

DON PEDRO / TUOLUMNE RIVER WATERSHED

	6/12/2019 Wednesday	6/11/2019 Tuesday	6/10/2019 Monday	6/9/2019 Sunday	6/8/2019 Saturday	6/7/2019 Friday	6/6/2019 Thursday
* Computed Natural Flow (cfs)	15,909	13,259	12,823	12,647	14,256	19,013	19,103
<u>Don Pedro</u>							
Elevation (Feet) ^{^(Max = 830.0, Min = 600.0)}	819.4	818.8	818.3	817.9	817.5	817.2	816.7
Storage (AF) ^{^(Max = 2,030,000 Min=309,000)}	1,896,191	1,888,827	1,882,706	1,877,821	1,872,946	1,869,296	1,863,225
Gain/(-Loss) (AF)	7,364	6,121	4,885	4,875	3,650	6,071	4,846
** Avg. Inflow (cfs)	12,405	12,080	11,546	11,363	10,925	12,248	12,039
<u>Avg. Flows at La Grange</u>							
TID Canal (cfs) ^{^(Max = 2500)}	1,810	1,817	1,823	1,786	1,832	1,816	1,839
MID Canal (cfs) ^{^(Max = 1800)}	773	774	888	756	857	818	915
River (cfs) ^{^(Max = 9000)}	6,109	6,403	6,372	6,363	6,395	6,552	6,842
Total (cfs)	8,692	8,994	9,083	8,905	9,085	9,187	9,596
<u>Hetch Hetchy Reservoir</u>							
Elevation (Feet) ^{^(Max = 3806, Min = 3520)}	3,762.0	3,760.1	3,759.5	3,758.5	3,757.1	3,754.0	3,748.9
Storage (AF) ^{^(Max = 360,360, Min=410)}	277,290	273,879	272,810	271,030	268,547	263,080	254,177
Gain/(-Loss) (AF)	3,411	1,069	1,780	2,483	5,467	8,903	9,141
Avg. Release (cfs)	6,704	6,524	5,666	5,534	5,478	5,405	5,232
** Avg. Inflow (cfs)	8,424	7,063	6,563	6,786	8,234	9,894	9,841
<u>Cherry Valley Reservoir</u>							
Elevation (Feet) ^{^(Max = 4700 Min = 4440)}	4,679.3	4,677.9	4,677.8	4,677.9	4,678.3	4,678.0	4,675.9
Storage (AF) ^{^(Max = 270,270 Min=0)}	232,907	230,568	230,401	230,568	231,236	230,735	227,227
Gain/(-Loss) (AF)	2,339	167	-167	-668	501	3,508	3,675
Avg. Release (cfs)	1,529	1,933	2,019	2,042	1,906	1,565	1,514
** Avg. Inflow (cfs)	2,708	2,017	1,935	1,705	2,159	3,334	3,367
<u>Lake Eleanor Reservoir</u>							
Elevation (Feet) ^{^(Max = 4660.9 Min = 4620.9)}	4,658.1	4,657.9	4,657.8	4,657.9	4,658.2	4,658.6	4,658.6
Storage (AF) ^{^(Max = 27,016 Min=0)}	24,379	24,193	24,100	24,193	24,472	24,844	24,844
Gain/(-Loss) (AF)	186	93	-93	-279	-372	0	186
Avg. Release (cfs)	1,204	1,140	1,146	1,249	1,431	1,536	1,451
** Avg. Inflow (cfs)	1,298	1,187	1,099	1,108	1,243	1,536	1,545
Avg. Div. to S.F. Pipeline (mgd) ^{^(Max = 300)}	224	223	224	224	224	223	224
<u>Rain Fall (Inches)</u>							
Hetch Hetchy	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cherry Valley	0.00	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.

Table 2

SAN JOAQUIN VALLEY WATER YEAR HYDROLOGIC CLASSIFICATION

602020 INDEX

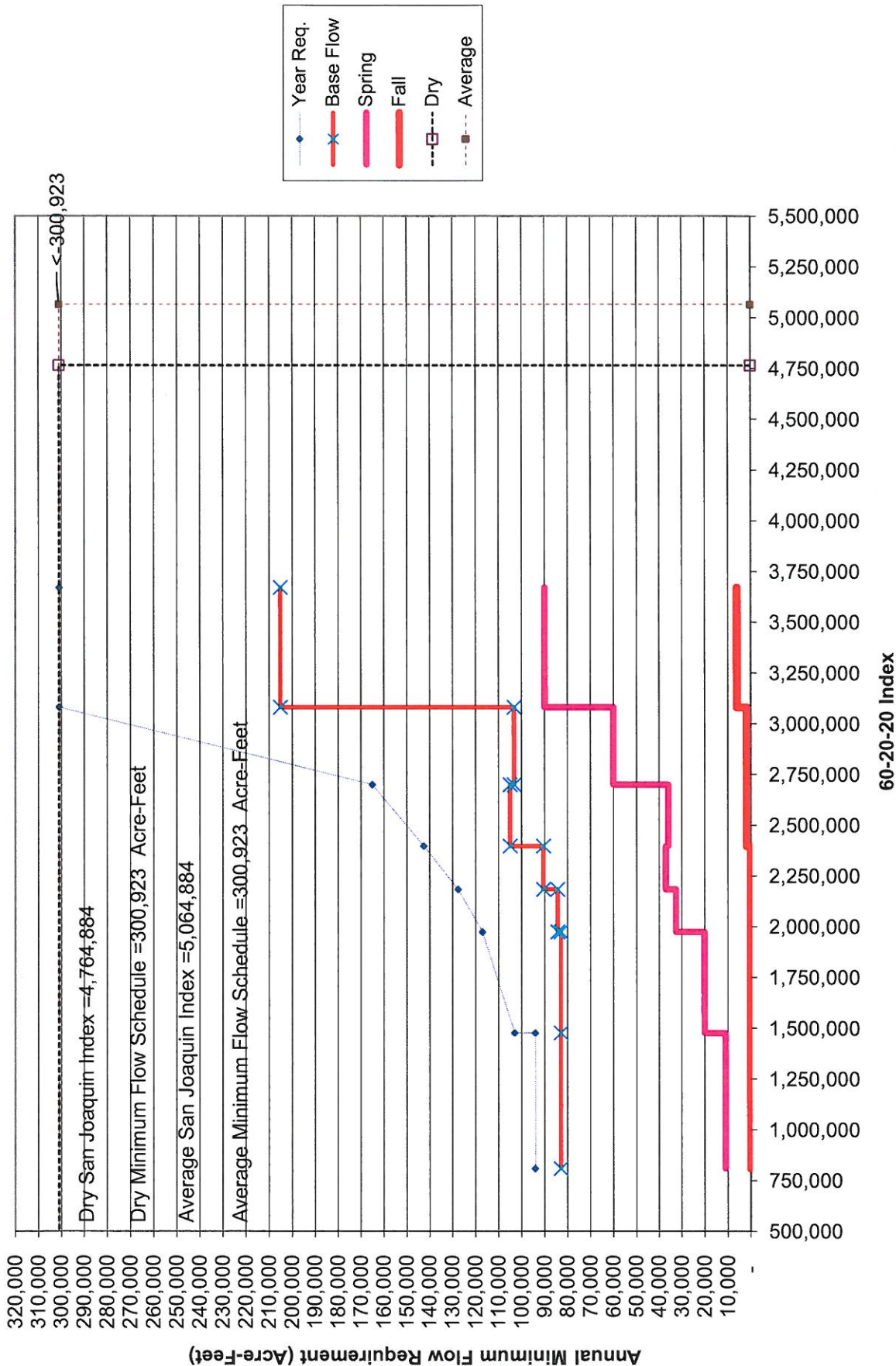
60-20-20 APRIL-JULY RUNOFF (AF)						OCTOBER-MARCH RUNOFF (AF)					602020 INDEX	TUOLUMNE RIVER	San Joaquin Index (not the FERC Index)	FERC Index
YEAR	STANISLAUS	TUOLUMNE	MERCED	FRIANT	TOTAL	STANISLAUS	TUOLUMNE	MERCED	FRIANT	TOTAL		MINIMUM FLOW REQUIREMENT		RANKING
18	588,162	1,011,627	459,456	947,685	3,006,930	378,596	620,658	273,637	368,411	1,641,302	3,032,418	284,136	Below Normal	MEDIAN BELOW NORMAL
19	842,243	1,227,150	691,541	1,255,117	4,016,051	639,357	907,414	503,733	591,514	2,642,018	3,544,518	300,923	Above Normal	INTERMEDIATE BN-AN
Feb 1 Forecast														
Dry	520,000	920,000	430,000	850,000	2,720,000	369,000	559,000	310,000	384,000	1,622,000	2,562,884	154,914	Below Normal	INTERMEDIATE D-BN
Average	640,000	1,130,000	540,000	1,100,000	3,410,000	369,000	559,000	310,000	384,000	1,622,000	2,976,884	264,340	Below Normal	MEDIAN BELOW NORMAL
Wet	850,000	1,470,000	710,000	1,390,000	4,420,000	369,000	559,000	310,000	384,000	1,622,000	3,582,884	300,923	Above Normal	INTERMEDIATE BN-AN
Feb 12 Update														
Dry	610,000	1,110,000	580,000	1,100,000	3,400,000	369,000	559,000	310,000	384,000	1,622,000	2,970,884	262,202	Below Normal	MEDIAN BELOW NORMAL
Average	780,000	1,430,000	750,000	1,470,000	4,430,000	369,000	559,000	310,000	384,000	1,622,000	3,588,884	300,923	Above Normal	INTERMEDIATE BN-AN
Wet	1,050,000	1,900,000	1,000,000	1,930,000	5,880,000	369,000	559,000	310,000	384,000	1,622,000	4,458,884	300,923	Wet	INTERMEDIATE AN-W
Feb 19 Update														
Dry	690,000	1,210,000	640,000	1,190,000	3,730,000	369,000	559,000	310,000	384,000	1,622,000	3,168,884	300,923	Above Normal	INTERMEDIATE BN-AN
Average	690,000	1,210,000	640,000	1,190,000	3,730,000	369,000	559,000	310,000	384,000	1,622,000	3,168,884	300,923	Above Normal	INTERMEDIATE BN-AN
Wet	690,000	1,210,000	640,000	1,190,000	3,730,000	369,000	559,000	310,000	384,000	1,622,000	3,168,884	300,923	Above Normal	INTERMEDIATE BN-AN
Feb 26 Update														
Dry	690,000	1,160,000	580,000	1,150,000	3,580,000	369,000	559,000	310,000	384,000	1,622,000	3,078,884	300,699	Below Normal	MEDIAN BELOW NORMAL
Average	920,000	1,580,000	810,000	1,600,000	4,910,000	369,000	559,000	310,000	384,000	1,622,000	3,876,884	300,923	Wet	MEDIAN ABOVE NORMAL
Wet	1,220,000	2,040,000	1,050,000	2,100,000	6,410,000	369,000	559,000	310,000	384,000	1,622,000	4,776,884	300,923	Wet	MEDIAN WET/ MAXIMUM
Mar 01 Update														
Dry	740,000	1,180,000	600,000	1,160,000	3,680,000	536,000	818,000	456,000	501,000	2,311,000	3,276,684	300,923	Above Normal	INTERMEDIATE BN-AN
Average	990,000	1,590,000	820,000	1,600,000	5,000,000	606,000	933,000	516,000	595,000	2,650,000	4,136,484	300,923	Wet	INTERMEDIATE AN-W
Wet	1,300,000	2,060,000	1,050,000	2,100,000	6,510,000	696,000	1,063,000	581,000	706,000	3,046,000	5,121,684	300,923	Wet	MEDIAN WET/ MAXIMUM
Mar 12 Update														
Dry	820,000	1,350,000	670,000	1,360,000	4,200,000	536,000	818,000	456,000	501,000	2,311,000	3,588,684	300,923	Above Normal	INTERMEDIATE BN-AN
Average	1,070,000	1,750,000	890,000	1,780,000	5,490,000	606,000	933,000	516,000	595,000	2,650,000	4,430,484	300,923	Wet	INTERMEDIATE AN-W
Wet	1,370,000	2,220,000	1,120,000	2,290,000	7,000,000	696,000	1,063,000	581,000	706,000	3,046,000	5,415,684	300,923	Wet	MEDIAN WET/ MAXIMUM
Mar 19 Update														
Dry	810,000	1,320,000	670,000	1,350,000	4,150,000	536,000	818,000	456,000	501,000	2,311,000	3,558,684	300,923	Above Normal	INTERMEDIATE BN-AN
Average	1,050,000	1,700,000	860,000	1,730,000	5,340,000	606,000	933,000	516,000	595,000	2,650,000	4,340,484	300,923	Wet	INTERMEDIATE AN-W
Wet	1,330,000	2,150,000	1,070,000	2,230,000	6,780,000	696,000	1,063,000	581,000	706,000	3,046,000	5,283,684	300,923	Wet	MEDIAN WET/ MAXIMUM
Mar 26 Update														
Dry	860,000	1,380,000	690,000	1,420,000	4,350,000	536,000	818,000	456,000	501,000	2,311,000	3,678,684	300,923	Above Normal	MEDIAN ABOVE NORMAL
Average	1,090,000	1,730,000	870,000	1,750,000	5,440,000	606,000	933,000	516,000	595,000	2,650,000	4,400,484	300,923	Wet	INTERMEDIATE AN-W
Wet	1,360,000	2,170,000	1,070,000	2,230,000	6,830,000	696,000	1,063,000	581,000	706,000	3,046,000	5,313,684	300,923	Wet	MEDIAN WET/ MAXIMUM
Apr 01 Update														
Dry	890,000	1,520,000	760,000	1,530,000	4,700,000	536,000	818,000	456,000	501,000	2,311,000	3,888,684	300,923	Wet	MEDIAN ABOVE NORMAL
Average	1,120,000	1,860,000	940,000	1,830,000	5,750,000	606,000	933,000	516,000	595,000	2,650,000	4,586,484	300,923	Wet	INTERMEDIATE AN-W
Wet	1,360,000	2,250,000	1,140,000	2,260,000	7,010,000	696,000	1,063,000	581,000	706,000	3,046,000	5,421,684	300,923	Wet	MEDIAN WET/ MAXIMUM
Apr 09 Update														
Dry	930,000	1,570,000	770,000	1,540,000	4,810,000	536,000	818,000	456,000	501,000	2,311,000	3,954,684	300,923	Wet	INTERMEDIATE AN-W
Average	1,140,000	1,880,000	940,000	1,830,000	5,790,000	606,000	933,000	516,000	595,000	2,650,000	4,610,484	300,923	Wet	INTERMEDIATE AN-W
Wet	1,370,000	2,240,000	1,120,000	2,200,000	6,930,000	696,000	1,063,000	581,000	706,000	3,046,000	5,373,684	300,923	Wet	MEDIAN WET/ MAXIMUM
May 1 Forecast														
Dry	950,000	1,570,000	760,000	1,510,000	4,790,000	639,000	908,000	504,000	591,000	2,642,000	4,008,884	300,923	Wet	INTERMEDIATE AN-W
Average	1,080,000	1,770,000	870,000	1,760,000	5,480,000	639,000	908,000	504,000	591,000	2,642,000	4,422,884	300,923	Wet	INTERMEDIATE AN-W
Wet	1,270,000	2,040,000	1,010,000	2,030,000	6,350,000	639,000	908,000	504,000	591,000	2,642,000	4,944,884	300,923	Wet	MEDIAN WET/ MAXIMUM
Apr 23 Update														
Dry	950,000	1,580,000	780,000	1,520,000	4,830,000	639,000	908,000	504,000	591,000	2,642,000	4,032,884	300,923	Wet	INTERMEDIATE AN-W
Average	1,110,000	1,820,000	900,000	1,790,000	5,620,000	639,000	908,000	504,000	591,000	2,642,000	4,506,884	300,923	Wet	INTERMEDIATE AN-W
Wet	1,320,000	2,130,000	1,050,000	2,080,000	6,580,000	639,000	908,000	504,000	591,000	2,642,000	5,082,884	300,923	Wet	MEDIAN WET/ MAXIMUM
May 01 Update														
Dry	950,000	1,570,000	760,000	1,510,000	4,790,000	639,000	908,000	504,000	591,000	2,642,000	4,008,884	300,923	Wet	INTERMEDIATE AN-W
Average	1,080,000	1,770,000	870,000	1,760,000	5,480,000	639,000	908,000	504,000	591,000	2,642,000	4,422,884	300,923	Wet	INTERMEDIATE AN-W
Wet	1,270,000	2,040,000	1,010,000	2,030,000	6,350,000	639,000	908,000	504,000	591,000	2,642,000	4,944,884	300,923	Wet	MEDIAN WET/ MAXIMUM
May 14 Update														
Dry	960,000	1,590,000	780,000	1,550,000	4,880,000	639,000	908,000	504,000	591,000	2,642,000	4,062,884	300,923	Wet	INTERMEDIATE AN-W
Average	1,070,000	1,760,000	870,000	1,770,000	5,470,000	639,000	908,000	504,000	591,000	2,642,000	4,416,884	300,923	Wet	INTERMEDIATE AN-W
Wet	1,240,000	2,000,000	990,000	2,010,000	6,240,000	639,000	908,000	504,000	591,000	2,642,000	4,878,884	300,923	Wet	MEDIAN WET/ MAXIMUM
May 21 Update														

Table 2

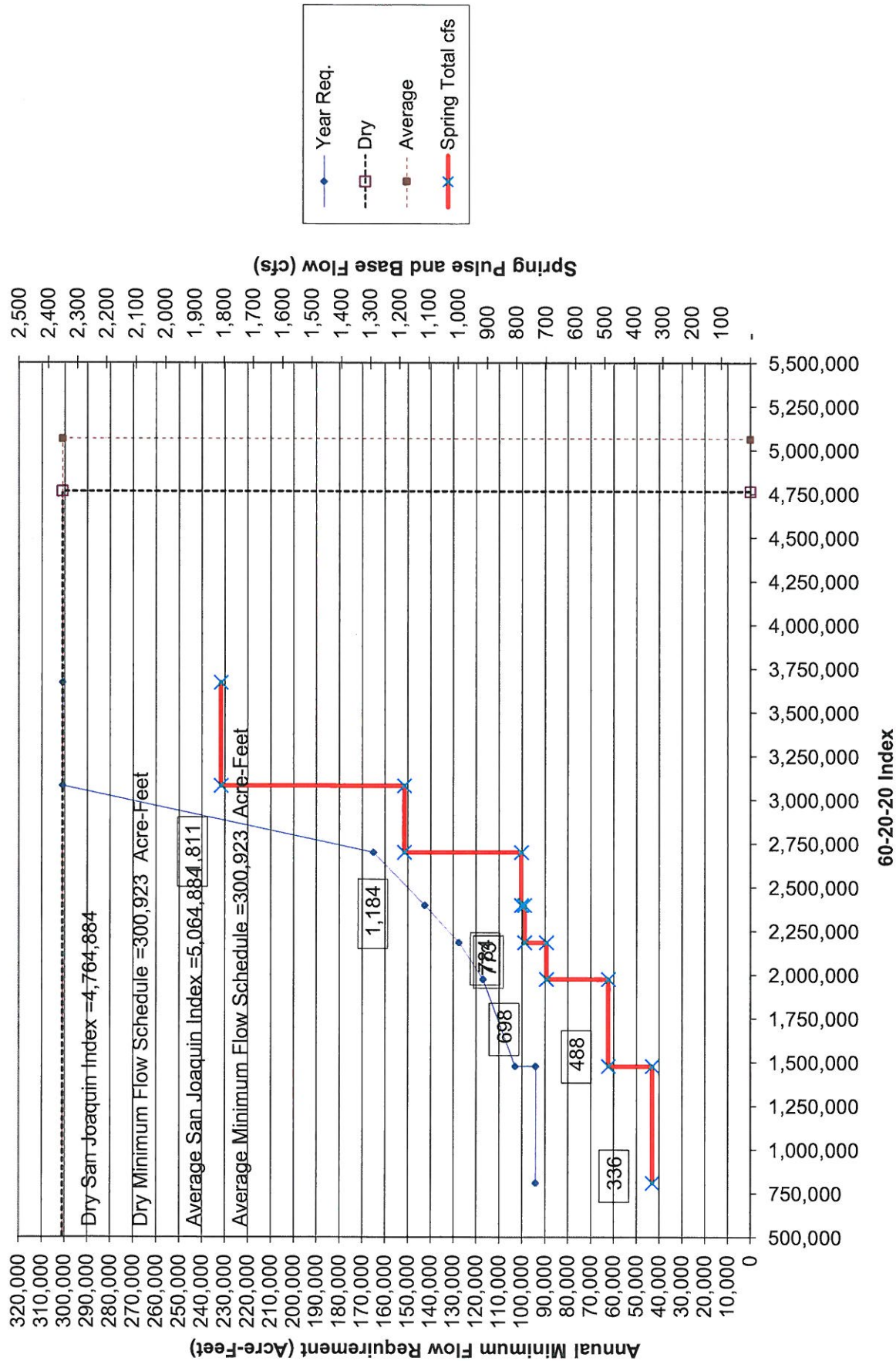
SAN JOAQUIN VALLEY WATER YEAR HYDROLOGIC CLASSIFICATION
602020 INDEX

60-20-20		APRIL-JULY RUNOFF (AF)					OCTOBER-MARCH RUNOFF (AF)					602020 INDEX		TUOLUMNE RIVER		San Joaquin Index (not the FERC Index)	FERC Index
YEAR		STANISLAUS	TUOLUMNE	MERCED	FRIANT	TOTAL	STANISLAUS	TUOLUMNE	MERCED	FRIANT	TOTAL			MINIMUM FLOW REQUIREMENT			RANKING
Dry		1,070,000	1,780,000	880,000	1,730,000	5,460,000	639,000	908,000	504,000	591,000	2,642,000	4,410,884		300,923	Wet		INTERMEDIATE AN-W
Average		1,180,000	1,930,000	970,000	1,940,000	6,020,000	639,000	908,000	504,000	591,000	2,642,000	4,746,884		300,923	Wet		INTERMEDIATE AN-W
Wet		1,330,000	2,160,000	1,090,000	2,170,000	6,750,000	639,000	908,000	504,000	591,000	2,642,000	5,184,884		300,923	Wet		MEDIAN WET/ MAXIMUM
May 28 Update																	
Dry		1,130,000	1,960,000	980,000	1,910,000	5,980,000	639,000	908,000	504,000	591,000	2,642,000	4,722,884		300,923	Wet		INTERMEDIATE AN-W
Average		1,240,000	2,100,000	1,080,000	2,110,000	6,530,000	639,000	908,000	504,000	591,000	2,642,000	5,052,884		300,923	Wet		MEDIAN WET/ MAXIMUM
Wet		1,370,000	2,320,000	1,200,000	2,320,000	7,210,000	639,000	908,000	504,000	591,000	2,642,000	5,460,884		300,923	Wet		MEDIAN WET/ MAXIMUM
Jun 04 Update																	
Dry		1,150,000	1,990,000	990,000	1,920,000	6,050,000	639,000	908,000	504,000	591,000	2,642,000	4,764,884		300,923	Wet		MEDIAN WET/ MAXIMUM
Average		1,250,000	2,110,000	1,080,000	2,110,000	6,550,000	639,000	908,000	504,000	591,000	2,642,000	5,064,884		300,923	Wet		MEDIAN WET/ MAXIMUM
Wet		1,360,000	2,320,000	1,190,000	2,290,000	7,160,000	639,000	908,000	504,000	591,000	2,642,000	5,430,884		300,923	Wet		MEDIAN WET/ MAXIMUM

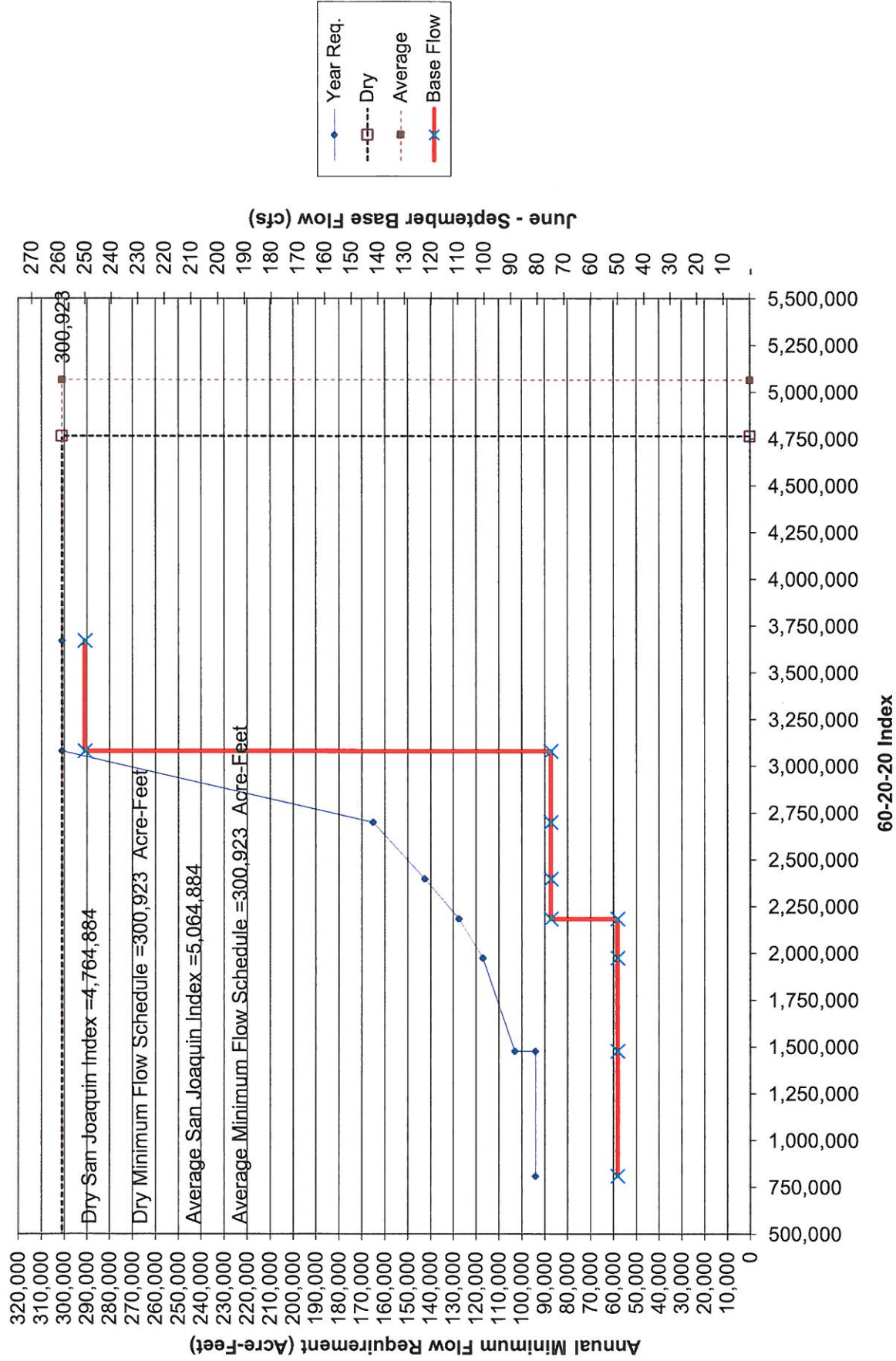
TUOLUMNE RIVER MINIMUM FLOW REQUIREMENT (Figure 1)
Annual Flow Requirement



TUOLUMNE RIVER MINIMUM FLOW REQUIREMENT (Figure 2)
(Spring Pulse Flow Plus Base Flow)



TUOLUMNE RIVER MINIMUM FLOW REQUIREMENT (Figure 3)
(Summer Base Flow)



TUOLUMNE RIVER MINIMUM FLOW REQUIREMENT (Figure 4)
Interpolation Volume

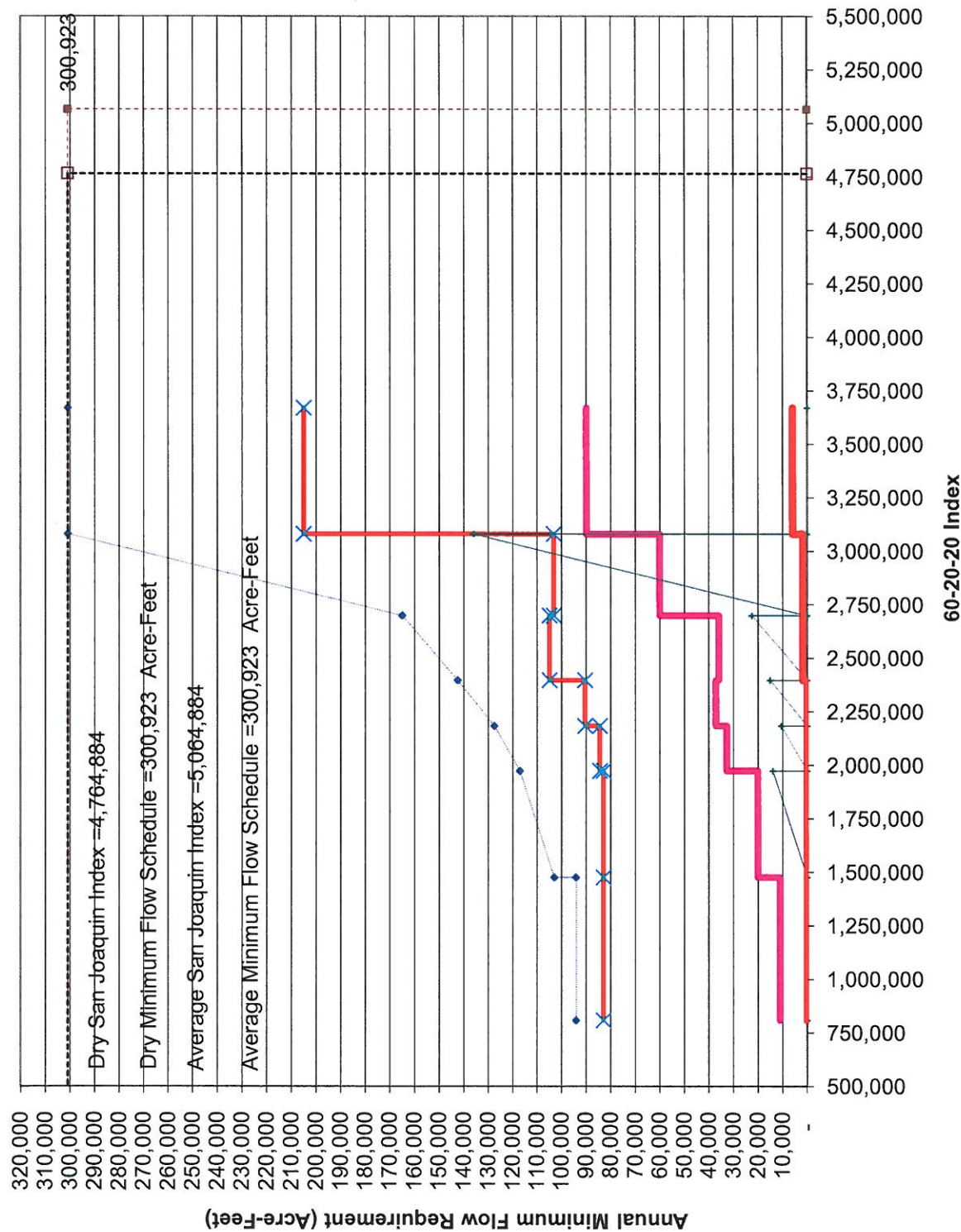


Table 3
Proposed Tuolumne River Flow Schedule
Based on DWR Values, 60-20-20 Index for 2018, Hydrologic Conditions
Schedule For 2019-2020 Fish Flow Year

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-Apr-2019	15-Apr-2019	1	300	595	595	2,000	3,967	3,967	0	0	0	0	0	0	2,300	4,562	1
16-Apr-2019	16-Apr-2019	1	300	595	1,190	2,600	5,157	9,124	0	0	0	0	0	0	2,900	10,314	1
17-Apr-2019	17-Apr-2019	1	300	595	1,785	2,400	4,760	13,884	0	0	0	0	0	0	2,700	15,669	1
18-Apr-2019	18-Apr-2019	1	300	595	2,380	2,200	4,364	18,248	0	0	0	0	0	0	2,500	20,628	1
19-Apr-2019	19-Apr-2019	1	300	595	2,975	2,000	3,967	22,215	0	0	0	0	0	0	2,300	25,190	1
20-Apr-2019	20-Apr-2019	1	300	595	3,570	1,800	3,570	25,785	0	0	0	0	0	0	2,100	29,355	1
21-Apr-2019	21-Apr-2019	1	300	595	4,165	1,600	3,174	28,959	0	0	0	0	0	0	1,900	33,124	1
22-Apr-2019	22-Apr-2019	1	300	595	4,760	1,400	2,777	31,736	0	0	0	0	0	0	1,700	36,496	1
23-Apr-2019	23-Apr-2019	1	300	595	5,355	1,200	2,380	34,116	0	0	0	0	0	0	1,500	39,471	1
24-Apr-2019	24-Apr-2019	1	300	595	5,950	1,000	1,983	36,099	0	0	0	0	0	0	1,300	42,050	1
25-Apr-2019	25-Apr-2019	1	300	595	6,545	1,500	2,975	39,074	0	0	0	0	0	0	1,800	45,620	1
26-Apr-2019	26-Apr-2019	1	300	595	7,140	2,000	3,967	43,041	0	0	0	0	0	0	2,300	50,182	1
27-Apr-2019	27-Apr-2019	1	300	595	7,736	2,500	4,959	48,000	0	0	0	0	0	0	2,800	55,736	1
28-Apr-2019	28-Apr-2019	1	300	595	8,331	2,300	4,562	52,562	0	0	0	0	0	0	2,600	60,893	1
29-Apr-2019	29-Apr-2019	1	300	595	8,926	2,100	4,165	56,727	0	0	0	0	0	0	2,400	65,653	1
30-Apr-2019	30-Apr-2019	1	300	595	9,521	1,900	3,769	60,496	0	0	0	0	0	0	2,200	70,017	1
01-May-2019	01-May-2019	1	300	595	10,116	1,700	3,372	63,868	0	0	0	0	0	0	2,000	73,983	1
02-May-2019	02-May-2019	1	300	595	10,711	1,500	2,975	66,843	0	0	0	0	0	0	1,800	77,554	1
03-May-2019	03-May-2019	1	300	595	11,306	1,300	2,579	69,421	0	0	0	0	0	0	1,600	80,727	1
04-May-2019	04-May-2019	1	300	595	11,901	1,100	2,182	71,603	0	0	0	0	0	0	1,400	83,504	1
05-May-2019	05-May-2019	1	300	595	12,496	900	1,785	73,388	0	0	0	0	0	0	1,200	85,884	1
06-May-2019	06-May-2019	1	300	595	13,091	700	1,388	74,777	0	0	0	0	0	0	1,000	87,868	1
07-May-2019	07-May-2019	1	300	595	13,686	500	992	75,769	0	0	0	0	0	0	800	89,455	1
08-May-2019	08-May-2019	1	300	595	14,281	300	595	76,364	0	0	0	0	0	0	600	90,645	1
09-May-2019	09-May-2019	1	300	595	14,876	300	595	76,959	0	0	0	0	0	0	600	91,835	1
10-May-2019	10-May-2019	1	300	595	15,471	300	595	77,554	0	0	0	0	0	0	600	93,025	1
11-May-2019	11-May-2019	1	300	595	16,066	300	595	78,149	0	0	0	0	0	0	600	94,215	1
12-May-2019	12-May-2019	1	300	595	16,661	300	595	78,744	0	0	0	0	0	0	600	95,405	1
13-May-2019	13-May-2019	1	300	595	17,256	300	595	79,339	0	0	0	0	0	0	600	96,595	1
14-May-2019	14-May-2019	1	300	595	17,851	300	595	79,934	0	0	0	0	0	0	600	97,785	1
15-May-2019	15-May-2019	1	300	595	18,446	300	595	80,529	0	0	0	0	0	0	600	98,975	1
16-May-2019	16-May-2019	1	300	595	19,041	300	595	81,124	0	0	0	0	0	0	600	100,165	1
17-May-2019	17-May-2019	1	300	595	19,636	300	595	81,719	0	0	0	0	0	0	600	101,355	1
18-May-2019	18-May-2019	1	300	595	20,231	300	595	82,314	0	0	0	0	0	0	600	102,545	1
19-May-2019	19-May-2019	1	300	595	20,826	300	595	82,909	0	0	0	0	0	0	600	103,736	1
20-May-2019	20-May-2019	1	300	595	21,421	300	595	83,504	0	0	0	0	0	0	600	104,926	1
21-May-2019	21-May-2019	1	300	595	22,017	300	595	84,099	0	0	0	0	0	0	600	106,116	1
22-May-2019	22-May-2019	1	300	595	22,612	300	595	84,694	0	0	0	0	0	0	600	107,306	1
23-May-2019	23-May-2019	1	300	595	23,207	300	595	85,289	0	0	0	0	0	0	600	108,496	1
24-May-2019	24-May-2019	1	300	595	23,802	300	595	85,884	0	0	0	0	0	0	600	109,686	1
25-May-2019	25-May-2019	1	300	595	24,397	200	397	86,281	0	0	0	0	0	0	500	110,678	1
26-May-2019	26-May-2019	1	300	595	24,992	200	397	86,678	0	0	0	0	0	0	500	111,669	1
27-May-2019	27-May-2019	1	300	595	25,587	200	397	87,074	0	0	0	0	0	0	500	112,661	1
28-May-2019	28-May-2019	1	300	595	26,182	200	397	87,471	0	0	0	0	0	0	500	113,653	1
29-May-2019	29-May-2019	1	300	595	26,777	200	397	87,868	0	0	0	0	0	0	500	114,645	1
30-May-2019	30-May-2019	1	300	595	27,372	200	397	88,264	0	0	0	0	0	0	500	115,636	1
31-May-2019	31-May-2019	1	300	595	27,967	200	397	88,661	0	0	0	0	0	0	500	116,628	1
01-Jun-2019	01-Jun-2019	1	250	496	28,463	200	397	89,058	0	0	0	0	0	0	450	117,521	1
02-Jun-2019	02-Jun-2019	1	250	496	28,959	200	397	89,455	0	0	0	0	0	0	450	118,413	1
03-Jun-2019	03-Jun-2019	1	250	496	29,455	100	198	89,653	0	0	0	0	0	0	350	119,107	1
04-Jun-2019	04-Jun-2019	1	250	496	29,950	75	149	89,802	0	0	0	0	0	0	325	119,752	1
05-Jun-2019	05-Jun-2019	1	250	496	30,446	41	80	89,882	0	0	0	0	0	0	291	120,328	1
06-Jun-2019	06-Jun-2019	1	250	496	30,942	0	0	89,882	0	0	0	0	0	0	250	120,824	1
07-Jun-2019	07-Jun-2019	1	250	496	31,438	0	0	89,882	0	0	0	0	0	0	250	121,320	1
08-Jun-2019	30-Jun-2019	23	250	11,405	42,843	0	0	89,882	0	0	0	0	0	0	250	132,725	1
01-Jul-2019	31-Jul-2019	31	250	15,372	58,215	0	0	89,882	0	0	0	0	0	0	250	148,097	1
01-Aug-2019	31-Aug-2019	31	250	15,372	73,587	0	0	89,882	0	0	0	0	0	0	250	163,469	1
01-Sep-2019	30-Sep-2019	30	250	14,876	88,463	0	0	89,882	0	0	0	0	0	0	250	178,345	1
01-Oct-2019	01-Oct-2019	1	300	595	89,058	0	0	89,882	0	0	0	0	0	0	300	178,940	1
02-Oct-2019	02-Oct-2019	1	300	595	89,653	0	0	89,882	0	0	0	0	0	0	300	179,535	1
03-Oct-2019	03-Oct-2019	1	300	595	90,248	0	0	89,882	0	0	0	0	0	0	300	180,130	1
04-Oct-2019	04-Oct-2019	1	300	595	90,843	0	0	89,882	0	0	0	0	0	0	300	180,725	1
05-Oct-2019	05-Oct-2019	1	300	595	91,438	0	0	89,882	0	0	0	0	0	0	300	181,320	1
06-Oct-2019	06-Oct-2019	1	300	595	92,033	0	0	89,882	0	0	0	0	0	0	300	181,915	1
07-Oct-2019	07-Oct-2019	1	300	595	92,628	0											

Table 3
Proposed Tuolumne River Flow Schedule
Based on DWR Values, 60-20-20 Index for 2018, Hydrologic Conditions
Schedule For 2019-2020 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.	
19-Nov-2019	19-Nov-2019	1	300	595	118,215	0	0	95,832	0	0	0	0	0	0	300	214,047	1
20-Nov-2019	20-Nov-2019	1	300	595	118,810	0	0	95,832	0	0	0	0	0	0	300	214,642	1
21-Nov-2019	21-Nov-2019	1	300	595	119,405	0	0	95,832	0	0	0	0	0	0	300	215,237	1
22-Nov-2019	22-Nov-2019	1	300	595	120,000	0	0	95,832	0	0	0	0	0	0	300	215,832	1
23-Nov-2019	23-Nov-2019	1	300	595	120,595	0	0	95,832	0	0	0	0	0	0	300	216,427	1
24-Nov-2019	24-Nov-2019	1	300	595	121,190	0	0	95,832	0	0	0	0	0	0	300	217,022	1
25-Nov-2019	25-Nov-2019	1	300	595	121,785	0	0	95,832	0	0	0	0	0	0	300	217,617	1
26-Nov-2019	26-Nov-2019	1	300	595	122,380	0	0	95,832	0	0	0	0	0	0	300	218,212	1
27-Nov-2019	27-Nov-2019	1	300	595	122,975	0	0	95,832	0	0	0	0	0	0	300	218,807	1
28-Nov-2019	28-Nov-2019	1	300	595	123,570	0	0	95,832	0	0	0	0	0	0	300	219,402	1
29-Nov-2019	29-Nov-2019	1	300	595	124,165	0	0	95,832	0	0	0	0	0	0	300	219,997	1
30-Nov-2019	30-Nov-2019	1	300	595	124,760	0	0	95,832	0	0	0	0	0	0	300	220,592	1
01-Dec-2019	01-Dec-2019	1	300	595	125,355	0	0	95,832	0	0	0	0	0	0	300	221,187	1
02-Dec-2019	02-Dec-2019	1	300	595	125,950	0	0	95,832	0	0	0	0	0	0	300	221,782	1
03-Dec-2019	03-Dec-2019	1	300	595	126,545	0	0	95,832	0	0	0	0	0	0	300	222,377	1
04-Dec-2019	04-Dec-2019	1	300	595	127,140	0	0	95,832	0	0	0	0	0	0	300	222,972	1
05-Dec-2019	05-Dec-2019	1	300	595	127,736	0	0	95,832	0	0	0	0	0	0	300	223,568	1
06-Dec-2019	06-Dec-2019	1	300	595	128,331	0	0	95,832	0	0	0	0	0	0	300	224,163	1
07-Dec-2019	07-Dec-2019	1	300	595	128,926	0	0	95,832	0	0	0	0	0	0	300	224,758	1
08-Dec-2019	08-Dec-2019	1	300	595	129,521	0	0	95,832	0	0	0	0	0	0	300	225,353	1
09-Dec-2019	09-Dec-2019	1	300	595	130,116	0	0	95,832	0	0	0	0	0	0	300	225,948	1
10-Dec-2019	10-Dec-2019	1	300	595	130,711	0	0	95,832	0	0	0	0	0	0	300	226,543	1
11-Dec-2019	11-Dec-2019	1	300	595	131,306	0	0	95,832	0	0	0	0	0	0	300	227,138	1
12-Dec-2019	12-Dec-2019	1	300	595	131,901	0	0	95,832	0	0	0	0	0	0	300	227,733	1
13-Dec-2019	13-Dec-2019	1	300	595	132,496	0	0	95,832	0	0	0	0	0	0	300	228,328	1
14-Dec-2019	14-Dec-2019	1	300	595	133,091	0	0	95,832	0	0	0	0	0	0	300	228,923	1
15-Dec-2019	15-Dec-2019	1	300	595	133,686	0	0	95,832	0	0	0	0	0	0	300	229,518	1
16-Dec-2019	16-Dec-2019	1	300	595	134,281	0	0	95,832	0	0	0	0	0	0	300	230,113	1
17-Dec-2019	17-Dec-2019	1	300	595	134,876	0	0	95,832	0	0	0	0	0	0	300	230,708	1
18-Dec-2019	18-Dec-2019	1	300	595	135,471	0	0	95,832	0	0	0	0	0	0	300	231,303	1
19-Dec-2019	19-Dec-2019	1	300	595	136,066	0	0	95,832	0	0	0	0	0	0	300	231,898	1
20-Dec-2019	20-Dec-2019	1	300	595	136,661	0	0	95,832	0	0	0	0	0	0	300	232,493	1
21-Dec-2019	21-Dec-2019	1	300	595	137,256	0	0	95,832	0	0	0	0	0	0	300	233,088	1
22-Dec-2019	22-Dec-2019	1	300	595	137,851	0	0	95,832	0	0	0	0	0	0	300	233,683	1
23-Dec-2019	23-Dec-2019	1	300	595	138,446	0	0	95,832	0	0	0	0	0	0	300	234,278	1
24-Dec-2019	24-Dec-2019	1	300	595	139,041	0	0	95,832	0	0	0	0	0	0	300	234,873	1
25-Dec-2019	25-Dec-2019	1	300	595	139,636	0	0	95,832	0	0	0	0	0	0	300	235,468	1
26-Dec-2019	26-Dec-2019	1	300	595	140,231	0	0	95,832	0	0	0	0	0	0	300	236,063	1
27-Dec-2019	27-Dec-2019	1	300	595	140,826	0	0	95,832	0	0	0	0	0	0	300	236,658	1
28-Dec-2019	28-Dec-2019	1	300	595	141,421	0	0	95,832	0	0	0	0	0	0	300	237,253	1
29-Dec-2019	29-Dec-2019	1	300	595	142,017	0	0	95,832	0	0	0	0	0	0	300	237,849	1
30-Dec-2019	30-Dec-2019	1	300	595	142,612	0	0	95,832	0	0	0	0	0	0	300	238,444	1
31-Dec-2019	31-Dec-2019	1	300	595	143,207	0	0	95,832	0	0	0	0	0	0	300	239,039	1
01-Jan-2020	01-Jan-2020	1	300	595	143,802	0	0	95,832	0	0	0	0	0	0	300	239,634	1
02-Jan-2020	02-Jan-2020	1	300	595	144,397	0	0	95,832	0	0	0	0	0	0	300	240,229	1
03-Jan-2020	03-Jan-2020	1	300	595	144,992	0	0	95,832	0	0	0	0	0	0	300	240,824	1
04-Jan-2020	04-Jan-2020	1	300	595	145,587	0	0	95,832	0	0	0	0	0	0	300	241,419	1
05-Jan-2020	05-Jan-2020	1	300	595	146,182	0	0	95,832	0	0	0	0	0	0	300	242,014	1
06-Jan-2020	06-Jan-2020	1	300	595	146,777	0	0	95,832	0	0	0	0	0	0	300	242,609	1
07-Jan-2020	07-Jan-2020	1	300	595	147,372	0	0	95,832	0	0	0	0	0	0	300	243,204	1
08-Jan-2020	08-Jan-2020	1	300	595	147,967	0	0	95,832	0	0	0	0	0	0	300	243,799	1
09-Jan-2020	09-Jan-2020	1	300	595	148,562	0	0	95,832	0	0	0	0	0	0	300	244,394	1
10-Jan-2020	10-Jan-2020	1	300	595	149,157	0	0	95,832	0	0	0	0	0	0	300	244,989	1
11-Jan-2020	11-Jan-2020	1	300	595	149,752	0	0	95,832	0	0	0	0	0	0	300	245,584	1
12-Jan-2020	12-Jan-2020	1	300	595	150,347	0	0	95,832	0	0	0	0	0	0	300	246,179	1
13-Jan-2020	13-Jan-2020	1	300	595	150,942	0	0	95,832	0	0	0	0	0	0	300	246,774	1
14-Jan-2020	14-Jan-2020	1	300	595	151,537	0	0	95,832	0	0	0	0	0	0	300	247,369	1
15-Jan-2020	15-Jan-2020	1	300	595	152,132	0	0	95,832	0	0	0	0	0	0	300	247,964	1
16-Jan-2020	16-Jan-2020	1	300	595	152,727	0	0	95,832	0	0	0	0	0	0	300	248,559	1
17-Jan-2020	17-Jan-2020	1	300	595	153,322	0	0	95,832	0	0	0	0	0	0	300	249,154	1
18-Jan-2020	18-Jan-2020	1	300	595	153,917	0	0	95,832	0	0	0	0	0	0	300	249,749	1
19-Jan-2020	19-Jan-2020	1	300	595	154,512	0	0	95,832	0	0	0	0	0	0	300	250,344	1
20-Jan-2020	20-Jan-2020	1	300	595	155,107	0	0	95,832	0	0	0	0	0	0	300	250,939	1
21-Jan-2020	21-Jan-2020	1	300	595	155,702	0	0	95,832	0	0	0	0	0	0	300	251,534	1
22-Jan-2020	22-Jan-2020	1	300	595	156,298	0	0	95,832	0	0	0	0	0	0	300	252,129	1
23-Jan-2020	23-Jan-2020	1	300	595	156,893	0	0	95,832	0	0	0	0	0	0	300	252,725	

Table 3
Proposed Tuolumne River Flow Schedule
Based on DWR Values, 60-20-20 Index for 2018, Hydrologic Conditions
Schedule For 2019-2020 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.	
05-Mar-2020	05-Mar-2020	1	300	595	181,884	0	0	95,832	0	0	0	0	0	0	300	277,716	
06-Mar-2020	06-Mar-2020	1	300	595	182,479	0	0	95,832	0	0	0	0	0	0	300	278,311	
07-Mar-2020	07-Mar-2020	1	300	595	183,074	0	0	95,832	0	0	0	0	0	0	300	278,906	
08-Mar-2020	08-Mar-2020	1	300	595	183,669	0	0	95,832	0	0	0	0	0	0	300	279,501	
09-Mar-2020	09-Mar-2020	1	300	595	184,264	0	0	95,832	0	0	0	0	0	0	300	280,096	
10-Mar-2020	10-Mar-2020	1	300	595	184,859	0	0	95,832	0	0	0	0	0	0	300	280,691	
11-Mar-2020	11-Mar-2020	1	300	595	185,455	0	0	95,832	0	0	0	0	0	0	300	281,287	
12-Mar-2020	12-Mar-2020	1	300	595	186,050	0	0	95,832	0	0	0	0	0	0	300	281,882	
13-Mar-2020	13-Mar-2020	1	300	595	186,645	0	0	95,832	0	0	0	0	0	0	300	282,477	
14-Mar-2020	14-Mar-2020	1	300	595	187,240	0	0	95,832	0	0	0	0	0	0	300	283,072	
15-Mar-2020	15-Mar-2020	1	300	595	187,835	0	0	95,832	0	0	0	0	0	0	300	283,667	
16-Mar-2020	16-Mar-2020	1	300	595	188,430	0	0	95,832	0	0	0	0	0	0	300	284,262	
17-Mar-2020	17-Mar-2020	1	300	595	189,025	0	0	95,832	0	0	0	0	0	0	300	284,857	
18-Mar-2020	18-Mar-2020	1	300	595	189,620	0	0	95,832	0	0	0	0	0	0	300	285,452	
19-Mar-2020	19-Mar-2020	1	300	595	190,215	0	0	95,832	0	0	0	0	0	0	300	286,047	
20-Mar-2020	20-Mar-2020	1	300	595	190,810	0	0	95,832	0	0	0	0	0	0	300	286,642	
21-Mar-2020	21-Mar-2020	1	300	595	191,405	0	0	95,832	0	0	0	0	0	0	300	287,237	
22-Mar-2020	22-Mar-2020	1	300	595	192,000	0	0	95,832	0	0	0	0	0	0	300	287,832	
23-Mar-2020	23-Mar-2020	1	300	595	192,595	0	0	95,832	0	0	0	0	0	0	300	288,427	
24-Mar-2020	24-Mar-2020	1	300	595	193,190	0	0	95,832	0	0	0	0	0	0	300	289,022	
25-Mar-2020	25-Mar-2020	1	300	595	193,785	0	0	95,832	0	0	0	0	0	0	300	289,617	
26-Mar-2020	26-Mar-2020	1	300	595	194,380	0	0	95,832	0	0	0	0	0	0	300	290,212	
27-Mar-2020	27-Mar-2020	1	300	595	194,975	0	0	95,832	0	0	0	0	0	0	300	290,807	
28-Mar-2020	28-Mar-2020	1	300	595	195,570	0	0	95,832	0	0	0	0	0	0	300	291,402	
29-Mar-2020	29-Mar-2020	1	300	595	196,165	0	0	95,832	0	0	0	0	0	0	300	291,997	
30-Mar-2020	30-Mar-2020	1	300	595	196,760	0	0	95,832	0	0	0	0	0	0	300	292,592	
31-Mar-2020	31-Mar-2020	1	300	595	197,355	0	0	95,832	0	0	0	0	0	0	300	293,187	
01-Apr-2020	01-Apr-2020	1	300	595	197,950	0	0	95,832	0	0	0	0	0	0	300	293,782	
02-Apr-2020	02-Apr-2020	1	300	595	198,545	0	0	95,832	0	0	0	0	0	0	300	294,377	
03-Apr-2020	03-Apr-2020	1	300	595	199,140	0	0	95,832	0	0	0	0	0	0	300	294,972	
04-Apr-2020	04-Apr-2020	1	300	595	199,736	0	0	95,832	0	0	0	0	0	0	300	295,568	
05-Apr-2020	05-Apr-2020	1	300	595	200,331	0	0	95,832	0	0	0	0	0	0	300	296,163	
06-Apr-2020	06-Apr-2020	1	300	595	200,926	0	0	95,832	0	0	0	0	0	0	300	296,758	
07-Apr-2020	07-Apr-2020	1	300	595	201,521	0	0	95,832	0	0	0	0	0	0	300	297,353	
08-Apr-2020	08-Apr-2020	1	300	595	202,116	0	0	95,832	0	0	0	0	0	0	300	297,948	
09-Apr-2020	09-Apr-2020	1	300	595	202,711	0	0	95,832	0	0	0	0	0	0	300	298,543	
10-Apr-2020	10-Apr-2020	1	300	595	203,306	0	0	95,832	0	0	0	0	0	0	300	299,138	
11-Apr-2020	11-Apr-2020	1	300	595	203,901	0	0	95,832	0	0	0	0	0	0	300	299,733	
12-Apr-2020	12-Apr-2020	1	300	595	204,496	0	0	95,832	0	0	0	0	0	0	300	300,328	
13-Apr-2020	13-Apr-2020	1	300	595	205,091	0	0	95,832	0	0	0	0	0	0	300	300,923	
No. of days		365															

1 cfs day = 1.983471 acre-feet (af)

- Total accumulation amount pertains to 2018-2019 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.

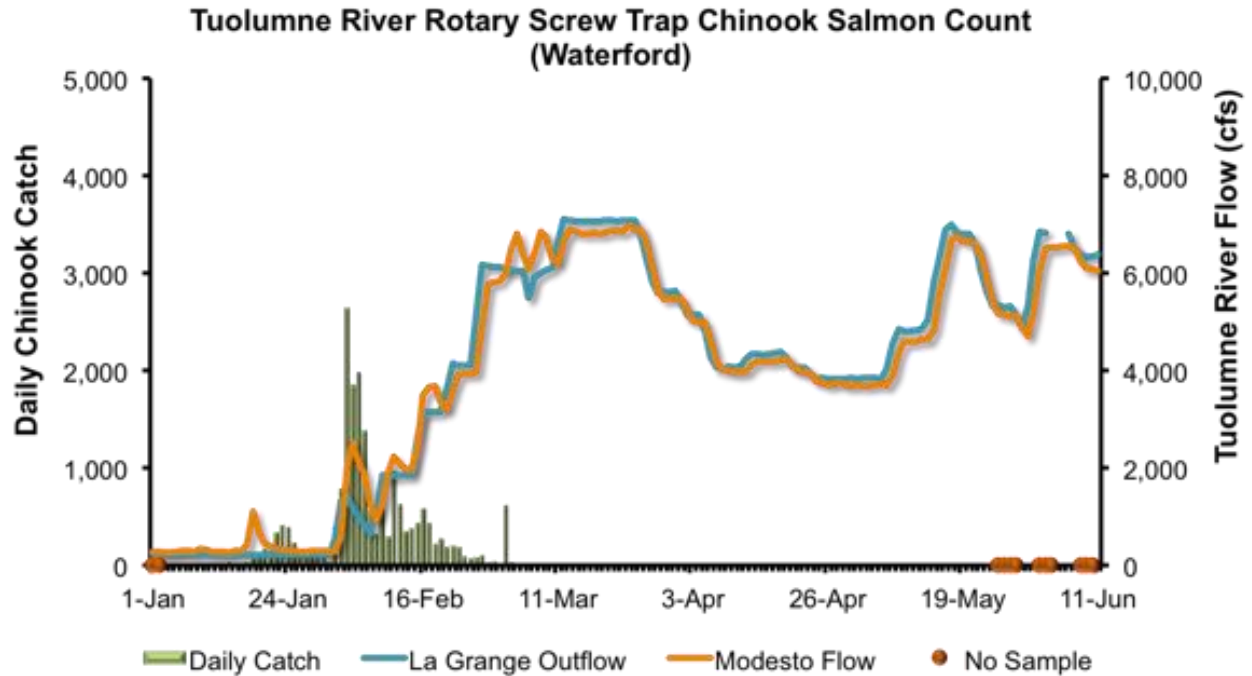


Figure 1. Daily Chinook catch at Waterford and Tuolumne River flow at La Grange and Modesto. Total catch through 6/11/19 = 19,840 Chinook. Zero *O. mykiss* captured to date in 2019.

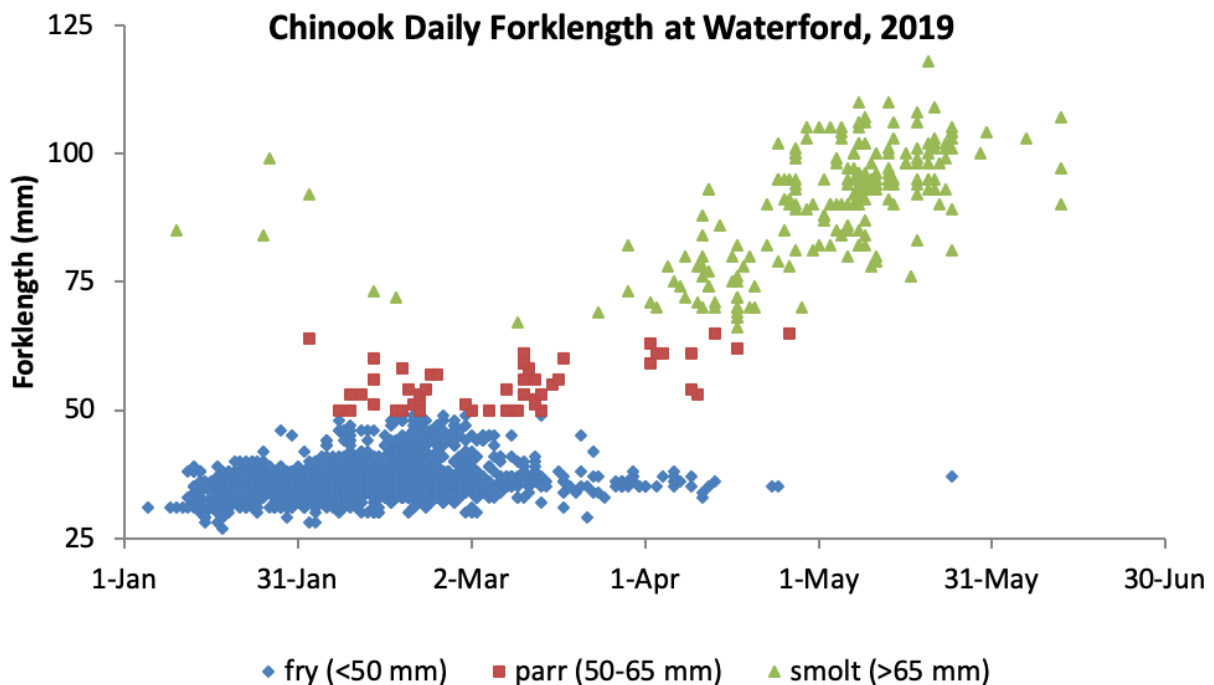


Figure 2. Daily forklength by lifestage of Chinook captured at Waterford, 2019.

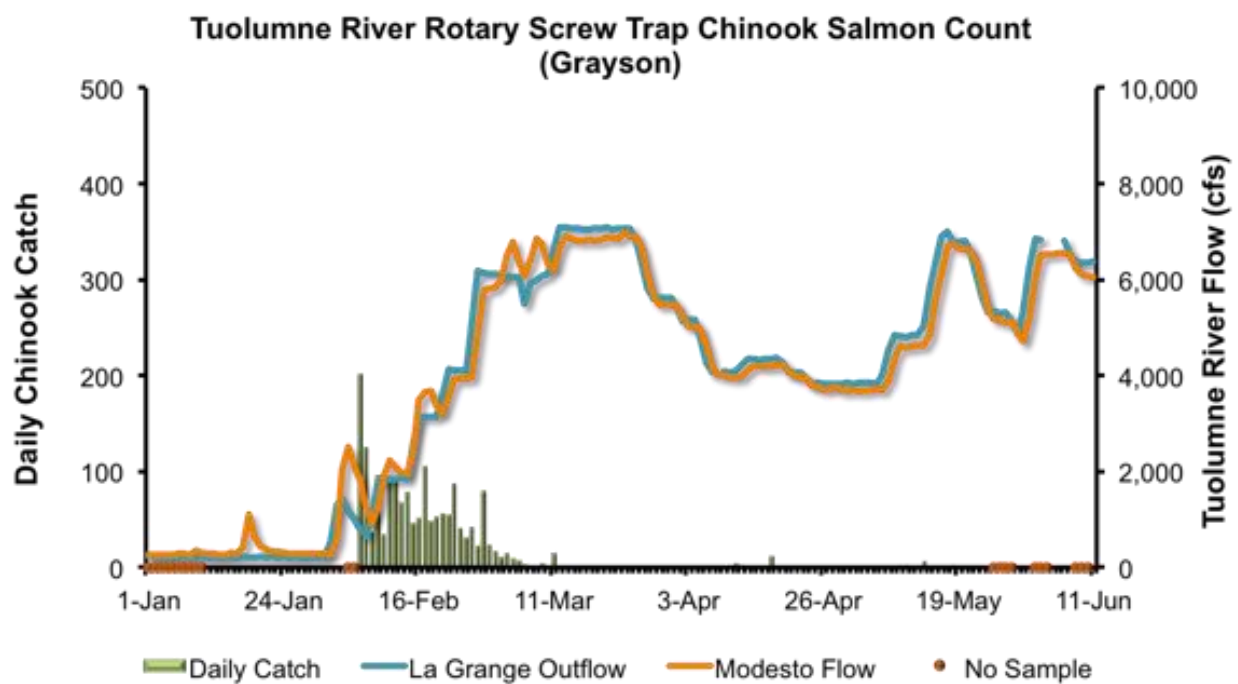


Figure 3. Daily Chinook catch at Grayson and Tuolumne River flow at La Grange and Modesto. Total catch through 6/11/19 = 1,767 Chinook. Zero *O. mykiss* captured to date in 2019.

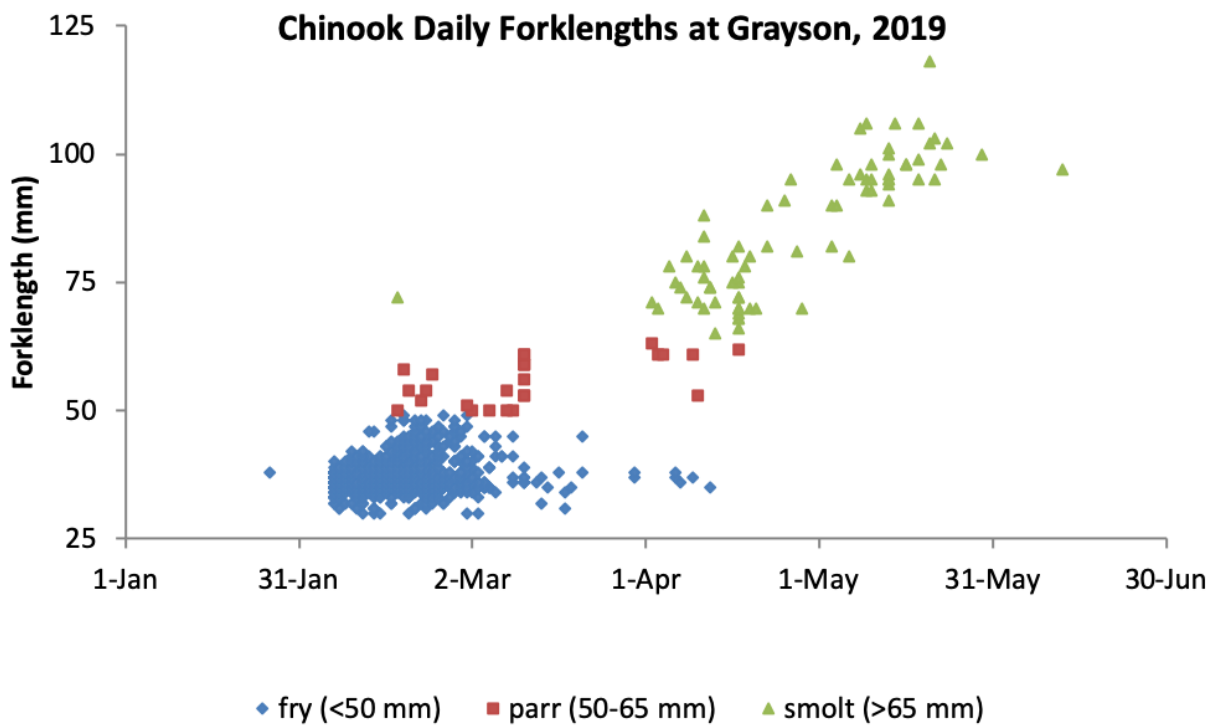


Figure 4. Daily forklength by lifestage of Chinook captured at Grayson, 2019.

Minimum, Average and Maximum Lengths of Chinook and *O. mykiss* Captured During Seining Surveys, 2019

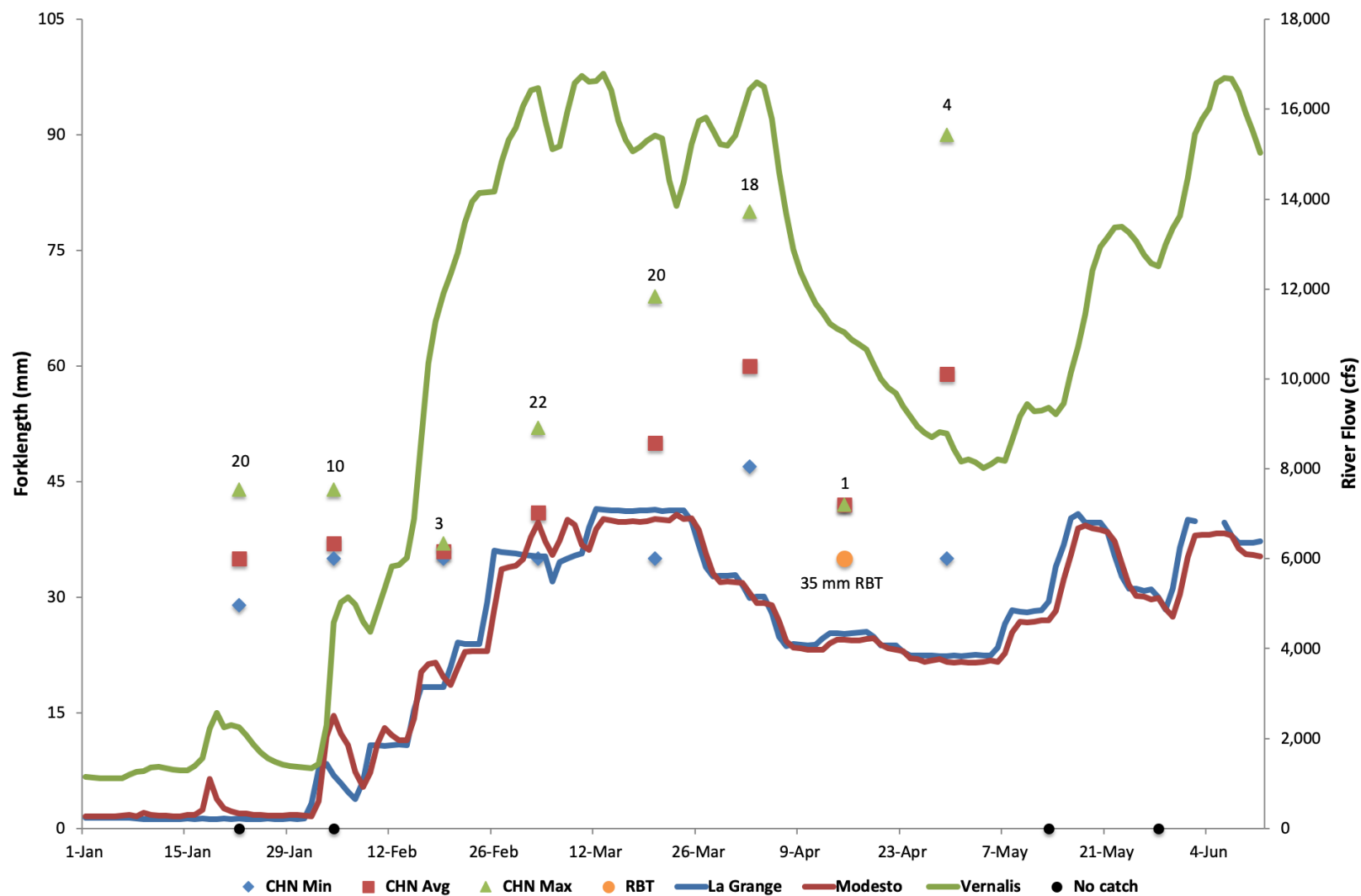


Figure 5. Minimum, average and maximum length of Chinook salmon captured in the Tuolumne and San Joaquin river seine surveys. One *O. mykiss* was captured on 4/15/19 (35 mm). Total daily Chinook catch is noted above the maximum length of each sampling event.

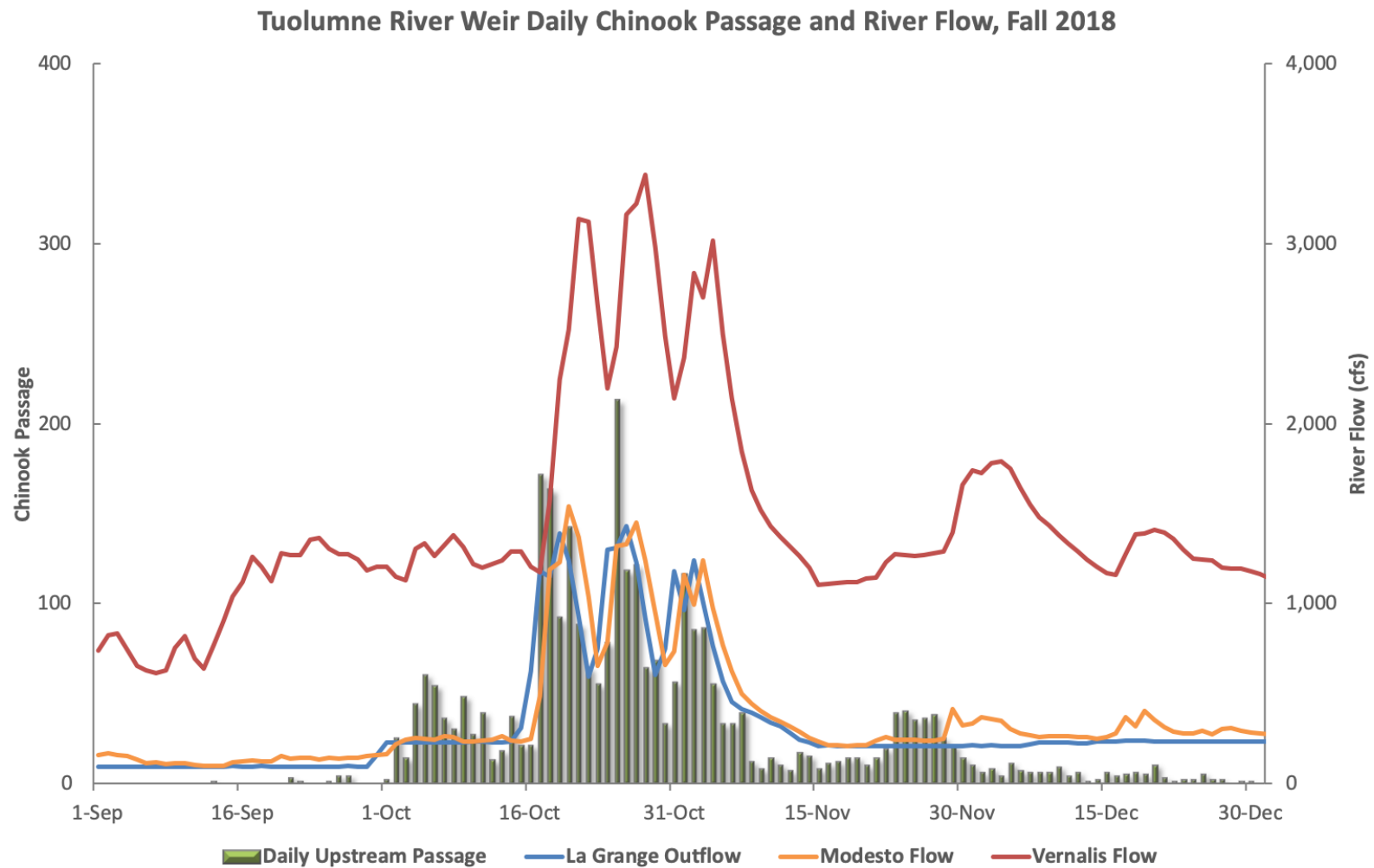


Figure 6. Tuolumne River weir daily Chinook salmon passage and Tuolumne and San Joaquin River flow, fall 2018.

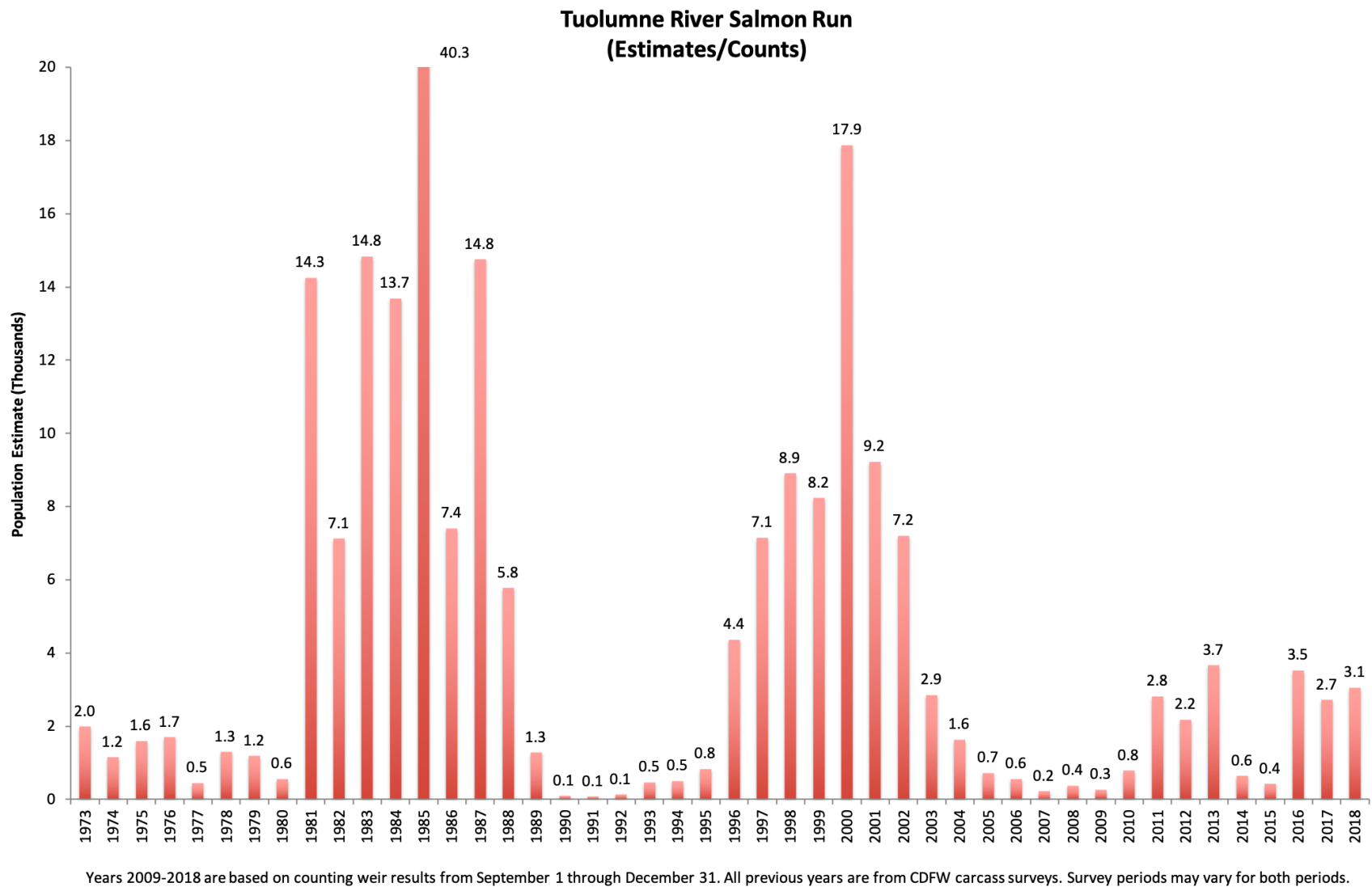


Figure 7. Tuolumne River annual Chinook salmon estimates (CDFW 1973-2008) and weir passages (FISHBIO 2009-2018).

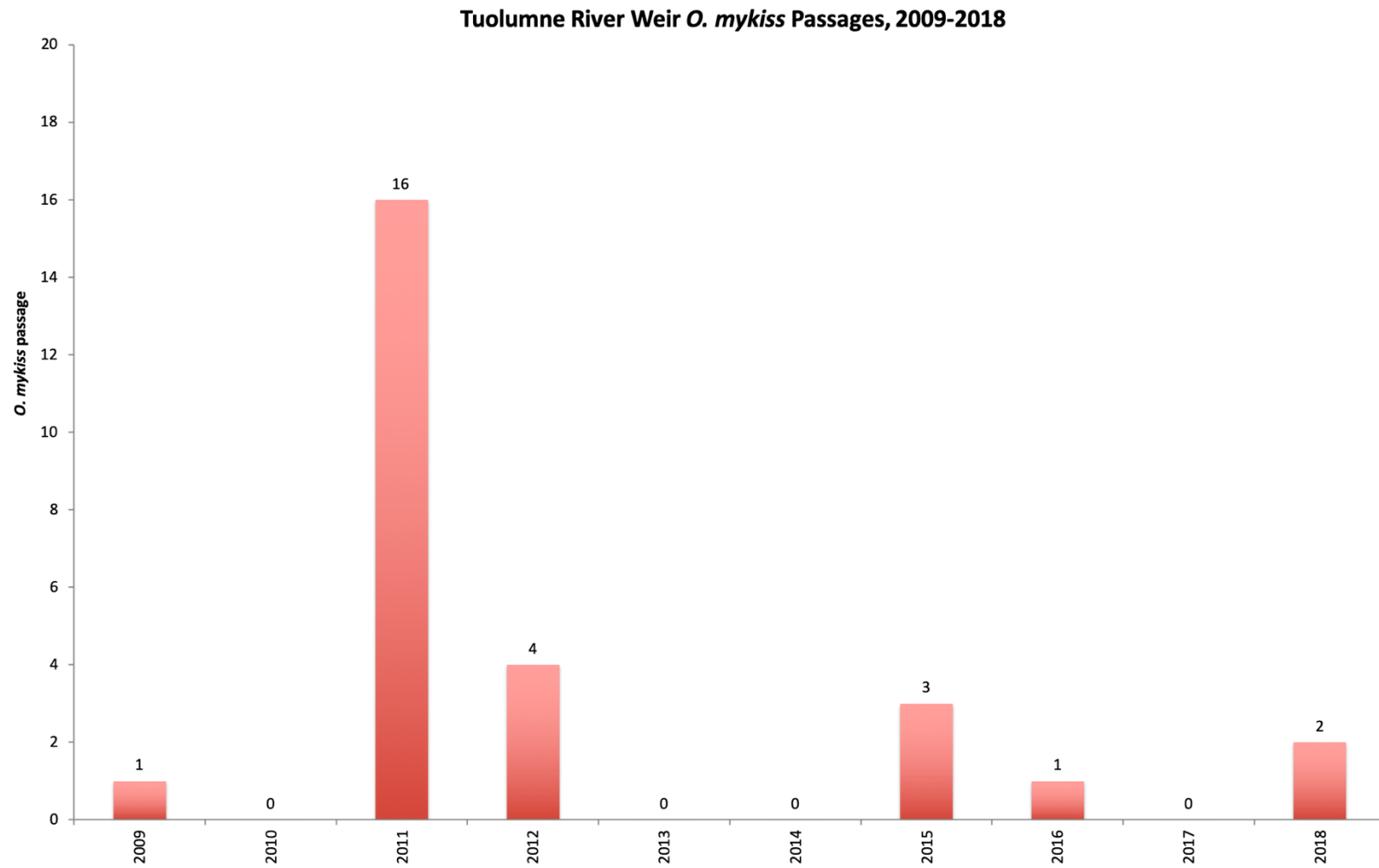


Figure 8. Tuolumne River Weir annual *O. mykiss* passages, 2009-2018.