

October 10, 2022

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RE: Project 2299 – Update of Water Year Classification Index and Flow Schedule for the Tuolumne River

Dear Fishery Agency Representatives:

The final 60-20-20 San Joaquin Basin Index or calculation for 2022 resulted in a value of 1,557, 993 or a **MEDIAN CRITICAL** FERC classification for the Tuolumne River. This is shown on **Table 1** along with the DWR updates to their monthly forecasts for the 2022 Water Year.

Based on the final index, a revised flow schedule for the 106,142 AF required by FERC is shown in **Table 2**. Note that under the final index and calculations, there is an additional 8,999 A.F. of water to be allocated. Based on previous discussions with the fishery agencies, the additional water has been placed into a pulse flow from October 17th through October 21st.

The Article 38 '45-Day Period' typically will begin October 17 and end November 30, the standard practice. However, this year, to accommodate the fisheries agencies timing of the pulse flows, the Article 38 '45-Day Period' for fall of 2022 will begin November 26th and end December 31st, as was done in 2018 to accommodate a similar fisheries request on the pulse flow timing. In accordance with Article 38, reduction in river height between the end of the 45-day period and March 31 shall not exceed four inches (0.33 feet) below the average height established during the 45-day period (measured at Old La Grange Bridge). Using the scheduled daily flow data from the schedule, we have calculated the average flow of 150 cfs for the 45-day period, which corresponds to a river height of 169.530 feet at the Old La Grange Bridge based on the USGS 1996 rating table. The current minimum flow requirement of 150 cfs through March 31 exceeds the 4-inch reduction level of 63 cfs represented by a gage elevation of 169.20 feet as shown on **Table 3**.

The 1996 FERC Order, Amended Article 37, contained a Water Year Classification Index for determining the volume of scheduled stream flows for each fish flow year. The classifications were based on the San Joaquin Basin 60-20-20 Indices for water years 1906-1995. The order stated, "60-20-20 index numbers used each year shall be updated to incorporate subsequent water years pursuant to standard Department of Water Resources (DWR) procedures so as to maintain approximately the same frequency distribution of water year types." The index is now updated to incorporate water years through 2022 **Table 4**. While the frequency distribution remains the same, some index numbers may change slightly with each annual update to maintain the frequency distribution. This index will be used for the next year's minimum flow calculations.

If there are any questions, please contact Wes Monier at (209)-883-8321 or via email at fwmonier@tid.org.

Very Truly Yours,



Michael I. Cooke
Director of Water Resources and Regulatory Affairs

C: Michelle Reimers – General Manager, TID
Ed Franciosa – General Manager, MID
Dennis Herrera – General Manager, SFPUC
Kimberly Bose – Secretary, Office of the Secretary, FERC

Enclosures: Tables 1, 2, 3 & 4

Table 1

SAN JOAQUIN VALLEY WATER YEAR HYDROLOGIC CLASSIFICATION

602020 INDEX

60-20-20 YEAR	APRIL-JULY RUNOFF (AF)					OCTOBER-MARCH RUNOFF (AF)					602020 INDEX	TUOLUMNE RIVER MINIMUM FLOW REQUIREMENT	San Joaquin Index (not the FERC Index)	FERC Index RANKING	
	STANISLAUS	TUOLUMNE	MERCED	FRIANT	TOTAL	STANISLAUS	TUOLUMNE	MERCED	FRIANT	TOTAL					
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	
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	
Feb 1 Forecast															
Dry	340,000	640,000	300,000	670,000	1,950,000	339,984	524,980	234,986	454,942	1,554,892	1,744,518	111,142	Critical	MEDIAN CRITICAL WATER YEAR	
Average	640,000	1,060,000	540,000	1,170,000	3,410,000	439,000	640,000	306,000	522,000	1,907,000	2,690,939	180,516	Below Normal	MEDIAN BELOW NORMAL	
Wet	1,140,000	1,830,000	940,000	1,890,000	5,800,000	644,984	899,980	454,986	754,942	2,754,892	4,294,518	300,923	Wet	INTERMEDIATE AN-W	
Feb 08 Update															
Dry	310,000	580,000	270,000	630,000	1,790,000	319,985	494,981	214,988	444,948	1,474,902	1,632,520	108,140	Critical	MEDIAN CRITICAL WATER YEAR	
Average	590,000	980,000	490,000	1,090,000	3,150,000	405,000	596,000	273,000	503,000	1,777,000	2,508,939	154,660	Below Normal	INTERMEDIATE D-BN	
Wet	1,060,000	1,720,000	870,000	1,770,000	5,420,000	584,985	829,981	399,988	719,948	2,534,902	4,022,520	300,923	Wet	INTERMEDIATE AN-W	
Feb 15 Update															
Dry	290,000	510,000	230,000	560,000	1,590,000	314,986	464,983	199,990	444,957	1,424,916	1,502,523	104,656	Critical	MEDIAN CRITICAL WATER YEAR	
Average	540,000	890,000	430,000	950,000	2,810,000	386,000	548,000	250,000	507,000	1,691,000	2,287,739	137,464	Dry	MEDIAN DRY	
Wet	980,000	1,550,000	790,000	1,580,000	4,900,000	549,986	739,983	364,990	719,957	2,374,916	3,678,523	300,923	Above Normal	MEDIAN ABOVE NORMAL	
Feb 22 Update															
Dry	270,000	480,000	200,000	510,000	1,460,000	284,990	429,983	159,993	369,962	1,244,928	1,388,525	94,000	Critical	CRITICAL WATER YEAR AND BELOW	
Average	500,000	810,000	390,000	900,000	2,600,000	370,000	538,000	233,000	482,000	1,623,000	2,148,139	126,928	Dry	INTERMEDIATE C-D WATER YEAR	
Wet	900,000	1,400,000	730,000	1,440,000	4,470,000	434,990	569,983	269,993	514,962	1,789,928	3,303,525	300,923	Above Normal	INTERMEDIATE BN-AN	
Mar 1 Forecast															
Dry	220,000	430,000	185,000	470,000	1,305,000	314,991	474,988	199,995	444,963	1,434,937	1,333,527	94,000	Critical	CRITICAL WATER YEAR AND BELOW	
Average	440,000	730,000	350,000	850,000	2,370,000	361,000	523,000	230,000	478,000	1,623,000	2,003,939	119,179	Critical	INTERMEDIATE C-D WATER YEAR	
Wet	820,000	1,310,000	680,000	1,370,000	4,180,000	459,991	649,988	299,995	609,963	2,019,937	3,175,527	300,923	Above Normal	INTERMEDIATE BN-AN	
Mar 08 Update															
Dry	230,000	430,000	190,000	490,000	1,340,000	314,993	469,988	199,994	449,964	1,434,939	1,354,527	94,000	Critical	CRITICAL WATER YEAR AND BELOW	
Average	430,000	700,000	340,000	840,000	2,310,000	353,000	513,000	221,000	474,000	1,561,000	1,961,739	116,964	Critical	MEDIAN CRITICAL WATER YEAR	
Wet	730,000	1,170,000	610,000	1,270,000	3,780,000	424,993	614,988	279,994	584,964	1,904,939	2,912,527	250,262	Below Normal	MEDIAN BELOW NORMAL	
Mar 15 Update															
Dry	240,000	430,000	185,000	500,000	1,355,000	314,990	459,987	194,996	449,965	1,419,938	1,360,527	94,000	Critical	CRITICAL WATER YEAR AND BELOW	
Average	420,000	670,000	320,000	810,000	2,220,000	345,000	487,000	211,000	470,000	1,513,000	1,898,139	115,259	Critical	MEDIAN CRITICAL WATER YEAR	
Wet	680,000	1,080,000	540,000	1,170,000	3,470,000	409,990	569,987	249,996	569,965	1,799,938	2,705,527	185,108	Below Normal	MEDIAN BELOW NORMAL	
Mar 22 Update															
Dry	240,000	410,000	170,000	460,000	1,280,000	309,992	444,992	194,994	444,965	1,394,943	1,310,528	94,000	Critical	CRITICAL WATER YEAR AND BELOW	
Average	390,000	630,000	290,000	750,000	2,060,000	332,000	472,000	209,000	460,000	1,473,000	1,794,139	112,472	Critical	MEDIAN CRITICAL WATER YEAR	
Wet	640,000	1,030,000	500,000	1,060,000	3,230,000	389,992	539,992	254,994	549,965	1,734,943	2,548,528	157,746	Below Normal	INTERMEDIATE D-BN	
Mar 28 Update															
Dry	220,000	390,000	150,000	400,000	1,160,000	324,995	469,992	204,997	454,969	1,454,953	1,250,530	94,000	Critical	CRITICAL WATER YEAR AND BELOW	
Average	350,000	590,000	260,000	670,000	1,870,000	360,000	507,000	230,000	489,000	1,586,000	1,702,739	110,022	Critical	MEDIAN CRITICAL WATER YEAR	
Wet	590,000	980,000	460,000	950,000	2,980,000	434,995	599,992	289,997	584,969	1,909,953	2,433,530	148,784	Dry	INTERMEDIATE D-BN	
April 1 Forecast															
Dry	190,000	380,000	155,000	410,000	1,135,000	357,000	505,000	232,000	487,000	1,581,000	1,260,739	94,000	Critical	CRITICAL WATER YEAR AND BELOW	
Average	310,000	570,000	260,000	670,000	1,810,000	357,000	505,000	232,000	487,000	1,581,000	1,665,739	109,031	Critical	MEDIAN CRITICAL WATER YEAR	
Wet	540,000	940,000	440,000	940,000	2,860,000	357,000	505,000	232,000	487,000	1,581,000	2,295,739	138,082	Dry	MEDIAN DRY	
Apr 12 Update															
Dry	195,000	395,000	180,000	445,000	1,215,000	357,000	505,000	232,000	487,000	1,581,000	1,308,739	94,000	Critical	CRITICAL WATER YEAR AND BELOW	
Average	290,000	550,000	250,000	620,000	1,710,000	357,000	505,000	232,000	487,000	1,581,000	1,605,739	107,423	Critical	MEDIAN CRITICAL WATER YEAR	
Wet	470,000	815,000	405,000	850,000	2,540,000	357,000	505,000	232,000	487,000	1,581,000	2,103,739	124,542	Dry	INTERMEDIATE C-D WATER YEAR	
Apr 19 Update															
Dry	225,000	430,000	180,000	480,000	1,315,000	357,000	505,000	232,000	487,000	1,581,000	1,368,739	94,000	Critical	CRITICAL WATER YEAR AND BELOW	
Average	310,000	560,000	250,000	620,000	1,740,000	357,000	505,000	232,000	487,000	1,581,000	1,623,739	107,905	Critical	MEDIAN CRITICAL WATER YEAR	
Wet	460,000	765,000	375,000	800,000	2,400,000	357,000	505,000	232,000	487,000	1,581,000	2,019,739	120,028	Critical	INTERMEDIATE C-D WATER YEAR	
Apr 26 Update															
Dry	270,000	480,000	210,000	500,000	1,460,000	357,000	505,000	232,000	487,000	1,581,000	1,455,739	103,403	Critical	MEDIAN CRITICAL WATER YEAR	
Average	350,000	600,000	260,000	620,000	1,830,000	357,000	505,000	232,000	487,000	1,581,000	1,677,739	109,352	Critical	MEDIAN CRITICAL WATER YEAR	
Wet	480,000	800,000	380,000	790,000	2,450,000	357,000	505,000	232,000	487,000	1,581,000	2,049,739	121,640	Critical	INTERMEDIATE C-D WATER YEAR	
May 1 Forecast															
Dry	270,000	480,000	210,000	500,000	1,460,000	357,000	505,000	232,000	487,000	1,581,000	1,455,739	103,403	Critical	MEDIAN CRITICAL WATER YEAR	
Average	330,000	560,000	250,000	570,000	1,710,000	357,000	505,000	232,000	487,000	1,581,000	1,605,739	107,423	Critical	MEDIAN CRITICAL WATER YEAR	
Wet	460,000	760,000	370,000	730,000	2,320,000	357,000	505,000	232,000	487,000	1,581,000	1,971,739	117,449	Critical	INTERMEDIATE C-D WATER YEAR	
May 10 Update															

Table 1

SAN JOAQUIN VALLEY WATER YEAR HYDROLOGIC CLASSIFICATION

602020 INDEX

60-20-20 YEAR	APRIL-JULY RUNOFF (AF)					OCTOBER-MARCH RUNOFF (AF)					602020 INDEX	TUOLUMNE RIVER MINIMUM FLOW REQUIREMENT	San Joaquin Index	FERC Index	
	STANISLAUS	TUOLUMNE	MERCED	FRIANT	TOTAL	STANISLAUS	TUOLUMNE	MERCED	FRIANT	TOTAL			(not the FERC Index)	RANKING	
Dry	260,000	470,000	210,000	500,000	1,440,000	357,000	505,000	232,000	487,000	1,581,000	1,443,739	103,081	Critical	MEDIAN CRITICAL WATER YEAR	
Average	310,000	540,000	250,000	560,000	1,660,000	357,000	505,000	232,000	487,000	1,581,000	1,575,739	106,619	Critical	MEDIAN CRITICAL WATER YEAR	
Wet	410,000	690,000	320,000	700,000	2,120,000	357,000	505,000	232,000	487,000	1,581,000	1,851,739	114,016	Critical	MEDIAN CRITICAL WATER YEAR	
May 17 Update															
Dry	270,000	480,000	220,000	500,000	1,470,000	357,000	505,000	232,000	487,000	1,581,000	1,461,739	103,563	Critical	MEDIAN CRITICAL WATER YEAR	
Average	300,000	540,000	250,000	550,000	1,640,000	357,000	505,000	232,000	487,000	1,581,000	1,563,739	106,297	Critical	MEDIAN CRITICAL WATER YEAR	
Wet	380,000	640,000	300,000	650,000	1,970,000	357,000	505,000	232,000	487,000	1,581,000	1,761,739	111,604	Critical	MEDIAN CRITICAL WATER YEAR	
May 24 Update															
Dry	270,000	480,000	220,000	500,000	1,470,000	357,000	505,000	232,000	487,000	1,581,000	1,461,739	103,563	Critical	MEDIAN CRITICAL WATER YEAR	
Average	300,000	530,000	250,000	540,000	1,620,000	357,000	505,000	232,000	487,000	1,581,000	1,551,739	105,976	Critical	MEDIAN CRITICAL WATER YEAR	
Wet	340,000	580,000	280,000	610,000	1,810,000	357,000	505,000	232,000	487,000	1,581,000	1,665,739	109,031	Critical	MEDIAN CRITICAL WATER YEAR	
May 31 Update															
Dry	280,000	490,000	235,000	500,000	1,505,000	357,000	505,000	232,000	487,000	1,581,000	1,482,739	104,126	Critical	MEDIAN CRITICAL WATER YEAR	
Average	300,000	530,000	250,000	540,000	1,620,000	357,000	505,000	232,000	487,000	1,581,000	1,551,739	105,976	Critical	MEDIAN CRITICAL WATER YEAR	
Wet	330,000	570,000	280,000	590,000	1,770,000	357,000	505,000	232,000	487,000	1,581,000	1,641,739	108,388	Critical	MEDIAN CRITICAL WATER YEAR	

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 FERCC 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-2022	Fri	15-Apr-2022	Fri	1	150	298	298	0	0	0	0	0	0	0	0	0	Yes
16-Apr-2022	Sat	16-Apr-2022	Sat	1	150	298	595	1,350	2,679	2,679	0	0	0	0	0	0	Yes
17-Apr-2022	Sun	17-Apr-2022	Sun	1	150	298	893	1,100	2,182	4,860	0	0	0	0	0	0	Yes
18-Apr-2022	Mon	18-Apr-2022	Mon	1	150	298	1,190	875	1,736	6,596	0	0	0	0	0	0	Yes
19-Apr-2022	Tue	19-Apr-2022	Tue	1	150	298	1,488	666	1,321	7,917	0	0	0	0	0	0	Yes
20-Apr-2022	Wed	20-Apr-2022	Wed	1	150	298	1,785	550	1,091	9,008	0	0	0	0	0	0	Yes
21-Apr-2022	Thu	21-Apr-2022	Thu	1	150	298	2,083	400	793	9,801	0	0	0	0	0	0	Yes
22-Apr-2022	Fri	22-Apr-2022	Fri	1	150	298	2,380	300	595	10,396	0	0	0	0	0	0	Yes
23-Apr-2022	Sat	23-Apr-2022	Sat	1	150	298	2,678	202	401	10,797	0	0	0	0	0	0	Yes
24-Apr-2022	Sun	24-Apr-2022	Sun	1	150	298	2,975	98	194	10,992	0	0	0	0	0	0	Yes
25-Apr-2022	Mon	25-Apr-2022	Mon	1	150	298	3,273	51	100	11,092	0	0	0	0	0	0	Yes
26-Apr-2022	Tue	26-Apr-2022	Tue	1	150	298	3,570	0	0	11,092	0	0	0	0	0	0	Yes
27-Apr-2022	Wed	27-Apr-2022	Wed	1	150	298	3,868	0	0	11,092	0	0	0	0	0	0	Yes
28-Apr-2022	Thu	28-Apr-2022	Thu	1	150	298	4,165	0	0	11,092	0	0	0	0	0	0	Yes
29-Apr-2022	Fri	29-Apr-2022	Fri	1	150	298	4,463	0	0	11,092	0	0	0	0	0	0	Yes
30-Apr-2022	Sat	30-Apr-2022	Sat	1	150	298	4,760	0	0	11,092	0	0	0	0	0	0	Yes
01-May-2022	Sun	01-May-2022	Sun	1	150	298	5,058	0	0	11,092	0	0	0	0	0	0	Yes
02-May-2022	Mon	02-May-2022	Mon	1	150	298	5,355	0	0	11,092	0	0	0	0	0	0	Yes
03-May-2022	Tue	03-May-2022	Tue	1	150	298	5,653	0	0	11,092	0	0	0	0	0	0	Yes
04-May-2022	Wed	04-May-2022	Wed	1	150	298	5,950	0	0	11,092	0	0	0	0	0	0	Yes
05-May-2022	Thu	05-May-2022	Thu	1	150	298	6,248	0	0	11,092	0	0	0	0	0	0	Yes
06-May-2022	Fri	06-May-2022	Fri	1	150	298	6,545	0	0	11,092	0	0	0	0	0	0	Yes
07-May-2022	Sat	07-May-2022	Sat	1	150	298	6,843	0	0	11,092	0	0	0	0	0	0	Yes
08-May-2022	Sun	08-May-2022	Sun	1	150	298	7,140	0	0	11,092	0	0	0	0	0	0	Yes
09-May-2022	Mon	09-May-2022	Mon	1	150	298	7,438	0	0	11,092	0	0	0	0	0	0	Yes
10-May-2022	Tue	10-May-2022	Tue	1	150	298	7,736	0	0	11,092	0	0	0	0	0	0	Yes
11-May-2022	Wed	11-May-2022	Wed	1	150	298	8,033	0	0	11,092	0	0	0	0	0	0	Yes
12-May-2022	Thu	12-May-2022	Thu	1	150	298	8,331	0	0	11,092	0	0	0	0	0	0	Yes
13-May-2022	Fri	13-May-2022	Fri	1	150	298	8,628	0	0	11,092	0	0	0	0	0	0	Yes
14-May-2022	Sat	14-May-2022	Sat	1	150	298	8,926	0	0	11,092	0	0	0	0	0	0	Yes
15-May-2022	Sun	15-May-2022	Sun	1	150	298	9,223	0	0	11,092	0	0	0	0	0	0	Yes
16-May-2022	Mon	16-May-2022	Mon	1	150	298	9,521	0	0	11,092	0	0	0	0	0	0	Yes
17-May-2022	Tue	17-May-2022	Tue	1	150	298	9,818	0	0	11,092	0	0	0	0	0	0	Yes
18-May-2022	Wed	18-May-2022	Wed	1	150	298	10,116	0	0	11,092	0	0	0	0	0	0	Yes
19-May-2022	Thu	19-May-2022	Thu	1	150	298	10,413	0	0	11,092	0	0	0	0	0	0	Yes
20-May-2022	Fri	20-May-2022	Fri	1	150	298	10,711	0	0	11,092	0	0	0	0	0	0	Yes
21-May-2022	Sat	21-May-2022	Sat	1	150	298	11,008	0	0	11,092	0	0	0	0	0	0	Yes
22-May-2022	Sun	22-May-2022	Sun	1	150	298	11,306	0	0	11,092	0	0	0	0	0	0	Yes
23-May-2022	Mon	23-May-2022	Mon	1	150	298	11,603	0	0	11,092	0	0	0	0	0	0	Yes
24-May-2022	Tue	24-May-2022	Tue	1	150	298	11,901	0	0	11,092	0	0	0	0	0	0	Yes
25-May-2022	Wed	25-May-2022	Wed	1	150	298	12,198	0	0	11,092	0	0	0	0	0	0	Yes
26-May-2022	Thu	26-May-2022	Thu	1	150	298	12,496	0	0	11,092	0	0	0	0	0	0	Yes
27-May-2022	Fri	27-May-2022	Fri	1	150	298	12,793	0	0	11,092	0	0	0	0	0	0	Yes
28-May-2022	Sat	28-May-2022	Sat	1	150	298	13,091	0	0	11,092	0	0	0	0	0	0	Yes
29-May-2022	Sun	29-May-2022	Sun	1	150	298	13,388	0	0	11,092	0	0	0	0	0	0	Yes
30-May-2022	Mon	30-May-2022	Mon	1	150	298	13,686	0	0	11,092	0	0	0	0	0	0	Yes
31-May-2022	Tue	31-May-2022	Tue	1	150	298	13,983	0	0	11,092	0	0	0	0	0	0	Yes
01-Jun-2022	Wed	01-Jun-2022	Wed	1	50	99	14,083	0	0	11,092	0	0	0	0	0	0	Yes

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.			
02-Jun-2022	Thu	02-Jun-2022	Thu	1	50	99	14,182	0	0	11,092	0	0	0	0	0	0	50	25,274	Yes
03-Jun-2022	Fri	03-Jun-2022	Fri	1	50	99	14,281	0	0	11,092	0	0	0	0	0	0	50	25,373	Yes
04-Jun-2022	Sat	04-Jun-2022	Sat	1	50	99	14,380	0	0	11,092	0	0	0	0	0	0	50	25,472	Yes
05-Jun-2022	Sun	05-Jun-2022	Sun	1	50	99	14,479	0	0	11,092	0	0	0	0	0	0	50	25,571	Yes
06-Jun-2022	Mon	06-Jun-2022	Mon	1	50	99	14,579	0	0	11,092	0	0	0	0	0	0	50	25,670	Yes
07-Jun-2022	Tue	07-Jun-2022	Tue	1	50	99	14,678	0	0	11,092	0	0	0	0	0	0	50	25,770	Yes
08-Jun-2022	Wed	30-Jun-2022	Thu	23	50	2,281	16,959	0	0	11,092	0	0	0	0	0	0	50	28,050	Yes
01-Jul-2022	Fri	31-Jul-2022	Sun	31	50	3,074	20,033	0	0	11,092	0	0	0	0	0	0	50	31,125	Yes
01-Aug-2022	Mon	31-Aug-2022	Wed	31	50	3,074	23,107	0	0	11,092	0	0	0	0	0	0	50	34,199	Yes
01-Sep-2022	Thu	30-Sep-2022	Fri	30	50	2,975	26,083	0	0	11,092	0	0	0	0	0	0	50	37,174	Yes
01-Oct-2022	Sat	01-Oct-2022	Sat	1	100	198	26,281	0	0	11,092	0	0	0	0	0	0	100	37,373	Yes
02-Oct-2022	Sun	02-Oct-2022	Sun	1	100	198	26,479	0	0	11,092	0	0	0	0	0	0	100	37,571	Yes
03-Oct-2022	Mon	03-Oct-2022	Mon	1	100	198	26,678	0	0	11,092	0	0	0	0	0	0	100	37,770	Yes
04-Oct-2022	Tue	04-Oct-2022	Tue	1	100	198	26,876	0	0	11,092	0	0	0	0	0	0	100	37,968	Yes
05-Oct-2022	Wed	05-Oct-2022	Wed	1	100	198	27,074	0	0	11,092	0	0	0	0	0	0	100	38,166	Yes
06-Oct-2022	Thu	06-Oct-2022	Thu	1	100	198	27,273	0	0	11,092	0	0	0	0	0	0	100	38,365	Yes
07-Oct-2022	Fri	07-Oct-2022	Fri	1	100	198	27,471	0	0	11,092	0	0	0	0	0	0	100	38,563	Yes
08-Oct-2022	Sat	08-Oct-2022	Sat	1	100	198	27,669	0	0	11,092	0	0	0	0	0	0	100	38,761	Yes
09-Oct-2022	Sun	09-Oct-2022	Sun	1	100	198	27,868	0	0	11,092	0	0	0	0	0	0	100	38,960	Yes
10-Oct-2022	Mon	10-Oct-2022	Mon	1	100	198	28,066	0	0	11,092	0	0	0	0	0	0	100	39,158	Yes
11-Oct-2022	Tue	11-Oct-2022	Tue	1	100	198	28,264	0	0	11,092	0	0	0	0	0	0	100	39,356	Yes
12-Oct-2022	Wed	12-Oct-2022	Wed	1	100	198	28,463	0	0	11,092	0	0	0	0	0	0	100	39,555	Yes
13-Oct-2022	Thu	13-Oct-2022	Thu	1	100	198	28,661	0	0	11,092	0	0	0	0	0	0	100	39,753	Yes
14-Oct-2022	Fri	14-Oct-2022	Fri	1	100	198	28,860	0	0	11,092	0	0	0	0	0	0	100	39,951	Yes
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	Yes
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	Yes
17-Oct-2022	Mon	17-Oct-2022	Mon	1	150	298	29,653	0	0	11,092	304	603	603	0	0	0	454	41,348	Yes
18-Oct-2022	Tue	18-Oct-2022	Tue	1	150	298	29,950	0	0	11,092	654	1,297	1,901	0	0	0	804	42,943	Yes
19-Oct-2022	Wed	19-Oct-2022	Wed	1	150	298	30,248	0	0	11,092	625	1,240	3141	528	1,046	1046	1,303	45,527	Yes
20-Oct-2022	Thu	20-Oct-2022	Thu	1	150	298	30,545	0	0	11,092	0	0	3141	599	1,188	2234	749	47,012	Yes
21-Oct-2022	Fri	21-Oct-2022	Fri	1	150	298	30,843	0	0	11,092	0	0	3141	299	593	2826	449	47,902	Yes
22-Oct-2022	Sat	22-Oct-2022	Sat	1	150	298	31,140	0	0	11,092	0	0	3141	0	0	2826	150	48,200	Yes
23-Oct-2022	Sun	23-Oct-2022	Sun	1	150	298	31,438	0	0	11,092	0	0	3141	0	0	2826	150	48,497	Yes
24-Oct-2022	Mon	24-Oct-2022	Mon	1	150	298	31,736	0	0	11,092	0	0	3141	0	0	2826	150	48,795	Yes
25-Oct-2022	Tue	25-Oct-2022	Tue	1	150	298	32,033	0	0	11,092	0	0	3141	349	692	3518	499	49,784	Yes
26-Oct-2022	Wed	26-Oct-2022	Wed	1	150	298	32,331	0	0	11,092	0	0	3141	599	1,188	4706	749	51,269	Yes
27-Oct-2022	Thu	27-Oct-2022	Thu	1	150	298	32,628	0	0	11,092	0	0	3141	1049	2,080	6786	1,199	53,647	Yes
28-Oct-2022	Fri	28-Oct-2022	Fri	1	150	298	32,926	0	0	11,092	0	0	3141	599	1,188	7974	749	55,132	Yes
29-Oct-2022	Sat	29-Oct-2022	Sat	1	150	298	33,223	0	0	11,092	0	0	3141	349	692	8665	499	56,121	Yes
30-Oct-2022	Sun	30-Oct-2022	Sun	1	150	298	33,521	0	0	11,092	0	0	3141	119	235	8900	269	56,654	Yes
31-Oct-2022	Mon	31-Oct-2022	Mon	1	150	298	33,818	0	0	11,092	0	0	3141	50	99	9000	200	57,051	Yes
01-Nov-2022	Tue	01-Nov-2022	Tue	1	150	298	34,116	0	0	11,092	0	0	3141	0	0	9000	150	57,348	Yes
02-Nov-2022	Wed	02-Nov-2022	Wed	1	150	298	34,413	0	0	11,092	0	0	3141	0	0	9000	150	57,646	Yes
03-Nov-2022	Thu	03-Nov-2022	Thu	1	150	298	34,711	0	0	11,092	0	0	3141	0	0	9000	150	57,943	Yes
04-Nov-2022	Fri	04-Nov-2022	Fri	1	150	298	35,008	0	0	11,092	0	0	3141	0	0	9000	150	58,241	Yes
05-Nov-2022	Sat	05-Nov-2022	Sat	1	150	298	35,306	0	0	11,092	0	0	3141	0	0	9000	150	58,538	Yes
06-Nov-2022	Sun	06-Nov-2022	Sun	1	150	298	35,603	0	0	11,092	0	0	3141	0	0	9000	150	58,836	Yes
07-Nov-2022	Mon	07-Nov-2022	Mon	1	150	298	35,901	0	0	11,092	0	0	3141	0	0	9000	150	59,133	Yes
08-Nov-2022	Tue	08-Nov-2022	Tue	1	150	298	36,198	0	0	11,092	0	0	3141	0	0	9000	150	59,431	Yes
09-Nov-2022	Wed	09-Nov-2022	Wed	1	150	298	36,496	0	0	11,092	0	0	3141	0	0	9000	150	59,728	Yes
10-Nov-2022	Thu	10-Nov-2022	Thu	1	150	298	36,793	0	0	11,092	0	0	3141	0	0	9000	150	60,026	Yes
11-Nov-2022	Fri	11-Nov-2022	Fri	1	150	298	37,091	0	0	11,092	0	0	3141	0	0	9000	150	60,323	Yes

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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.			
12-Nov-2022	Sat	12-Nov-2022	Sat	1	150	298	37,388	0	0	11,092	0	0	3141	0	0	9000	150	60,621	Yes
13-Nov-2022	Sun	13-Nov-2022	Sun	1	150	298	37,686	0	0	11,092	0	0	3141	0	0	9000	150	60,918	Yes
14-Nov-2022	Mon	14-Nov-2022	Mon	1	150	298	37,983	0	0	11,092	0	0	3141	0	0	9000	150	61,216	Yes
15-Nov-2022	Tue	15-Nov-2022	Tue	1	150	298	38,281	0	0	11,092	0	0	3141	0	0	9000	150	61,513	Yes
16-Nov-2022	Wed	16-Nov-2022	Wed	1	150	298	38,579	0	0	11,092	0	0	3141	0	0	9000	150	61,811	Yes
17-Nov-2022	Thu	17-Nov-2022	Thu	1	150	298	38,876	0	0	11,092	0	0	3141	0	0	9000	150	62,108	Yes
18-Nov-2022	Fri	18-Nov-2022	Fri	1	150	298	39,174	0	0	11,092	0	0	3141	0	0	9000	150	62,406	Yes
19-Nov-2022	Sat	19-Nov-2022	Sat	1	150	298	39,471	0	0	11,092	0	0	3141	0	0	9000	150	62,704	Yes
20-Nov-2022	Sun	20-Nov-2022	Sun	1	150	298	39,769	0	0	11,092	0	0	3141	0	0	9000	150	63,001	Yes
21-Nov-2022	Mon	21-Nov-2022	Mon	1	150	298	40,066	0	0	11,092	0	0	3141	0	0	9000	150	63,299	Yes
22-Nov-2022	Tue	22-Nov-2022	Tue	1	150	298	40,364	0	0	11,092	0	0	3141	0	0	9000	150	63,596	Yes
23-Nov-2022	Wed	23-Nov-2022	Wed	1	150	298	40,661	0	0	11,092	0	0	3141	0	0	9000	150	63,894	Yes
24-Nov-2022	Thu	24-Nov-2022	Thu	1	150	298	40,959	0	0	11,092	0	0	3141	0	0	9000	150	64,191	Yes
25-Nov-2022	Fri	25-Nov-2022	Fri	1	150	298	41,256	0	0	11,092	0	0	3141	0	0	9000	150	64,489	Yes
26-Nov-2022	Sat	26-Nov-2022	Sat	1	150	298	41,554	0	0	11,092	0	0	3141	0	0	9000	150	64,786	Yes
27-Nov-2022	Sun	27-Nov-2022	Sun	1	150	298	41,851	0	0	11,092	0	0	3141	0	0	9000	150	65,084	Yes
28-Nov-2022	Mon	28-Nov-2022	Mon	1	150	298	42,149	0	0	11,092	0	0	3141	0	0	9000	150	65,381	Yes
29-Nov-2022	Tue	29-Nov-2022	Tue	1	150	298	42,446	0	0	11,092	0	0	3141	0	0	9000	150	65,679	Yes
30-Nov-2022	Wed	30-Nov-2022	Wed	1	150	298	42,744	0	0	11,092	0	0	3141	0	0	9000	150	65,976	Yes
01-Dec-2022	Thu	01-Dec-2022	Thu	1	150	298	43,041	0	0	11,092	0	0	3141	0	0	9000	150	66,274	Yes
02-Dec-2022	Fri	02-Dec-2022	Fri	1	150	298	43,339	0	0	11,092	0	0	3141	0	0	9000	150	66,571	Yes
03-Dec-2022	Sat	03-Dec-2022	Sat	1	150	298	43,636	0	0	11,092	0	0	3141	0	0	9000	150	66,869	Yes
04-Dec-2022	Sun	04-Dec-2022	Sun	1	150	298	43,934	0	0	11,092	0	0	3141	0	0	9000	150	67,166	Yes
05-Dec-2022	Mon	05-Dec-2022	Mon	1	150	298	44,231	0	0	11,092	0	0	3141	0	0	9000	150	67,464	Yes
06-Dec-2022	Tue	06-Dec-2022	Tue	1	150	298	44,529	0	0	11,092	0	0	3141	0	0	9000	150	67,761	Yes
07-Dec-2022	Wed	07-Dec-2022	Wed	1	150	298	44,826	0	0	11,092	0	0	3141	0	0	9000	150	68,059	Yes
08-Dec-2022	Thu	08-Dec-2022	Thu	1	150	298	45,124	0	0	11,092	0	0	3141	0	0	9000	150	68,356	Yes
09-Dec-2022	Fri	09-Dec-2022	Fri	1	150	298	45,421	0	0	11,092	0	0	3141	0	0	9000	150	68,654	Yes
10-Dec-2022	Sat	10-Dec-2022	Sat	1	150	298	45,719	0	0	11,092	0	0	3141	0	0	9000	150	68,951	Yes
11-Dec-2022	Sun	11-Dec-2022	Sun	1	150	298	46,017	0	0	11,092	0	0	3141	0	0	9000	150	69,249	Yes
12-Dec-2022	Mon	12-Dec-2022	Mon	1	150	298	46,314	0	0	11,092	0	0	3141	0	0	9000	150	69,546	Yes
13-Dec-2022	Tue	13-Dec-2022	Tue	1	150	298	46,612	0	0	11,092	0	0	3141	0	0	9000	150	69,844	Yes
14-Dec-2022	Wed	14-Dec-2022	Wed	1	150	298	46,909	0	0	11,092	0	0	3141	0	0	9000	150	70,142	Yes
15-Dec-2022	Thu	15-Dec-2022	Thu	1	150	298	47,207	0	0	11,092	0	0	3141	0	0	9000	150	70,439	Yes
16-Dec-2022	Fri	16-Dec-2022	Fri	1	150	298	47,504	0	0	11,092	0	0	3141	0	0	9000	150	70,737	Yes
17-Dec-2022	Sat	17-Dec-2022	Sat	1	150	298	47,802	0	0	11,092	0	0	3141	0	0	9000	150	71,034	Yes
18-Dec-2022	Sun	18-Dec-2022	Sun	1	150	298	48,099	0	0	11,092	0	0	3141	0	0	9000	150	71,332	Yes
19-Dec-2022	Mon	19-Dec-2022	Mon	1	150	298	48,397	0	0	11,092	0	0	3141	0	0	9000	150	71,629	Yes
20-Dec-2022	Tue	20-Dec-2022	Tue	1	150	298	48,694	0	0	11,092	0	0	3141	0	0	9000	150	71,927	Yes
21-Dec-2022	Wed	21-Dec-2022	Wed	1	150	298	48,992	0	0	11,092	0	0	3141	0	0	9000	150	72,224	Yes
22-Dec-2022	Thu	22-Dec-2022	Thu	1	150	298	49,289	0	0	11,092	0	0	3141	0	0	9000	150	72,522	Yes
23-Dec-2022	Fri	23-Dec-2022	Fri	1	150	298	49,587	0	0	11,092	0	0	3141	0	0	9000	150	72,819	Yes
24-Dec-2022	Sat	24-Dec-2022	Sat	1	150	298	49,884	0	0	11,092	0	0	3141	0	0	9000	150	73,117	Yes
25-Dec-2022	Sun	25-Dec-2022	Sun	1	150	298	50,182	0	0	11,092	0	0	3141	0	0	9000	150	73,414	Yes
26-Dec-2022	Mon	26-Dec-2022	Mon	1	150	298	50,479	0	0	11,092	0	0	3141	0	0	9000	150	73,712	Yes
27-Dec-2022	Tue	27-Dec-2022	Tue	1	150	298	50,777	0	0	11,092	0	0	3141	0	0	9000	150	74,009	Yes
28-Dec-2022	Wed	28-Dec-2022	Wed	1	150	298	51,074	0	0	11,092	0	0	3141	0	0	9000	150	74,307	Yes
29-Dec-2022	Thu	29-Dec-2022	Thu	1	150	298	51,372	0	0	11,092	0	0	3141	0	0	9000	150	74,604	Yes
30-Dec-2022	Fri	30-Dec-2022	Fri	1	150	298	51,669	0	0	11,092	0	0	3141	0	0	9000	150	74,902	Yes
31-Dec-2022	Sat	31-Dec-2022	Sat	1	150	298	51,967	0	0	11,092	0	0	3141	0	0	9000	150	75,199	Yes
01-Jan-2023	Sun	01-Jan-2023	Sun	1	150	298	52,264	0	0	11,092	0	0	3141	0	0	9000	150	75,497	Yes
02-Jan-2023	Mon	02-Jan-2023	Mon	1	150	298	52,562	0	0	11,092	0	0	3141	0	0	9000	150	75,794	Yes

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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.			
03-Jan-2023	Tue	03-Jan-2023	Tue	1	150	298	52,860	0	0	11,092	0	0	3141	0	0	9000	150	76,092	Yes
04-Jan-2023	Wed	04-Jan-2023	Wed	1	150	298	53,157	0	0	11,092	0	0	3141	0	0	9000	150	76,389	Yes
05-Jan-2023	Thu	05-Jan-2023	Thu	1	150	298	53,455	0	0	11,092	0	0	3141	0	0	9000	150	76,687	Yes
06-Jan-2023	Fri	06-Jan-2023	Fri	1	150	298	53,752	0	0	11,092	0	0	3141	0	0	9000	150	76,984	Yes
07-Jan-2023	Sat	07-Jan-2023	Sat	1	150	298	54,050	0	0	11,092	0	0	3141	0	0	9000	150	77,282	Yes
08-Jan-2023	Sun	08-Jan-2023	Sun	1	150	298	54,347	0	0	11,092	0	0	3141	0	0	9000	150	77,580	Yes
09-Jan-2023	Mon	09-Jan-2023	Mon	1	150	298	54,645	0	0	11,092	0	0	3141	0	0	9000	150	77,877	Yes
10-Jan-2023	Tue	10-Jan-2023	Tue	1	150	298	54,942	0	0	11,092	0	0	3141	0	0	9000	150	78,175	Yes
11-Jan-2023	Wed	11-Jan-2023	Wed	1	150	298	55,240	0	0	11,092	0	0	3141	0	0	9000	150	78,472	Yes
12-Jan-2023	Thu	12-Jan-2023	Thu	1	150	298	55,537	0	0	11,092	0	0	3141	0	0	9000	150	78,770	Yes
13-Jan-2023	Fri	13-Jan-2023	Fri	1	150	298	55,835	0	0	11,092	0	0	3141	0	0	9000	150	79,067	Yes
14-Jan-2023	Sat	14-Jan-2023	Sat	1	150	298	56,132	0	0	11,092	0	0	3141	0	0	9000	150	79,365	Yes
15-Jan-2023	Sun	15-Jan-2023	Sun	1	150	298	56,430	0	0	11,092	0	0	3141	0	0	9000	150	79,662	Yes
16-Jan-2023	Mon	16-Jan-2023	Mon	1	150	298	56,727	0	0	11,092	0	0	3141	0	0	9000	150	79,960	Yes
17-Jan-2023	Tue	17-Jan-2023	Tue	1	150	298	57,025	0	0	11,092	0	0	3141	0	0	9000	150	80,257	Yes
18-Jan-2023	Wed	18-Jan-2023	Wed	1	150	298	57,322	0	0	11,092	0	0	3141	0	0	9000	150	80,555	Yes
19-Jan-2023	Thu	19-Jan-2023	Thu	1	150	298	57,620	0	0	11,092	0	0	3141	0	0	9000	150	80,852	Yes
20-Jan-2023	Fri	20-Jan-2023	Fri	1	150	298	57,917	0	0	11,092	0	0	3141	0	0	9000	150	81,150	Yes
21-Jan-2023	Sat	21-Jan-2023	Sat	1	150	298	58,215	0	0	11,092	0	0	3141	0	0	9000	150	81,447	Yes
22-Jan-2023	Sun	22-Jan-2023	Sun	1	150	298	58,512	0	0	11,092	0	0	3141	0	0	9000	150	81,745	Yes
23-Jan-2023	Mon	23-Jan-2023	Mon	1	150	298	58,810	0	0	11,092	0	0	3141	0	0	9000	150	82,042	Yes
24-Jan-2023	Tue	24-Jan-2023	Tue	1	150	298	59,107	0	0	11,092	0	0	3141	0	0	9000	150	82,340	Yes
25-Jan-2023	Wed	25-Jan-2023	Wed	1	150	298	59,405	0	0	11,092	0	0	3141	0	0	9000	150	82,637	Yes
26-Jan-2023	Thu	26-Jan-2023	Thu	1	150	298	59,702	0	0	11,092	0	0	3141	0	0	9000	150	82,935	Yes
27-Jan-2023	Fri	27-Jan-2023	Fri	1	150	298	60,000	0	0	11,092	0	0	3141	0	0	9000	150	83,232	Yes
28-Jan-2023	Sat	28-Jan-2023	Sat	1	150	298	60,298	0	0	11,092	0	0	3141	0	0	9000	150	83,530	Yes
29-Jan-2023	Sun	29-Jan-2023	Sun	1	150	298	60,595	0	0	11,092	0	0	3141	0	0	9000	150	83,827	Yes
30-Jan-2023	Mon	30-Jan-2023	Mon	1	150	298	60,893	0	0	11,092	0	0	3141	0	0	9000	150	84,125	Yes
31-Jan-2023	Tue	31-Jan-2023	Tue	1	150	298	61,190	0	0	11,092	0	0	3141	0	0	9000	150	84,423	Yes
01-Feb-2023	Wed	01-Feb-2023	Wed	1	150	298	61,488	0	0	11,092	0	0	3141	0	0	9000	150	84,720	Yes
02-Feb-2023	Thu	02-Feb-2023	Thu	1	150	298	61,785	0	0	11,092	0	0	3141	0	0	9000	150	85,018	Yes
03-Feb-2023	Fri	03-Feb-2023	Fri	1	150	298	62,083	0	0	11,092	0	0	3141	0	0	9000	150	85,315	Yes
04-Feb-2023	Sat	04-Feb-2023	Sat	1	150	298	62,380	0	0	11,092	0	0	3141	0	0	9000	150	85,613	Yes
05-Feb-2023	Sun	05-Feb-2023	Sun	1	150	298	62,678	0	0	11,092	0	0	3141	0	0	9000	150	85,910	Yes
06-Feb-2023	Mon	06-Feb-2023	Mon	1	150	298	62,975	0	0	11,092	0	0	3141	0	0	9000	150	86,208	Yes
07-Feb-2023	Tue	07-Feb-2023	Tue	1	150	298	63,273	0	0	11,092	0	0	3141	0	0	9000	150	86,505	Yes
08-Feb-2023	Wed	08-Feb-2023	Wed	1	150	298	63,570	0	0	11,092	0	0	3141	0	0	9000	150	86,803	Yes
09-Feb-2023	Thu	09-Feb-2023	Thu	1	150	298	63,868	0	0	11,092	0	0	3141	0	0	9000	150	87,100	Yes
10-Feb-2023	Fri	10-Feb-2023	Fri	1	150	298	64,165	0	0	11,092	0	0	3141	0	0	9000	150	87,398	Yes
11-Feb-2023	Sat	11-Feb-2023	Sat	1	150	298	64,463	0	0	11,092	0	0	3141	0	0	9000	150	87,695	Yes
12-Feb-2023	Sun	12-Feb-2023	Sun	1	150	298	64,760	0	0	11,092	0	0	3141	0	0	9000	150	87,993	Yes
13-Feb-2023	Mon	13-Feb-2023	Mon	1	150	298	65,058	0	0	11,092	0	0	3141	0	0	9000	150	88,290	Yes
14-Feb-2023	Tue	14-Feb-2023	Tue	1	150	298	65,355	0	0	11,092	0	0	3141	0	0	9000	150	88,588	Yes
15-Feb-2023	Wed	15-Feb-2023	Wed	1	150	298	65,653	0	0	11,092	0	0	3141	0	0	9000	150	88,885	Yes
16-Feb-2023	Thu	16-Feb-2023	Thu	1	150	298	65,950	0	0	11,092	0	0	3141	0	0	9000	150	89,183	Yes
17-Feb-2023	Fri	17-Feb-2023	Fri	1	150	298	66,248	0	0	11,092	0	0	3141	0	0	9000	150	89,480	Yes
18-Feb-2023	Sat	18-Feb-2023	Sat	1	150	298	66,545	0	0	11,092	0	0	3141	0	0	9000	150	89,778	Yes
19-Feb-2023	Sun	19-Feb-2023	Sun	1	150	298	66,843	0	0	11,092	0	0	3141	0	0	9000	150	90,075	Yes
20-Feb-2023	Mon	20-Feb-2023	Mon	1	150	298	67,140	0	0	11,092	0	0	3141	0	0	9000	150	90,373	Yes
21-Feb-2023	Tue	21-Feb-2023	Tue	1	150	298	67,438	0	0	11,092	0	0	3141	0	0	9000	150	90,670	Yes
22-Feb-2023	Wed	22-Feb-2023	Wed	1	150	298	67,736	0	0	11,092	0	0	3141	0	0	9000	150	90,968	Yes
23-Feb-2023	Thu	23-Feb-2023	Thu	1	150	298	68,033	0	0	11,092	0	0	3141	0	0	9000	150	91,265	Yes

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 ¹			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.			
24-Feb-2023	Fri	24-Feb-2023	Fri	1	150	298	68,331	0	0	11,092	0	0	3141	0	0	9000	150	91,563	Yes
25-Feb-2023	Sat	25-Feb-2023	Sat	1	150	298	68,628	0	0	11,092	0	0	3141	0	0	9000	150	91,861	Yes
26-Feb-2023	Sun	26-Feb-2023	Sun	1	150	298	68,926	0	0	11,092	0	0	3141	0	0	9000	150	92,158	Yes
27-Feb-2023	Mon	27-Feb-2023	Mon	1	150	298	69,223	0	0	11,092	0	0	3141	0	0	9000	150	92,456	Yes
28-Feb-2023	Tue	28-Feb-2023	Tue	1	150	298	69,521	0	0	11,092	0	0	3141	0	0	9000	150	92,753	Yes
01-Mar-2023	Wed	01-Mar-2023	Wed	1	150	298	69,818	0	0	11,092	0	0	3141	0	0	9000	150	93,051	Yes
02-Mar-2023	Thu	02-Mar-2023	Thu	1	150	298	70,116	0	0	11,092	0	0	3141	0	0	9000	150	93,348	Yes
03-Mar-2023	Fri	03-Mar-2023	Fri	1	150	298	70,413	0	0	11,092	0	0	3141	0	0	9000	150	93,646	Yes
04-Mar-2023	Sat	04-Mar-2023	Sat	1	150	298	70,711	0	0	11,092	0	0	3141	0	0	9000	150	93,943	Yes
05-Mar-2023	Sun	05-Mar-2023	Sun	1	150	298	71,008	0	0	11,092	0	0	3141	0	0	9000	150	94,241	Yes
06-Mar-2023	Mon	06-Mar-2023	Mon	1	150	298	71,306	0	0	11,092	0	0	3141	0	0	9000	150	94,538	Yes
07-Mar-2023	Tue	07-Mar-2023	Tue	1	150	298	71,603	0	0	11,092	0	0	3141	0	0	9000	150	94,836	Yes
08-Mar-2023	Wed	08-Mar-2023	Wed	1	150	298	71,901	0	0	11,092	0	0	3141	0	0	9000	150	95,133	Yes
09-Mar-2023	Thu	09-Mar-2023	Thu	1	150	298	72,198	0	0	11,092	0	0	3141	0	0	9000	150	95,431	Yes
10-Mar-2023	Fri	10-Mar-2023	Fri	1	150	298	72,496	0	0	11,092	0	0	3141	0	0	9000	150	95,728	Yes
11-Mar-2023	Sat	11-Mar-2023	Sat	1	150	298	72,793	0	0	11,092	0	0	3141	0	0	9000	150	96,026	Yes
12-Mar-2023	Sun	12-Mar-2023	Sun	1	150	298	73,091	0	0	11,092	0	0	3141	0	0	9000	150	96,323	Yes
13-Mar-2023	Mon	13-Mar-2023	Mon	1	150	298	73,388	0	0	11,092	0	0	3141	0	0	9000	150	96,621	Yes
14-Mar-2023	Tue	14-Mar-2023	Tue	1	150	298	73,686	0	0	11,092	0	0	3141	0	0	9000	150	96,918	Yes
15-Mar-2023	Wed	15-Mar-2023	Wed	1	150	298	73,983	0	0	11,092	0	0	3141	0	0	9000	150	97,216	Yes
16-Mar-2023	Thu	16-Mar-2023	Thu	1	150	298	74,281	0	0	11,092	0	0	3141	0	0	9000	150	97,513	Yes
17-Mar-2023	Fri	17-Mar-2023	Fri	1	150	298	74,579	0	0	11,092	0	0	3141	0	0	9000	150	97,811	Yes
18-Mar-2023	Sat	18-Mar-2023	Sat	1	150	298	74,876	0	0	11,092	0	0	3141	0	0	9000	150	98,108	Yes
19-Mar-2023	Sun	19-Mar-2023	Sun	1	150	298	75,174	0	0	11,092	0	0	3141	0	0	9000	150	98,406	Yes
20-Mar-2023	Mon	20-Mar-2023	Mon	1	150	298	75,471	0	0	11,092	0	0	3141	0	0	9000	150	98,704	Yes
21-Mar-2023	Tue	21-Mar-2023	Tue	1	150	298	75,769	0	0	11,092	0	0	3141	0	0	9000	150	99,001	Yes
22-Mar-2023	Wed	22-Mar-2023	Wed	1	150	298	76,066	0	0	11,092	0	0	3141	0	0	9000	150	99,299	Yes
23-Mar-2023	Thu	23-Mar-2023	Thu	1	150	298	76,364	0	0	11,092	0	0	3141	0	0	9000	150	99,596	Yes
24-Mar-2023	Fri	24-Mar-2023	Fri	1	150	298	76,661	0	0	11,092	0	0	3141	0	0	9000	150	99,894	Yes
25-Mar-2023	Sat	25-Mar-2023	Sat	1	150	298	76,959	0	0	11,092	0	0	3141	0	0	9000	150	100,191	Yes
26-Mar-2023	Sun	26-Mar-2023	Sun	1	150	298	77,256	0	0	11,092	0	0	3141	0	0	9000	150	100,489	Yes
27-Mar-2023	Mon	27-Mar-2023	Mon	1	150	298	77,554	0	0	11,092	0	0	3141	0	0	9000	150	100,786	Yes
28-Mar-2023	Tue	28-Mar-2023	Tue	1	150	298	77,851	0	0	11,092	0	0	3141	0	0	9000	150	101,084	Yes
29-Mar-2023	Wed	29-Mar-2023	Wed	1	150	298	78,149	0	0	11,092	0	0	3141	0	0	9000	150	101,381	Yes
30-Mar-2023	Thu	30-Mar-2023	Thu	1	150	298	78,446	0	0	11,092	0	0	3141	0	0	9000	150	101,679	Yes
31-Mar-2023	Fri	31-Mar-2023	Fri	1	150	298	78,744	0	0	11,092	0	0	3141	0	0	9000	150	101,976	Yes
01-Apr-2023	Sat	01-Apr-2023	Sat	1	150	298	79,041	0	0	11,092	0	0	3141	0	0	9000	150	102,274	Yes
02-Apr-2023	Sun	02-Apr-2023	Sun	1	150	298	79,339	0	0	11,092	0	0	3141	0	0	9000	150	102,571	Yes
03-Apr-2023	Mon	03-Apr-2023	Mon	1	150	298	79,636	0	0	11,092	0	0	3141	0	0	9000	150	102,869	Yes
04-Apr-2023	Tue	04-Apr-2023	Tue	1	150	298	79,934	0	0	11,092	0	0	3141	0	0	9000	150	103,166	Yes
05-Apr-2023	Wed	05-Apr-2023	Wed	1	150	298	80,231	0	0	11,092	0	0	3141	0	0	9000	150	103,464	Yes
06-Apr-2023	Thu	06-Apr-2023	Thu	1	150	298	80,529	0	0	11,092	0	0	3141	0	0	9000	150	103,761	Yes
07-Apr-2023	Fri	07-Apr-2023	Fri	1	150	298	80,826	0	0	11,092	0	0	3141	0	0	9000	150	104,059	Yes
08-Apr-2023	Sat	08-Apr-2023	Sat	1	150	298	81,124	0	0	11,092	0	0	3141	0	0	9000	150	104,356	Yes
09-Apr-2023	Sun	09-Apr-2023	Sun	1	150	298	81,421	0	0	11,092	0	0	3141	0	0	9000	150	104,654	Yes
10-Apr-2023	Mon	10-Apr-2023	Mon	1	150	298	81,719	0	0	11,092	0	0	3141	0	0	9000	150	104,951	Yes
11-Apr-2023	Tue	11-Apr-2023	Tue	1	150	298	82,017	0	0	11,092	0	0	3141	0	0	9000	150	105,249	Yes
12-Apr-2023	Wed	12-Apr-2023	Wed	1	150	298	82,314	0	0	11,092	0	0	3141	0	0	9000	150	105,546	Yes
13-Apr-2023	Thu	13-Apr-2023	Thu	1	150	298	82,612	0	0	11,092	0	0	3141	0	0	9000	150	105,844	Yes
14-Apr-2023	Fri	14-Apr-2023	Fri	1	150	298	82,909	0	0	11,092	0	0	3141	0	0	9000	150	106,142	Yes

No. of days 365

139406.2923

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 FEREC 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.	

1 cfs day = 1.983471 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	60-20-20 Index	82,909		20,091		3,141				106,142
		Scheduled Above	82,909		11,092		3,141		9,000		106,142
		Difference	(0)		8,999		0		(9,000)		(0)

TABLE 4
DETERMINATION OF WATER YEAR CLASSIFICATION THRESHOLDS
 Water Year Classification (1906-2022)

Water Year Classification	Cumulative Occurrence			602020 INDEX (x 1000)								
				Settlement Agreement	2016	2017	2018	2019	2020	2021	2022	
Critical Water Year and Below	0.0%	-	6.4%	<	1500	1,476	1,476	1,476	1,476	1,476	1,441	1,441
Median Critical Water Year	6.4%	<	14.4%	>=	1500	1,476	1,476	1,476	1,476	1,476	1,441	1,441
Intermediate Critical Dry Water Year	14.4%	<	20.5%	>=	2000	1,964	1,973	1,973	1,973	1,973	1,964	1,955
Median Dry	20.5%	<	31.3%	>=	2200	2,159	2,159	2,183	2,183	2,183	2,159	2,061
Intermediate Dry-Below Normal	31.3%	<	40.4%	>=	2400	2,352	2,396	2,396	2,396	2,353	2,353	2,352
Median Below Normal	40.4%	<	50.7%	>=	2700	2,642	2,698	2,698	2,720	2,698	2,642	2,642
* Intermediate Below Normal-Above Normal	50.7%	<	66.2%	>=	3100	3,080	3,080	3,080	3,080	3,080	3,073	3,073
Median Above Normal	66.2%	<	71.3%	>=	3100	3,669	3,689	3,689	3,689	3,689	3,669	3,669
Intermediate Above Normal-Wet	71.3%	<	86.7%	>=	3100	3,903	3,903	3,903	4,028	3,903	3,903	3,903
Median Wet/Maximum	86.7%	<	100.0%	>=	3100	4,754	4,773	4,754	4,773	4,773	4,773	4,773

* Maximum index value for fish flow year is not to go above value shown in this row.

** The index in the Settlement Agreement was based on Water Years 1906-1995