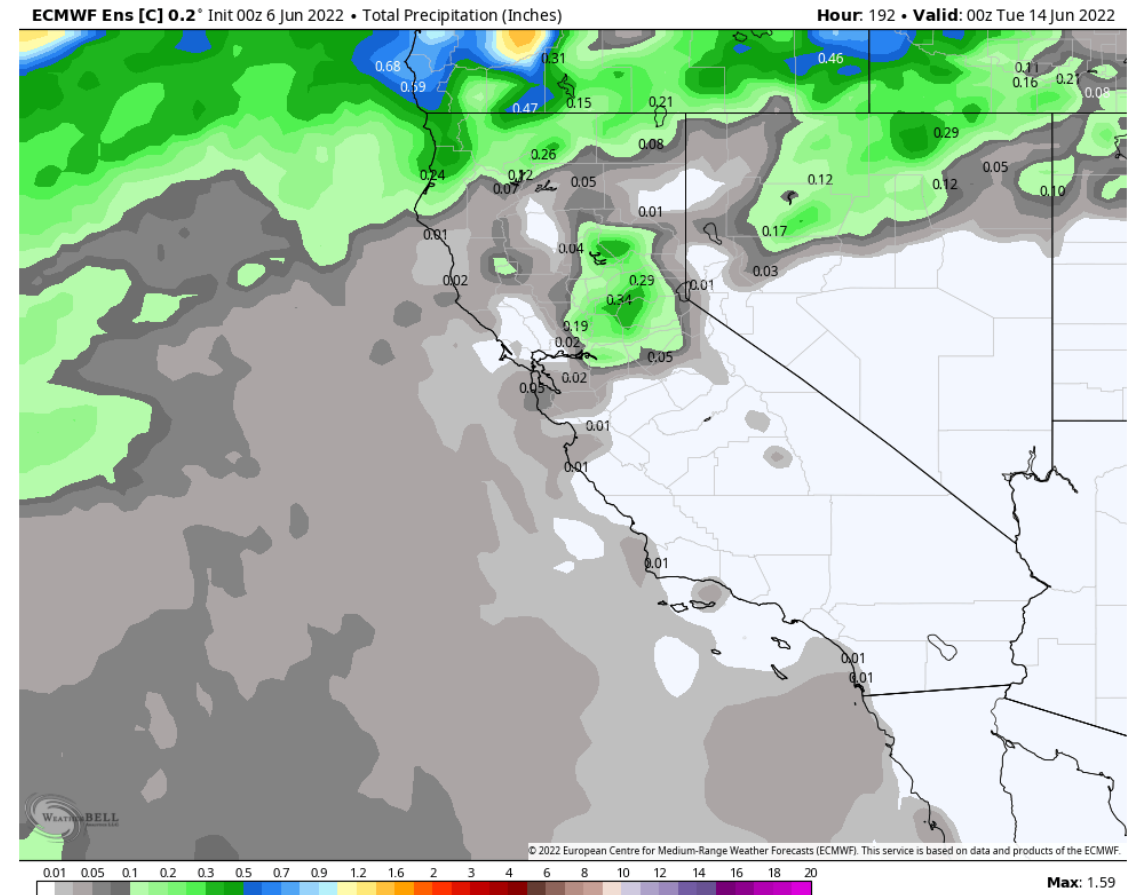


8 Day Precipitation Forecast

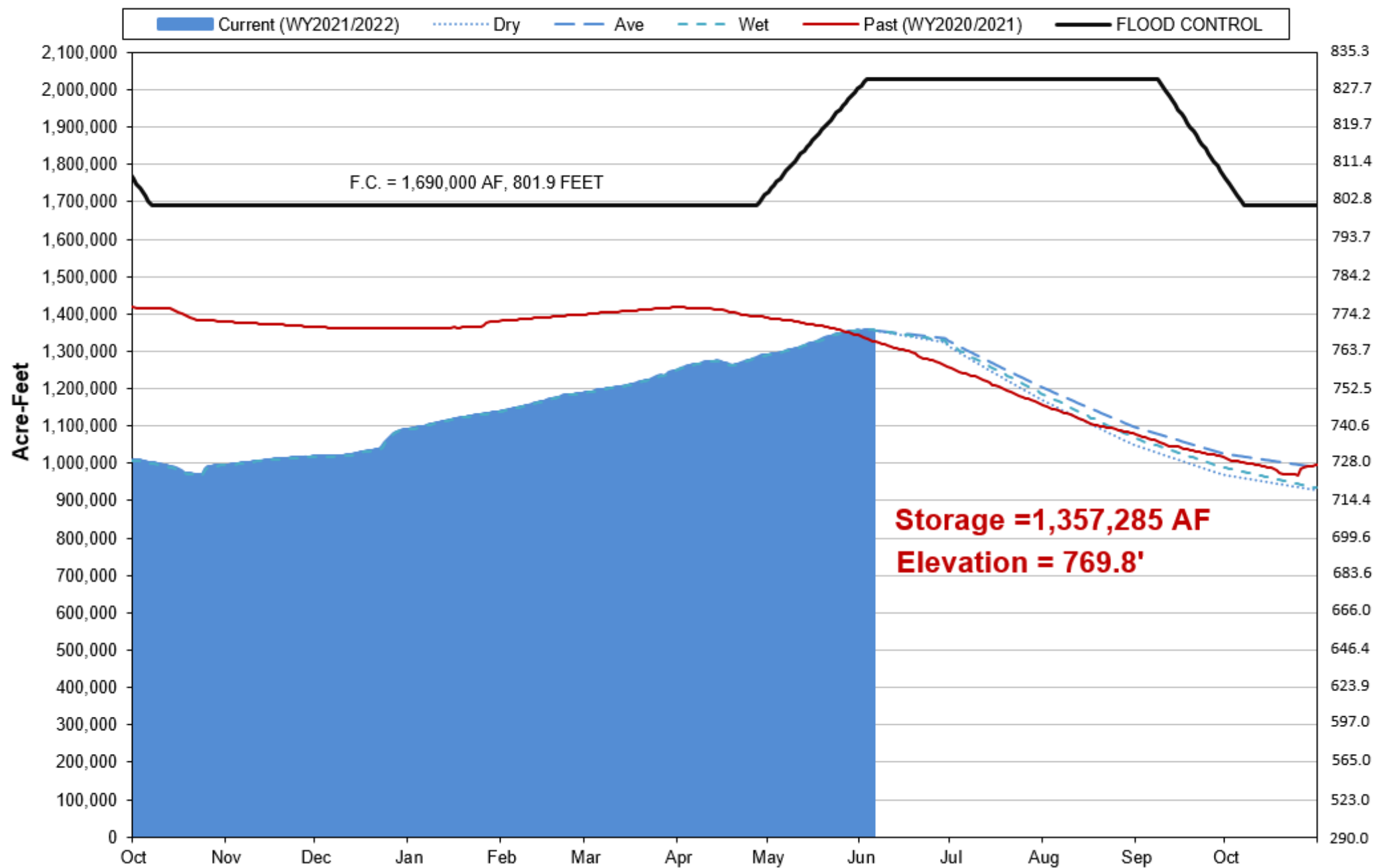
US MODEL



EURO MODEL



DON PEDRO STORAGE w/ Forecast



Accumulated Full Natural Flow w/ Forecast

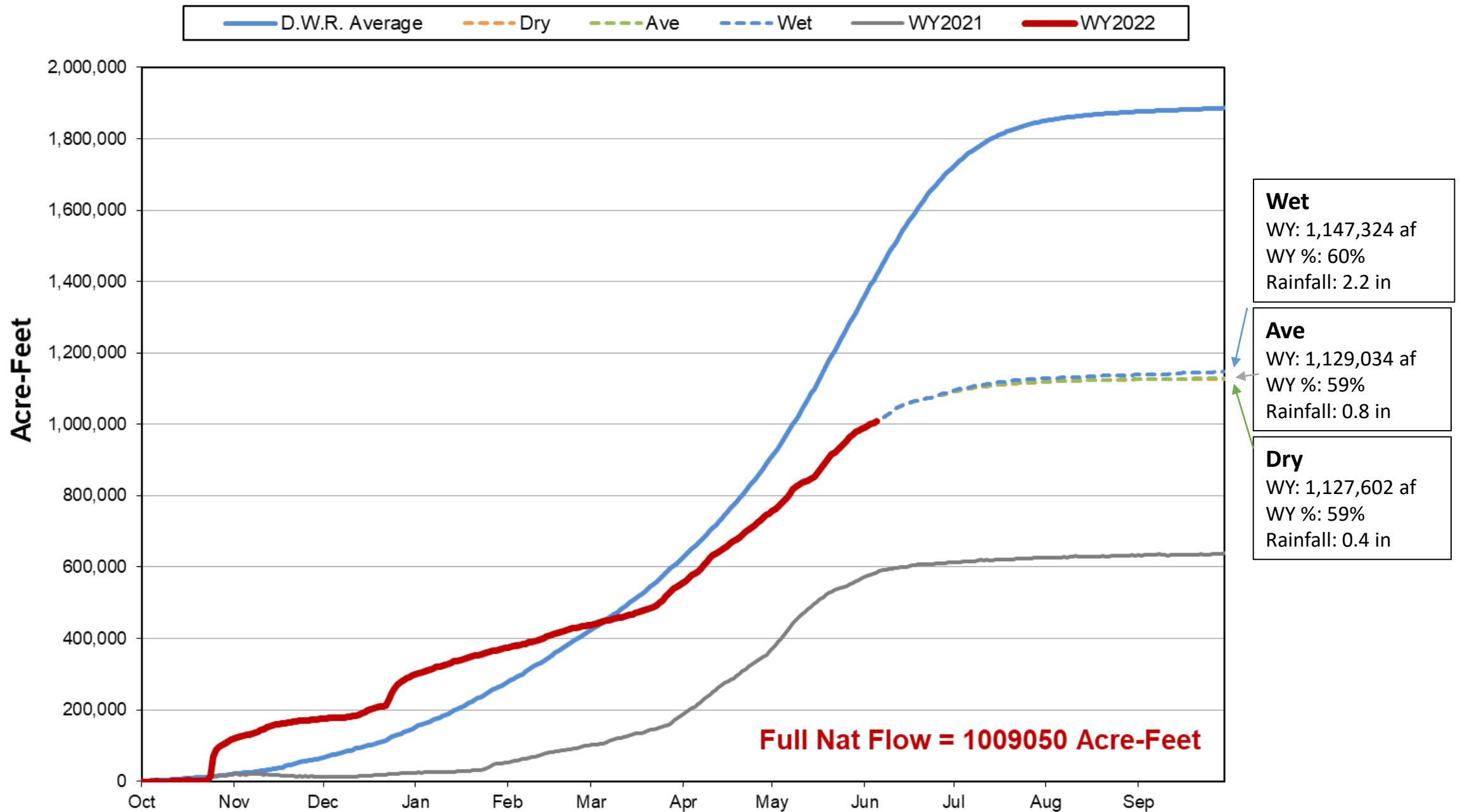


Table 3
Proposed Tuolumne River Flow Schedule
Based on DWR Values, 60-20-20 Index for 2022, Hydrologic Conditions
Schedule For 2022-2023 Fish Flow Year

DATE		Number of DAYS	BASEFLOW ¹			PULSEFLOW ²			INTERPOLATION FLOW			Other Adjusted Flow			TOTAL FERC FLOW	
			CFS	AF	ACCUM. A.F.	CFS	AF	ACCUM. A.F.	CFS	AF	ACCUM. A.F.	CFS	AF	ACCUM. A.F.	CFS	ACCUM. ³ A.F.
07-Jun-2022	07-Jun-2022	1	50	99	14,678	0	0	11,092	0	0	0	0	0	0	50	25,769
08-Jun-2022	30-Jun-2022	23	50	2,281	16,959	0	0	11,092	0	0	0	0	0	0	50	28,050
01-Jul-2022	31-Jul-2022	31	50	3,074	20,033	0	0	11,092	0	0	0	0	0	0	50	31,125
01-Aug-2022	31-Aug-2022	31	50	3,074	23,107	0	0	11,092	0	0	0	0	0	0	50	34,199
01-Sep-2022	30-Sep-2022	30	50	2,975	26,083	0	0	11,092	0	0	0	0	0	0	50	37,174
01-Oct-2022	01-Oct-2022	1	100	198	26,281	0	0	11,092	0	0	0	0	0	0	100	37,373
02-Oct-2022	02-Oct-2022	1	100	198	26,479	0	0	11,092	0	0	0	0	0	0	100	37,571
03-Oct-2022	03-Oct-2022	1	100	198	26,678	0	0	11,092	0	0	0	0	0	0	100	37,769
04-Oct-2022	04-Oct-2022	1	100	198	26,876	0	0	11,092	0	0	0	0	0	0	100	37,968
05-Oct-2022	05-Oct-2022	1	100	198	27,074	0	0	11,092	0	0	0	0	0	0	100	38,166
06-Oct-2022	06-Oct-2022	1	100	198	27,273	0	0	11,092	0	0	0	0	0	0	100	38,364
07-Oct-2022	07-Oct-2022	1	100	198	27,471	0	0	11,092	0	0	0	0	0	0	100	38,563
08-Oct-2022	08-Oct-2022	1	100	198	27,669	0	0	11,092	0	0	0	0	0	0	100	38,761
09-Oct-2022	09-Oct-2022	1	100	198	27,868	0	0	11,092	0	0	0	0	0	0	100	38,959
10-Oct-2022	10-Oct-2022	1	100	198	28,066	0	0	11,092	0	0	0	0	0	0	100	39,158
11-Oct-2022	11-Oct-2022	1	100	198	28,264	0	0	11,092	0	0	0	0	0	0	100	39,356
12-Oct-2022	12-Oct-2022	1	100	198	28,463	0	0	11,092	0	0	0	0	0	0	100	39,554
13-Oct-2022	13-Oct-2022	1	100	198	28,661	0	0	11,092	0	0	0	0	0	0	100	39,753
14-Oct-2022	14-Oct-2022	1	100	198	28,860	0	0	11,092	0	0	0	0	0	0	100	39,951
15-Oct-2022	15-Oct-2022	1	100	198	29,058	0	0	11,092	0	0	0	0	0	0	100	40,149
16-Oct-2022	16-Oct-2022	1	150	298	29,355	0	0	11,092	0	0	0	0	0	0	150	40,447
17-Oct-2022	17-Oct-2022	1	150	298	29,653	0	0	11,092	0	0	0	0	0	0	150	40,744
18-Oct-2022	18-Oct-2022	1	150	298	29,950	0	0	11,092	0	0	0	0	0	0	150	41,042
19-Oct-2022	19-Oct-2022	1	150	298	30,248	0	0	11,092	0	0	0	0	0	0	150	41,340
20-Oct-2022	20-Oct-2022	1	150	298	30,545	0	0	11,092	0	0	0	0	0	0	150	41,637
21-Oct-2022	21-Oct-2022	1	150	298	30,843	0	0	11,092	0	0	0	0	0	0	150	41,935
22-Oct-2022	22-Oct-2022	1	150	298	31,140	0	0	11,092	0	0	0	0	0	0	150	42,232
23-Oct-2022	23-Oct-2022	1	150	298	31,438	0	0	11,092	0	0	0	0	0	0	150	42,530
24-Oct-2022	24-Oct-2022	1	150	298	31,736	0	0	11,092	0	0	0	0	0	0	150	42,827
25-Oct-2022	25-Oct-2022	1	150	298	32,033	0	0	11,092	0	0	0	0	0	0	150	43,125
26-Oct-2022	26-Oct-2022	1	150	298	32,331	0	0	11,092	0	0	0	0	0	0	150	43,422
27-Oct-2022	27-Oct-2022	1	150	298	32,628	0	0	11,092	0	0	0	0	0	0	150	43,720
28-Oct-2022	28-Oct-2022	1	150	298	32,926	0	0	11,092	0	0	0	0	0	0	150	44,017
29-Oct-2022	29-Oct-2022	1	150	298	33,223	0	0	11,092	0	0	0	0	0	0	150	44,315
30-Oct-2022	30-Oct-2022	1	150	298	33,521	4,537	8,999	20,091	0	0	0	0	0	0	4,687	53,611
31-Oct-2022	31-Oct-2022	1	150	298	33,818	0	0	20,091	0	0	0	0	0	0	150	53,909
14-Apr-2023	14-Apr-2023	1	150	298	82,909	0	0	20,091	0	0	0	0	0	0	150	103,000
No. of days		365														

1 cfs day = 1,983,471 acre-feet (af)

1. Total accumulation amount pertains to 2021-2022 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.
3. Based on an hourly calculation schedule for the target flows. This represents a daily average.

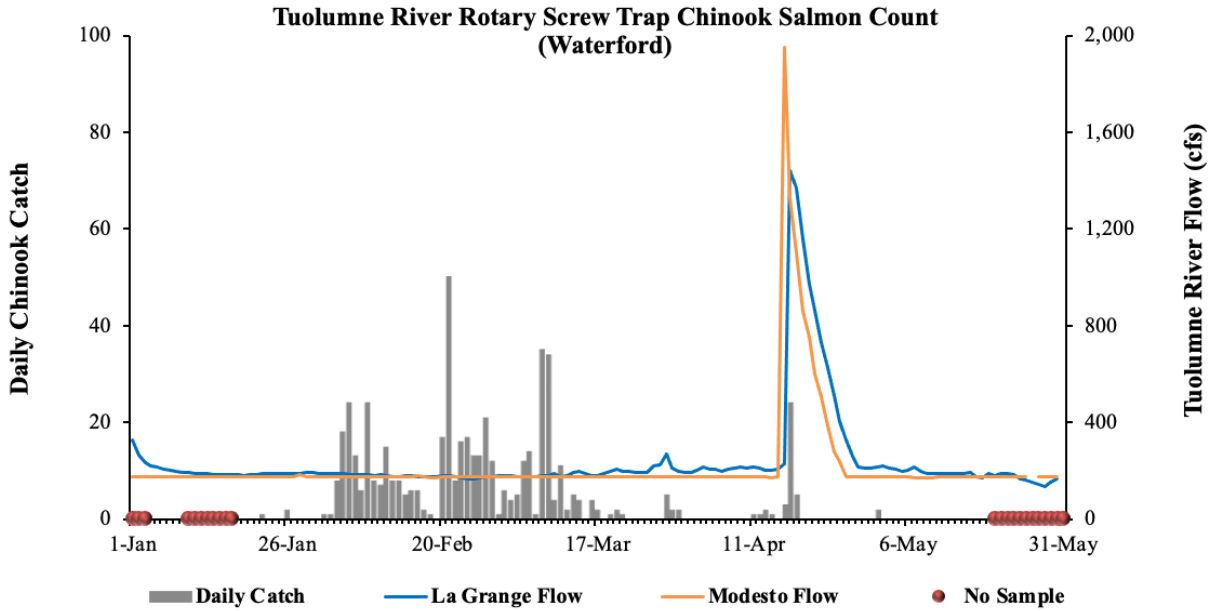


Figure 1. Daily juvenile Chinook salmon catch at the Waterford RST and Tuolumne River flow at La Grange and Modesto, 2022.

- Sampling at Waterford RST concluded on May 19 due to water temperature thresholds.
- Total Chinook salmon catch for the season was 527.

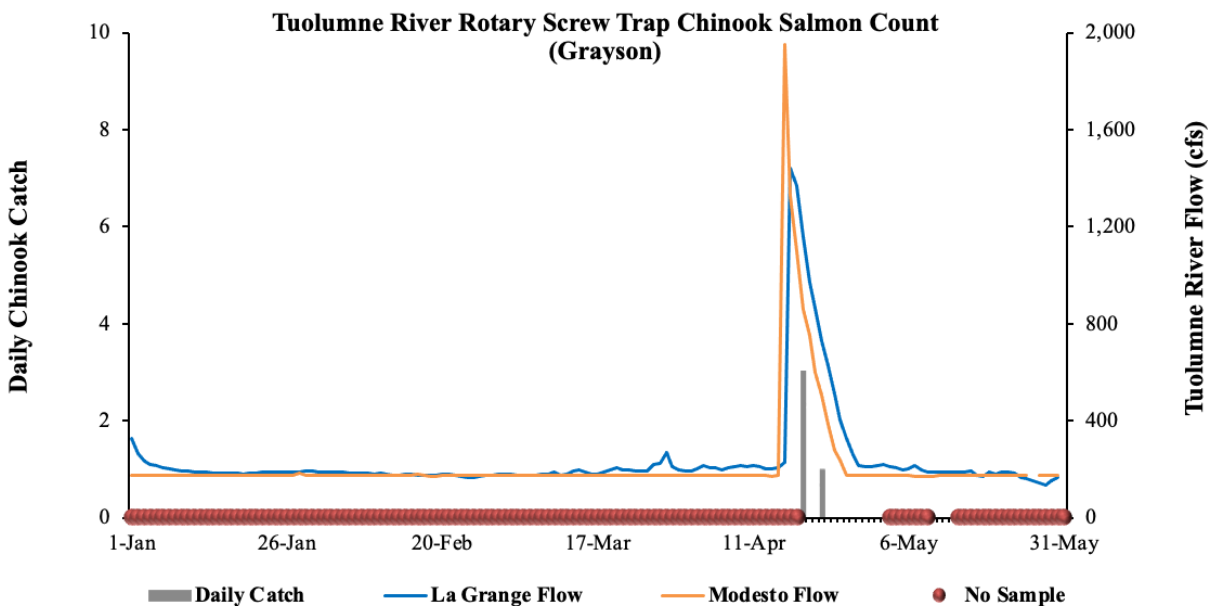


Figure 2. Daily juvenile Chinook salmon catch at the Grayson RST and Tuolumne River flow at La Grange and Modesto, 2022.

- Sampling concluded on May 13 and total Chinook salmon catch for the season was only 4.
- Sampling at Grayson was limited during 2022 due to water hyacinth and then water temperatures. Grayson began sampling on April 19, 2022 following the initial increase in flow for the spring pulse period. Water hyacinth mats

were broken up and pushed downstream allowing for sampling to occur at Grayson. On May 2, the traps were raised due to water temperature thresholds allowed for sampling, The following week ambient air temperatures decreased causing cooler water temperatures in the river. The traps sampled four more days between May 10 and May 13 before hitting temperature maximums again.

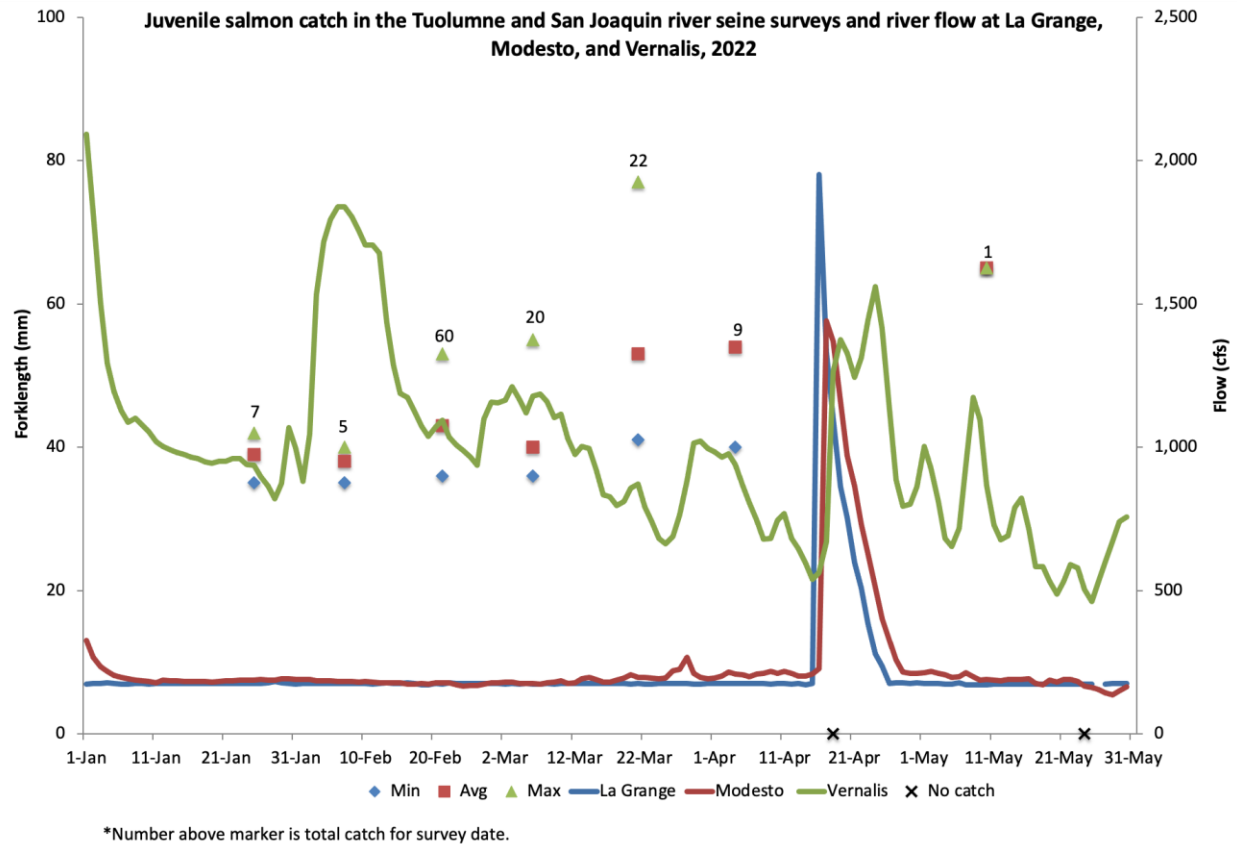


Figure 3. Juvenile salmon captured during the seine surveys and Tuolumne and San Joaquin River flow, 2022.

- Sampling concluded on May 24, 2022 due to high water temps and low catch.
- A total of 124 salmon were captured during the 2022 Tuolumne and San Joaquin river seine surveys including one ad-clipped salmon captured in the San Joaquin River at Gardner Cove. The ad-clip (spring-run) salmon was part of the San Joaquin River Restoration Group's release that was conducted in mid-March.
- Salmon were only captured at Old La Grange Bridge, Hickman and Charles Road in the Tuolumne River. Catch is likely underestimated during the pulse period as many sites were unable to be seined due to water depths and access.

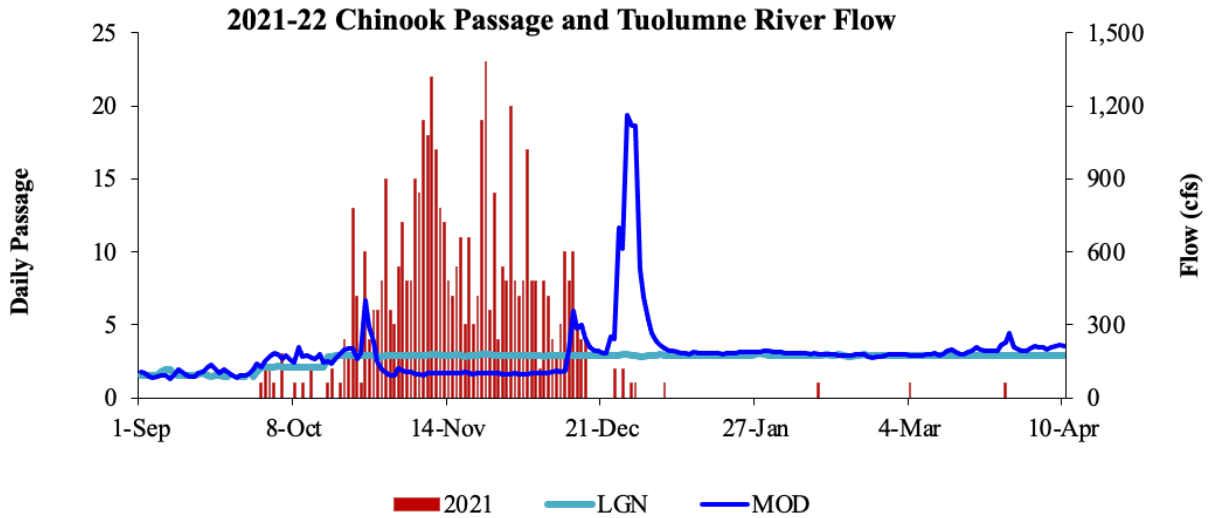


Figure 4. Daily Chinook salmon passage at the Tuolumne weir and Tuolumne River flow at La Grange (LGN) and Modesto (MOD) from September 29 through April 10.

- Sampling at the Tuolumne River weir occurred between September 29 and April 10. A total of 573 salmon and one trout were observed passing upstream of the weir during the season.
- Three of the salmon were observed outside of the normal fall-run migration period: February 11 (male, adipose fin intact), March 4 (male, adipose fin intact) and March 27 (female, adipose fin clipped).
- The ~16 inch trout (unknown sex, adipose fin intact) was observed on February 10, 2022.