

Allocation Analysis for 2021 (TAF)
WY 2021 based on the February 1st WSI forecast

	2020	2021											Total (MAF)	Possible Table A %		
	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov			Dec	
25% Exceedance Moderate OMR		D											SRI = 11.3	SVI = 5.5	Possible 2021 Table A = 0.795	19%
Oroville EOM Storage	1237	1239	1370	1737	2029	2080	1992	1788	1650	1600	1459	1304	1209	-		
Feather R. release (avg. cfs)	1590	1250	1260	1060	1090	1060	1050	2680	2670	2350	2000	1760	1760	-		
SWP Banks PP exports	101	111	120	111	40	41	22	34	33	90	113	185	116	1.015		
Potential South of Delta Art. 21 Water Avail.	0	0	0	0	0	0	0	0	0	0	0	0	0	0.000		
SWP San Luis EOM Storage	580	644	691	683	614	522	410	319	237	248	300	447	529	-		
SWP Contractor Deliveries	65	46	72	70	74	98	116	106	98	69	71	59	66	0.943		
50% Exceedance North of Delta		C											SRI = 9.8	SVI = 5.0	Possible 2021 Table A = 0.650	16%
Oroville EOM Storage	1237	1239	1360	1625	1884	1896	1776	1550	1399	1388	1311	1205	1159	-		
Feather R. release (avg. cfs)	1590	1250	1260	1060	820	800	820	2720	2560	1080	960	960	960	-		
SWP Banks PP exports	101	111	120	155	16	39	29	16	17	23	65	139	147	0.877		
Potential South of Delta Art. 21 Water Avail.	0	0	0	0	0	0	0	0	0	0	0	0	0	0.000		
SWP San Luis EOM Storage	580	644	703	759	668	569	459	339	236	192	189	288	417	-		
SWP Contractor Deliveries	65	46	60	50	71	104	121	117	103	57	78	61	49	0.915		
50% Exceedance Most OMR		C											SRI = 9.8	SVI = 5.0	Possible 2021 Table A = 0.500	12%
Oroville EOM Storage	1237	1239	1360	1625	1884	1896	1776	1551	1400	1389	1312	1206	1160	-		
Feather R. release (avg. cfs)	1590	1250	1260	1060	820	800	820	2700	2560	1080	960	960	960	-		
SWP Banks PP exports	101	111	120	50	16	39	38	51	17	23	65	139	53	0.722		
Potential South of Delta Art. 21 Water Avail.	0	0	0	0	0	0	0	0	0	0	0	0	0	0.000		
SWP San Luis EOM Storage	580	644	703	655	567	474	391	333	255	226	245	362	411	-		
SWP Contractor Deliveries	65	46	59	49	68	98	102	90	77	41	56	44	35	0.765		
50% Exceedance Moderate OMR		C											SRI = 9.8	SVI = 5.0	Possible 2021 Table A = 0.568	14%
Oroville EOM Storage	1237	1239	1360	1625	1884	1896	1776	1550	1399	1389	1312	1205	1160	-		
Feather R. release (avg. cfs)	1590	1250	1260	1060	820	800	820	2720	2560	1070	960	960	960	-		
SWP Banks PP exports	101	111	120	110	16	39	29	16	17	23	65	139	105	0.790		
Potential South of Delta Art. 21 Water Avail.	0	0	0	0	0	0	0	0	0	0	0	0	0	0.000		
SWP San Luis EOM Storage	580	644	703	715	626	530	429	324	234	198	207	316	411	-		
SWP Contractor Deliveries	65	46	60	50	69	100	111	102	89	48	66	51	41	0.834		
50% Exceedance Least OMR		C											SRI = 9.8	SVI = 5.0	Possible 2021 Table A = 0.609	15%
Oroville EOM Storage	1237	1239	1360	1625	1884	1896	1776	1551	1399	1389	1312	1205	1160	-		
Feather R. release (avg. cfs)	1590	1250	1260	1060	820	800	820	2710	2560	1080	960	960	960	-		
SWP Banks PP exports	101	111	120	151	16	39	29	16	17	23	65	139	105	0.830		
Potential South of Delta Art. 21 Water Avail.	0	0	0	0	0	0	0	0	0	0	0	0	0	0.000		
SWP San Luis EOM Storage	580	644	703	755	666	568	462	350	253	213	216	319	411	-		
SWP Contractor Deliveries	65	46	60	50	70	102	116	110	96	53	72	56	45	0.875		
75% Exceedance Moderate OMR		C											SRI = 8.6	SVI = 4.6	Possible 2021 Table A = 0.507	12%
Oroville EOM Storage	1237	1239	1350	1556	1710	1734	1568	1325	1145	1116	1098	1084	1084	-		
Feather R. release (avg. cfs)	1590	1250	1260	1060	2070	950	2290	3610	2710	1190	960	960	960	-		
SWP Banks PP exports	101	111	120	204	16	29	14	16	17	16	27	84	106	0.759		
Potential South of Delta Art. 21 Water Avail.	0	0	0	0	0	0	0	0	0	0	0	0	0	0.000		
SWP San Luis EOM Storage	580	644	703	809	721	616	504	404	320	280	256	312	411	-		
SWP Contractor Deliveries	65	46	60	49	69	99	107	97	84	45	62	48	38	0.803		
90% Exceedance North of Delta		C											SRI = 7.4	SVI = 4.2	Possible 2021 Table A = 0.400	10%
Oroville EOM Storage	1237	1239	1340	1489	1576	1546	1337	1048	837	794	775	799	849	-		
Feather R. release (avg. cfs)	1590	1250	1260	1060	1930	1430	2530	3730	2760	1480	960	970	960	-		
SWP Banks PP exports	101	111	120	134	16	17	14	17	17	16	27	64	90	0.643		
Potential South of Delta Art. 21 Water Avail.	0	0	0	0	0	0	0	0	0	0	0	0	0	0.000		
SWP San Luis EOM Storage	580	644	694	707	621	507	390	293	207	166	145	207	312	-		
SWP Contractor Deliveries	65	46	69	73	66	96	112	95	85	46	58	23	17	0.786		
90% Exceedance Most OMR		C											SRI = 7.4	SVI = 4.2	Possible 2021 Table A = 0.294	7%
Oroville EOM Storage	1237	1239	1340	1489	1549	1519	1309	1020	809	766	748	772	822	-		
Feather R. release (avg. cfs)	1590	1250	1260	1060	2390	1430	2540	3730	2760	1480	960	970	960	-		
SWP Banks PP exports	101	111	120	45	16	17	14	17	17	16	27	64	52	0.516		
Potential South of Delta Art. 21 Water Avail.	0	0	0	0	0	0	0	0	0	0	0	0	0	0.000		
SWP San Luis EOM Storage	580	644	694	619	535	425	318	244	181	154	151	219	290	-		
SWP Contractor Deliveries	65	46	69	72	64	92	102	71	63	33	40	17	12	0.680		
90% Exceedance Moderate OMR		C											SRI = 7.4	SVI = 4.2	Possible 2021 Table A = 0.400	10%
Oroville EOM Storage	1237	1239	1340	1489	1576	1546	1337	1048	837	794	775	799	849	-		
Feather R. release (avg. cfs)	1590	1250	1260	1060	1930	1430	2530	3730	2760	1480	960	970	960	-		
SWP Banks PP exports	101	111	120	134	16	17	14	17	17	16	27	64	78	0.631		
Potential South of Delta Art. 21 Water Avail.	0	0	0	0	0	0	0	0	0	0	0	0	0	0.000		
SWP San Luis EOM Storage	580	644	694	707	621	507	390	293	207	166	145	207	300	-		
SWP Contractor Deliveries	65	46	69	73	66	96	112	95	85	46	58	23	17	0.786		
90% Exceedance Least OMR		C											SRI = 7.4	SVI = 4.2	Possible 2021 Table A = 0.400	10%
Oroville EOM Storage	1237	1239	1340	1489	1576	1546	1337	1048	837	794	775	799	849	-		
Feather R. release (avg. cfs)	1590	1250	1260	1060	1930	1430	2530	3730	2760	1480	960	970	960	-		
SWP Banks PP exports	101	111	120	134	16	17	14	17	17	16	27	64	78	0.631		
Potential South of Delta Art. 21 Water Avail.	0	0	0	0	0	0	0	0	0	0	0	0	0	0.000		
SWP San Luis EOM Storage	580	644	694	707	621	507	390	293	207	166	145	207	300	-		
SWP Contractor Deliveries	65	46	69	73	66	96	112	95	85	46	58	23	17	0.786		

Assumptions for 2021 Allocation Analysis

Notes:

- SWPAO's initial delivery files: 10% for the 90%, 15% for the 50% and 75% studies, and the 30% for the 25% study.
- Both the 75% and 90% studies reflect the 50% FRSA delivery patterns; and the 50% and 25% studies reflect the 100% FRSA delivery pattern.
- When Biological Opinions' (BiOp) impacts occur at the export facilities, SWP and CVP will share the available water supply accordingly under the revised COA Article 10(i).

Estimated Delivery in Details

	(1) '21 Table A	(2) '21-'22 ANTCO	(3) '20 CO & Others	(1+2) 2021 Allocation	(1+3) 2021 Delivery	(1+2+3) Total Water Available for '21
25% Exceedence Moderate OMR	0.584 maf	0.211 maf	0.359 maf	0.795 maf	0.943 maf	1.154 maf
50% Exceedence North of Delta	0.493 maf	0.157 maf	0.422 maf	0.650 maf	0.915 maf	1.072 maf
50% Exceedence Most OMR	0.343 maf	0.157 maf	0.422 maf	0.500 maf	0.765 maf	0.922 maf
50% Exceedence Moderate OMR	0.412 maf	0.157 maf	0.422 maf	0.568 maf	0.834 maf	0.991 maf
50% Exceedence Least OMR	0.453 maf	0.157 maf	0.422 maf	0.609 maf	0.875 maf	1.032 maf
75% Exceedence Moderate OMR	0.350 maf	0.157 maf	0.453 maf	0.507 maf	0.803 maf	0.960 maf
90% Exceedence North of Delta	0.312 maf	0.088 maf	0.474 maf	0.400 maf	0.786 maf	0.874 maf
90% Exceedence Most OMR	0.205 maf	0.088 maf	0.474 maf	0.294 maf	0.680 maf	0.768 maf
90% Exceedence Moderate OMR	0.312 maf	0.088 maf	0.474 maf	0.400 maf	0.786 maf	0.874 maf
90% Exceedence Least OMR	0.312 maf	0.088 maf	0.474 maf	0.400 maf	0.786 maf	0.874 maf

Reservoir Targets

- Lake Oroville storage target = 1.600 MAF

Exceedence	Possible Table A	Storage Target
25% Exceedence Moderate OMR	19%	1.600 MAF
50% Exceedence North of Delta	16%	1.600 MAF
50% Exceedence Most OMR	12%	1.600 MAF
50% Exceedence Moderate OMR	14%	1.600 MAF
50% Exceedence Least OMR	15%	1.600 MAF
75% Exceedence Moderate OMR	12%	1.600 MAF
90% Exceedence North of Delta	10%	1.600 MAF
90% Exceedence Most OMR	7%	1.600 MAF
90% Exceedence Moderate OMR	10%	1.600 MAF
90% Exceedence Least OMR	10%	1.600 MAF

- SWP San Luis storage targets for 2021

Exceedence	Deadpool	=	Total
All	42 taf		42 taf
>>>> for the 25% study			
	Deadpool		Unscheduled CO & Backed up Water
Oct-21	42 taf		162 taf
Nov-21	42 taf		325 taf
Dec-21	42 taf		487 taf
			Required Storage
			204 >>> 1/3 of '21-'22 ANTCO is available in Oct. '21
			367 >>> 2/3 of '21-'22 ANTCO is available in Nov. '21
			529 >>> 100% of '21-'22 ANTCO is available in Dec. '21
>>>> for the 50% and 75% OMR studies			
	Deadpool		Unscheduled CO & Backed up Water
Oct-21	42 taf		123 taf
Nov-21	42 taf		246 taf
Dec-21	42 taf		369 taf
			Required Storage
			165 >>> 1/3 of '21-'22 ANTCO is available in Oct. '21
			288 >>> 2/3 of '21-'22 ANTCO is available in Nov. '21
			411 >>> 100% of '21-'22 ANTCO is available in Dec. '21
>>>> for all the 90% studies.			
	Deadpool		Unscheduled CO & Backed up Water
Oct-21	42 taf		83 taf
Nov-21	42 taf		165 taf
Dec-21	42 taf		248 taf
			Required Storage
			125 >>> 1/3 of '21-'22 ANTCO is available in Oct. '21
			207 >>> 2/3 of '21-'22 ANTCO is available in Nov. '21
			290 >>> 100% of '21-'22 ANTCO is available in Dec. '21

2019 NOAA Fisheries and USFWS Biological Opinions / 2020 DFW Incidental Take Permit Regulatory Requirements

OMR Management

(Targets assumed in accordance with the 2019 NOAA Fishery and USFWS Biological Opinions; and the 2020 DFW Incidental Take Permit)

	Most	Moderate	Least
January	-1250	-3500	-5000
February	-1250	-3500	-5000
March	-1250	-3500	-5000
April*	SJI Critical WY 1:1, Dry WY 2:1, BN WY 3:1, AN/W WY 4:1		
May*	SJI Critical WY 1:1, Dry WY 2:1, BN WY 3:1, AN/W WY 4:1		
June	-1250	-3500	-5000
December 1-17	-2000	-2000	-2000
December 18-31	-2000	-2000	-2000

* In accordance with the 2020 DFW Incidental Take Permit

Summer - Fall Action Plan (Delta Smelt Habitat)

Suisun Marsh Salinity Gate Operation

	Wet	Above Normal	Below Normal	Dry*	Critical
Jun					X
Jul					
Aug	SMSCG	SMSCG	SMSCG	SMSCG*	
Sep					
Oct					

Fall X2

	Wet	Above Normal
Sep		
Oct	Fall X2 < 80 KM	

* SMSCG operations: Following wet/above normal years, assumed July and Aug (60 days); following below normal years, assumed July (30 days)

Delta Outflow Blocks

(Includes Spring Outflow up to 150 TAF and 100 TAF)

	Wet	Above Normal	Below Normal	Dry	Critical
Apr	Spring Outflow Block				X
May					
Jun					
Jul					
Aug	100 TAF				
Sep					
Oct					

	Wet	Above Normal	Below Normal	Dry	Critical
Mar	-Spring Outflow to be used in the following year (subject to spill from Oroville) -100 TAF can be stored and used in the following year (subject to spill from Oroville)				X
Apr					
May					
Jun					
Jul					
Aug					
Sep					
Oct					