



Water Supply Report

June 4, 2021

WATER RESOURCES SUMMARY

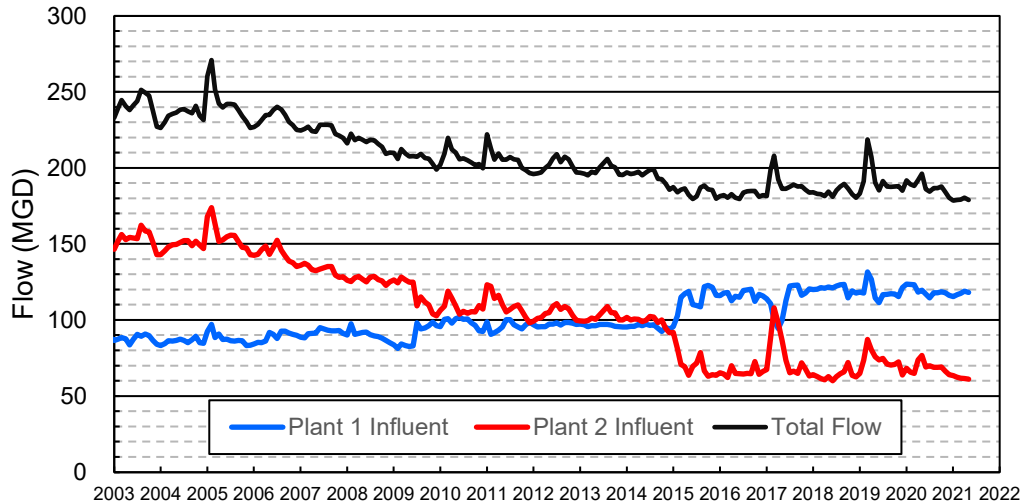
April 2021

INFLOWS & OUTFLOWS (acre-feet)	Total for Month	Year to Date - This Year Last Year		
BASIN SUPPLIES				
Water Purchases from MWD (excludes In Lieu)	0	0	18,098	
Water into MWD Storage Account (excludes In Lieu)	0	0	0	
SAR & Santiago Creek Flows (accounts for storage to/from recharge facilities)	13,533	102,829	145,274	
GWRS Water to Forebay	5,367	51,088	61,240	
GWRS Water to Mid-Basin Injection Wells	815	8,988	2,266	
GWRS Water to Talbert Barrier	2,079	22,347	20,261	
OC-44 Water to Talbert Barrier	0	15	0	
Alamitos Barrier Water	115	2,141	1,750	
Incidental Recharge (estimated)	4,000	31,700	36,700	
Evaporation from Recharge Basins	(292)	(2,698)	(2,698)	
River Flow Lost to Ocean	<u>0</u>	<u>(1,218)</u>	<u>(22,093)</u>	
Total Groundwater Recharge	25,617	215,192	260,798	
WATER PRODUCTION				
Groundwater Production	22,481	234,580	231,061	
MWD Storage Program Withdrawals	<u>0</u>	<u>0</u>	<u>0</u>	
Total Groundwater Production	22,481	234,580	231,061	
BASIN BALANCE				
Change in Groundwater Storage	3,136	(19,388)	29,737	
Change in Groundwater Storage excluding MWD Stored Water	3,136	(19,388)	29,737	
Accumulated Overdraft	-----	219,388	206,261	
Accumulated Overdraft excluding MWD Storage	-----	219,388	206,261	
IN LIEU WATER				
OCWD In Lieu Purchases (MWD Cyclic Storage)	0	0	9,355	
MWD In Lieu Storage	<u>0</u>	<u>0</u>	<u>0</u>	
Total In Lieu	0	0	9,355	
OTHER KEY INFORMATION				
1. MWD Water Deliveries to Producers	9,083	80,820	72,776	
2. Basin Production Percentage	71.2%	74.4%	79.1%	
3. Total Water Demand	33,214	330,381	317,022	
4. Total GWRS Production	8,263	82,476	83,844	
5. Green Acres Project Water	466	3,387	3,353	
6. SAR Water Quality				
- Total Dissolved Solids (TDS) of SAR below Prado Dam (ppm)	758	-----	328	
- Total Nitrogen of SAR below Prado Dam (ppm)	3.5	-----	2.0	
7. Month-End Water Storage Behind Prado Dam	2	-----	18,901	
8. Month-End Water Storage in Recharge Facilities	10,761	-----	17,533	
9. Water Storage Change in Recharge Facilities	(1,749)	(4,978)	750	
10. Total Artificial Recharge	21,617	183,492	224,100	
11. Monthly Mean Temperature at Santa Ana Fire Station (°F)	65.1	-----	64.7	
12. Rainfall at FHQ (inches)	0.01	5.74	13.83	

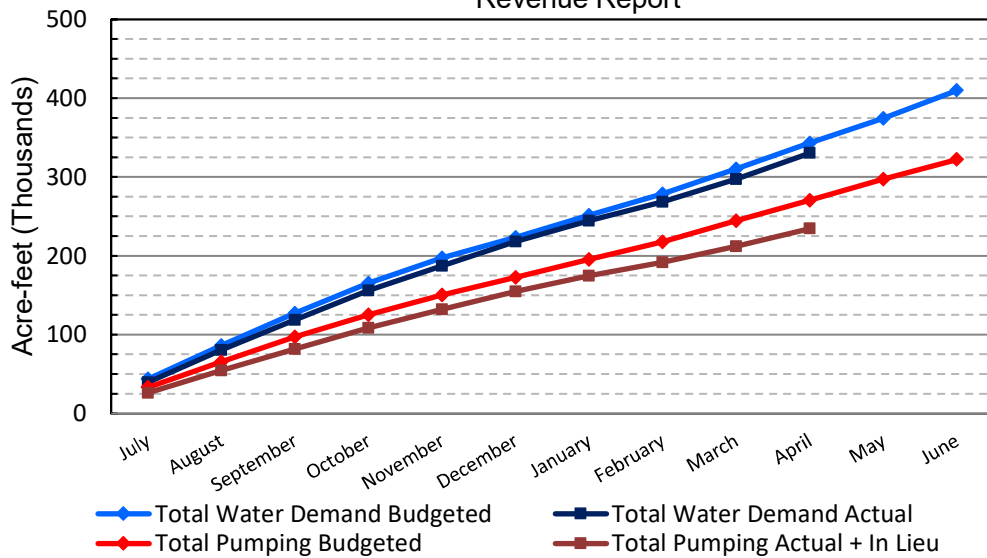
*** Note: Data are preliminary, subject to change

5/13/2021

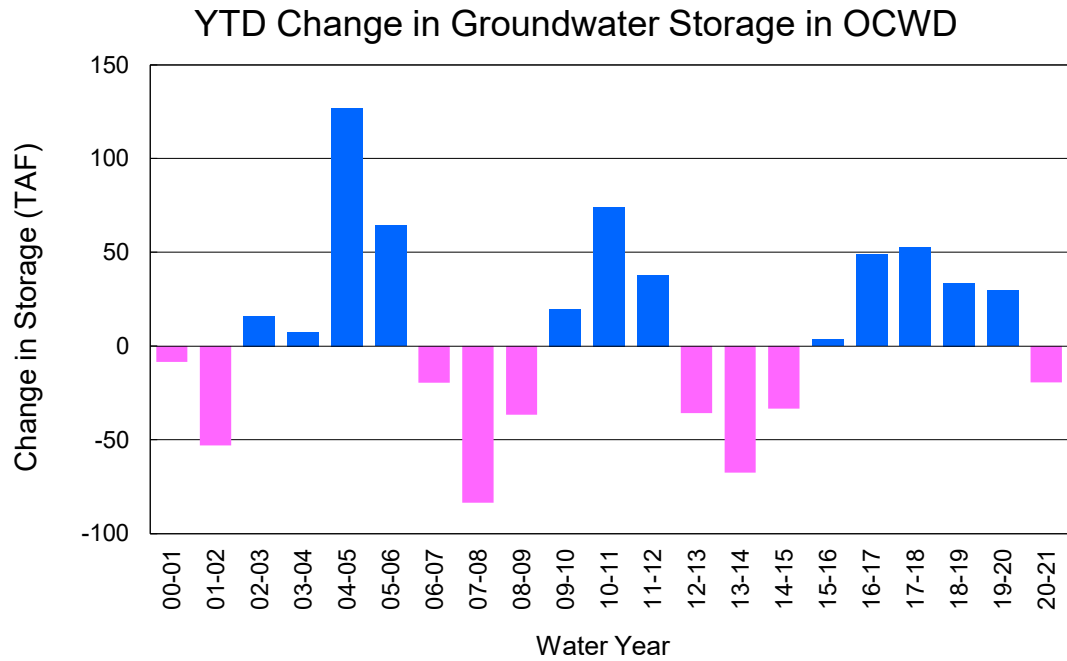
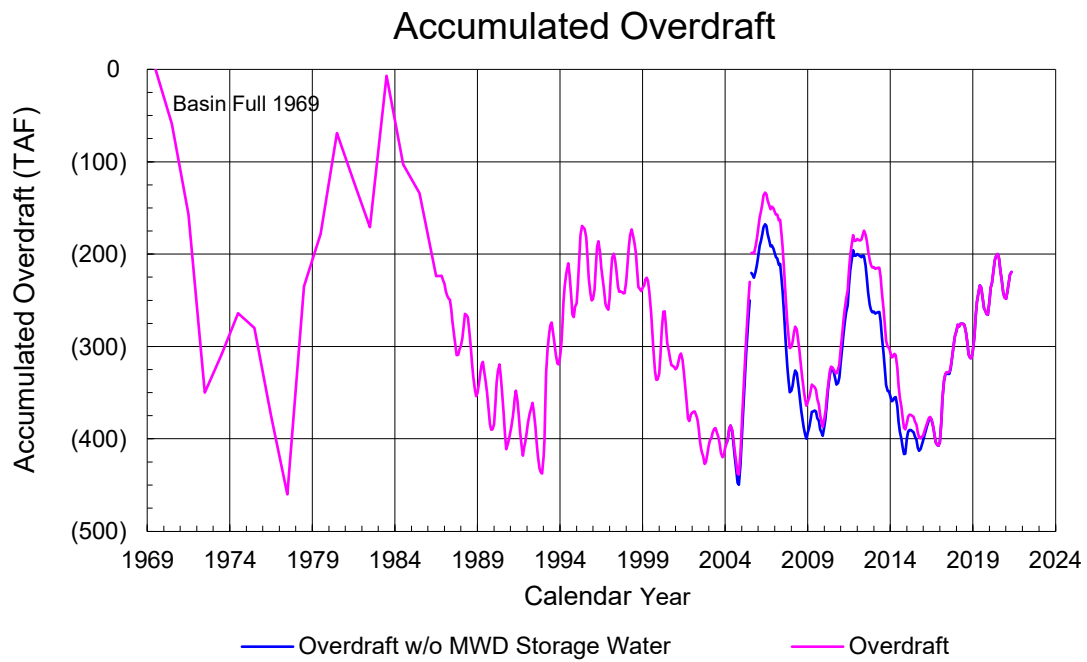
Orange County Sanitation District Influent Flows Report



2019-20 Water Demands/Groundwater Pumping + In Lieu/RA Revenue Report



	Monthly		Accumulated Total for the Year			
	Budget	Actual	Budget	Actual	Difference	Percent
Total Water Demand	32,600	33,214	343,000	330,381	-12,619	96.32%
Total Pumping + In Lieu	26,100	22,481	270,500	234,580	-35,920	86.72%
RA Revenue	\$12,058,200	\$10,386,082	\$124,971,000	\$108,376,005	-\$16,594,995	86.72%



PRODUCERS WATER USAGE SUMMARY

April 2021

(AF except BPP)

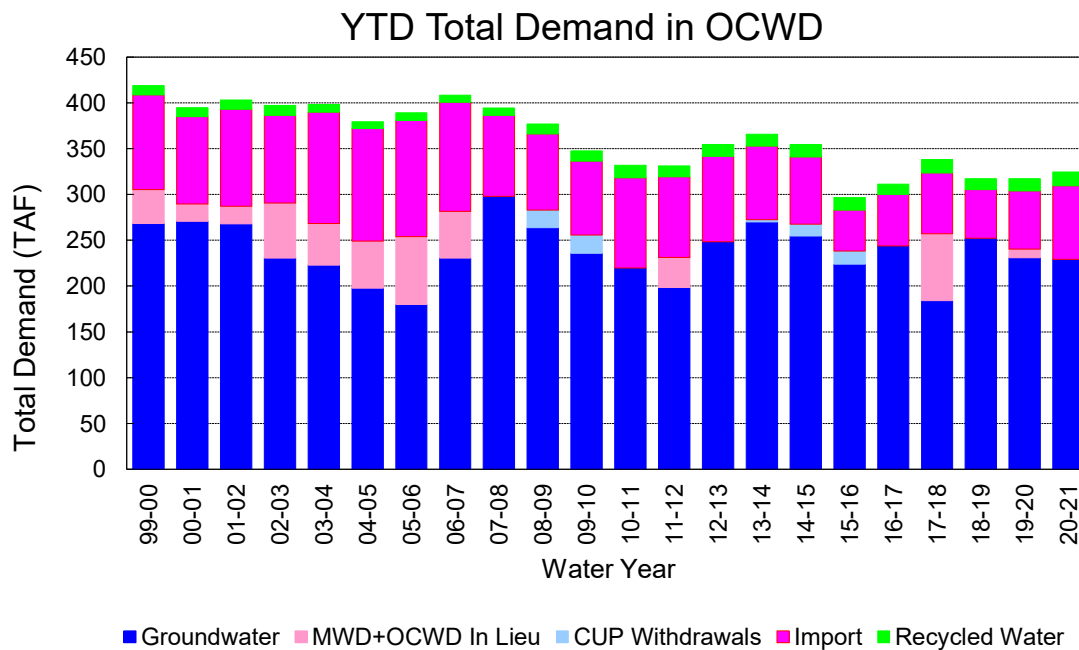
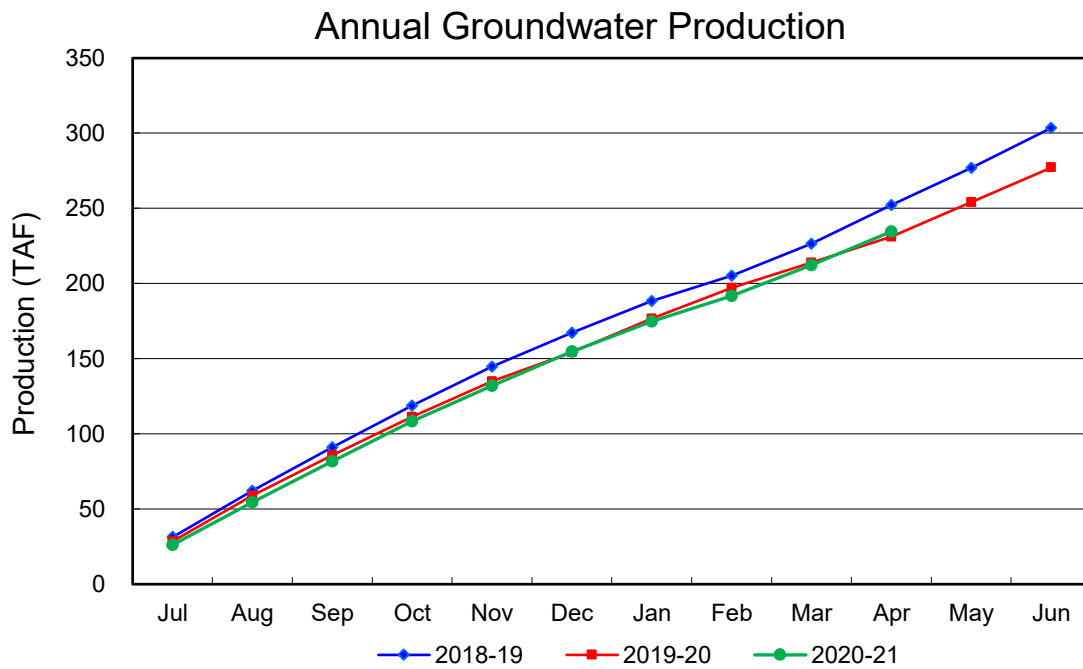
WATER AGENCY	Ground- water (1)	In Lieu	Reclaimed Water	Total Import (2)	Total Demand	2020-21 YTD Demand	2019-20 YTD Demand	YTD % Diff Demand	APR 2021 BPP	2020-21 YTD BPP	2019-20 YTD BPP
Anaheim	1,315	0	0	3,631	4,946	47,665	46,405	103%	26.6%	26.4%	67.4%
Buena Park	910	0	0	157	1,067	10,830	10,748	101%	85.3%	88.7%	77.4%
East Orange County	0	0	0	64	64	803	644	125%	0.0%	8.8%	0.6%
Fountain Valley	763	0	204	0	967	8,517	8,106	105%	100.0%	100.0%	100.0%
Fullerton	1,510	0	0	506	2,016	19,967	19,386	103%	74.9%	71.8%	79.1%
Garden Grove	1,635	0	0	281	1,916	18,957	17,959	106%	85.3%	76.1%	52.7%
Golden State	1,312	0	0	673	1,985	19,890	18,617	107%	66.1%	71.0%	80.7%
West OC System	1,231	-	-	2	1,233	11,991	11,183	107%	na	na	na
East OC System	81	-	-	671	752	7,899	7,434	106%	na	na	na
Huntington Beach	1,820	0	0	211	2,031	22,194	20,985	106%	89.6%	84.1%	84.2%
Irvine Ranch	4,062	0	1,239	42	5,343	51,500	50,281	102%	99.0%	99.5%	99.8%
DRWF Clear	2,274	-	-	-	2,274	23,318	17,924	130%	na	na	na
DRWF Color	687	-	-	-	687	6,963	7,125	98%	na	na	na
Laguna Beach	56	0	0	130	186	2,867	2,910	na	30.0%	19.2%	61.4%
La Palma	155	0	0	0	155	1,637	1,597	103%	99.8%	100.0%	100.0%
Mesa Water (MW)	1,410	0	106	56	1,572	14,369	13,889	103%	96.2%	99.5%	97.5%
MW Clear	925	-	-	-	925	10,369	9,713	107%	na	na	na
MW Amber	486	-	-	-	486	3,172	2,599	122%	na	na	na
Newport Beach	1,308	0	73	2	1,383	12,712	11,903	107%	99.8%	96.4%	63.0%
Orange	1,771	0	0	507	2,278	22,928	22,034	104%	77.7%	80.5%	80.3%
OCWD (GAP)	132	0	0	0	132	1,346	1,242	108%	100.0%	100.0%	100.0%
Santa Ana	2,117	0	29	480	2,626	28,314	27,393	103%	81.5%	76.5%	78.0%
Seal Beach	273	0	0	0	273	2,811	2,646	106%	99.8%	69.2%	66.4%
Serrano	0	0	0	227	227	2,297	2,002	115%	0.0%	0.1%	69.3%
Tustin	477	0	0	437	914	9,225	8,475	109%	52.2%	87.2%	96.4%
Westminster	895	0	0	0	895	9,029	8,719	104%	100.0%	100.0%	74.2%
Yorba Linda	<u>0</u>	<u>0</u>	<u>0</u>	<u>1,664</u>	<u>1,664</u>	<u>16,565</u>	<u>15,589</u>	<u>106%</u>	<u>0.0%</u>	<u>64.8%</u>	<u>64.6%</u>
SUBTOTAL:	21,919	0	1,650	9,071	32,641	324,421	311,530	104%	71.2%	74.4%	79.1%
Other Producers (Est ~3% of Subtotal)	<u>0</u>	<u>0</u>	<u>0</u>	<u>12</u>	<u>12</u>	<u>5,960</u>	<u>5,492</u>	<u>109%</u>			
TOTAL:	21,919	0	1,650	9,083	32,652	330,381	317,022		71.2%	74.4%	79.1%
OCWD (Talbert Barrier)	0		2,079	0	2,079	22,364	20,263				
OCSD (GAP)	na		55	na	55	943	1,049				

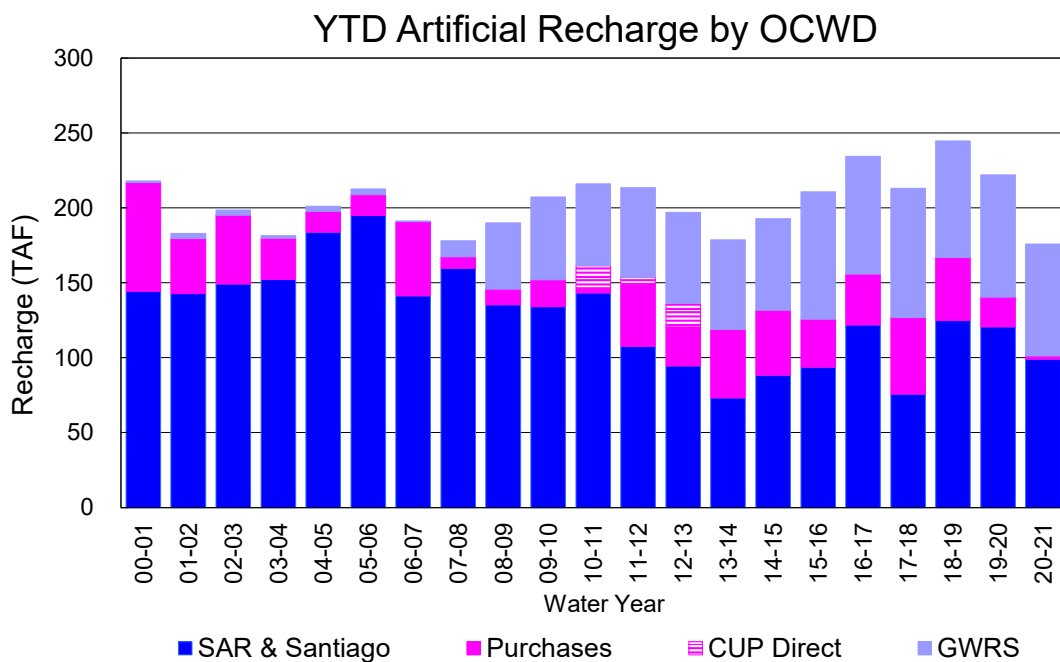
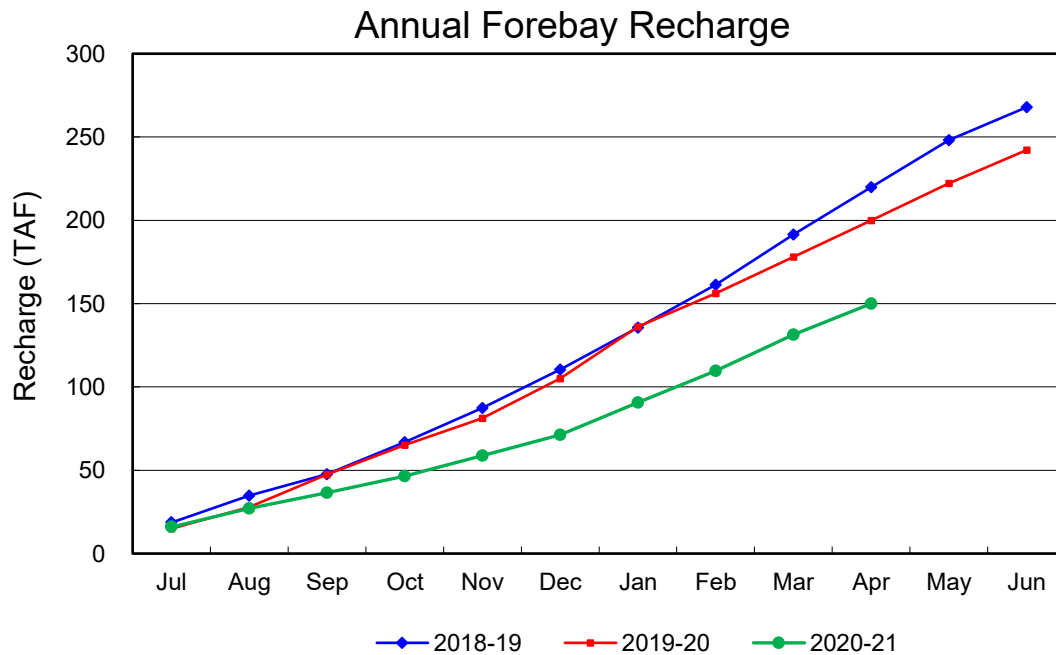
Estimated

(1) Excludes MWD CUP Withdrawals

(2) Includes MWD CUP Withdrawals & In Lieu Water

5/13/2021 13:36





RECHARGE AREAS REPORT

April 2021

	Percolation (AF)	Remarks
RIVER SYSTEM	4,940	83 cfs per day average perc
DESILTING SYSTEM	na	
OFF-RIVER SYSTEM	1,016	SAR
WARNER SYSTEM	621	SAR
OLIVE BASIN	na	Passive System, 713 af of perc for the month.
ANAHEIM LAKE	1,875	SAR
MINI-ANA LAKE	140	SAR
MILLER BASIN	965	SAR
KRAEMER BASIN	1,721	SAR, Miller pumped water
LA PALMA BASIN	2,731	GWRS
MIRA LOMA	2,652	GWRS
LA JOLLA BASIN	671	SAR, Miller pumped water
PLACENTIA BASIN	na	
RAYMOND BASIN	242	SAR, Miller pumped water
FIVE COVES BASIN	na	
BURRIS BASIN	958	SAR
RIVER VIEW BASIN	na	
FLETCHER BASIN	na	cleaned
SANTIAGO BASINS	79	local nuisance
SANTIAGO CREEK	0	
TOTALS	18,611	
5-YR AVERAGE	22,718	

FLOWS TO RECHARGE AREAS (AF)	
Imperial Headgates (estimated)	11,754
GWRS	5,369
OC-28 (MWD)	0
OC-28a (MWD)	0
OC-59	0
	0
Est'd local Forebay inflow below Imperial	30
Est'd local Santiago inflow (estimated)	0
Irvine lake releases (OC-13 MWD)	0
Villa Park Dam releases (estimated)	0
Precip at Warner Basin (inches)	0.01
Precip direct to open water surfaces	1
TOTAL INFLOW	17,153

LOSSES FROM RECHARGE AREAS (AF)	
Est'd SAR flow past Chapman Ave.	0
Est'd Santiago Cr. flow to SAR	0
Est'd flows past Raymond Basin	0
Calc'd evap (inches) Estimated	5
Est'd evaporative losses	292
TOTAL LOSSES	292

STORAGE CHANGES (AF)			
Facility	Begin	End	Net
Deep basins	10,317	8,620	-1,697
Santiago Pits	2,193	2,141	-52
River			
Off-river			
Irvine Lake			
TOTAL	12,510	10,761	-1,749

SUMMARY (AF)	
TOTAL INFLOW	17,153
TOTAL LOSSES	292
STORAGE CHANGE	-1,749
CALC'D PERCOLATION	18,611

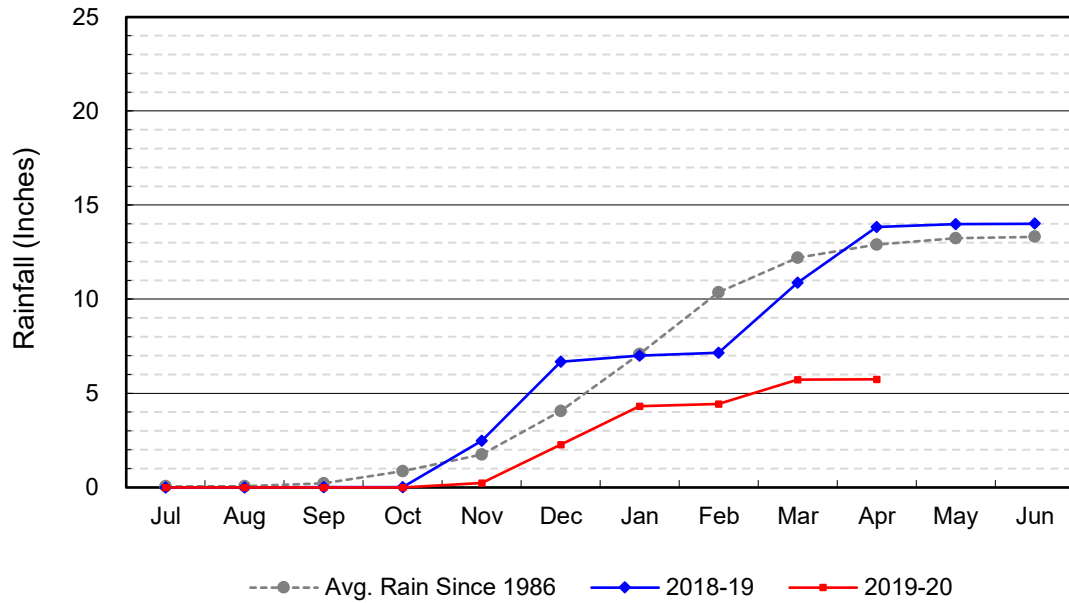
DEEP BASINS MONTHLY STATUS

April 2021

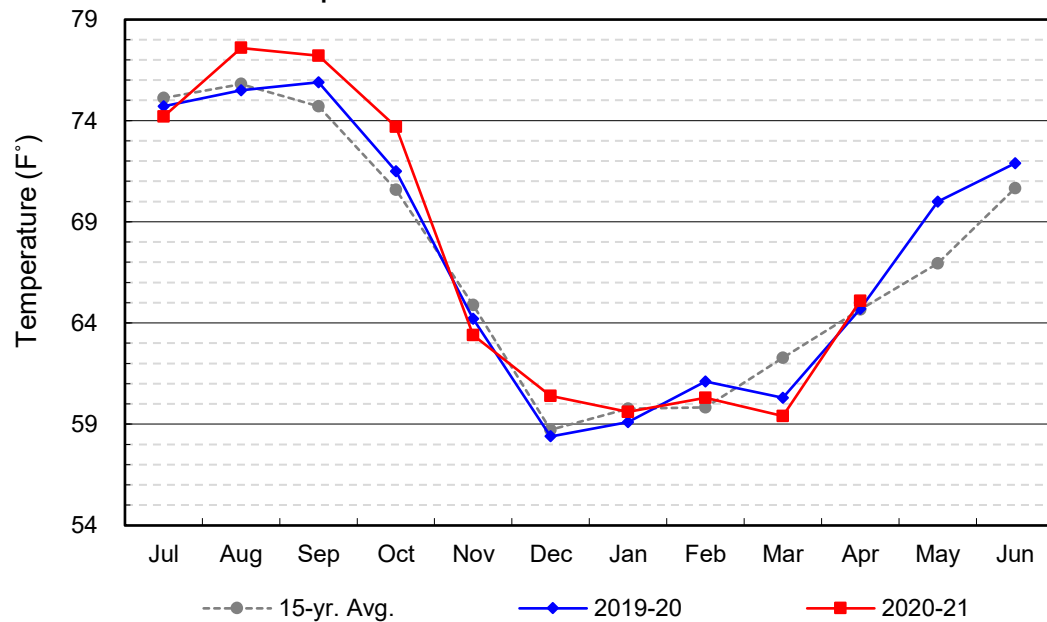
(values in acre-feet)

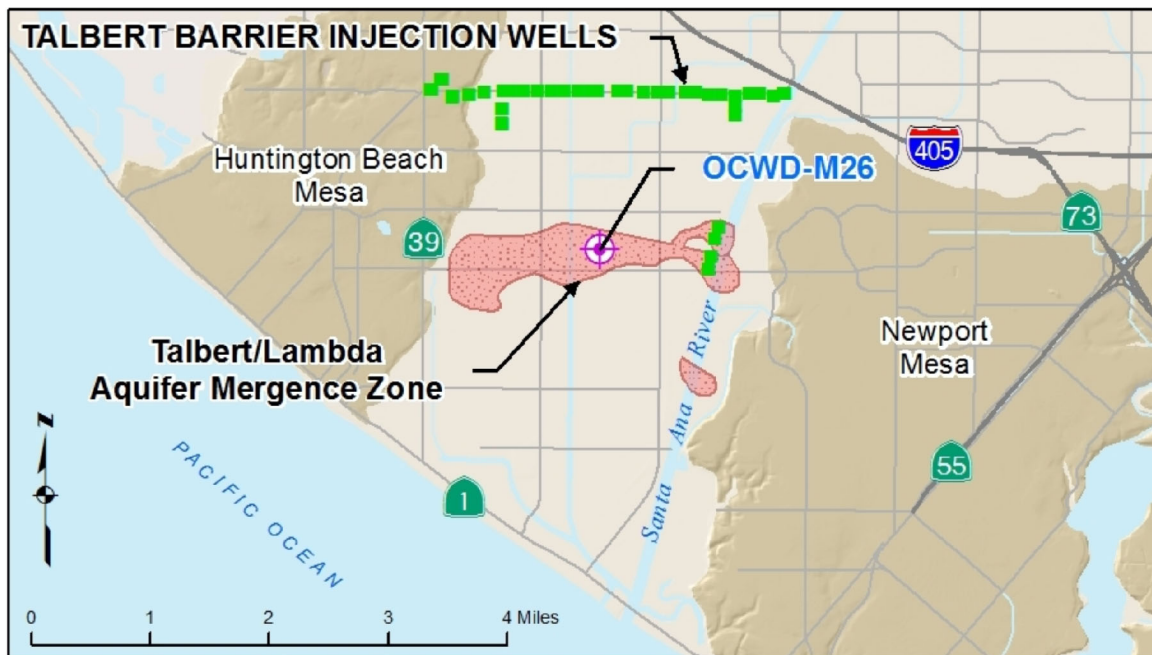
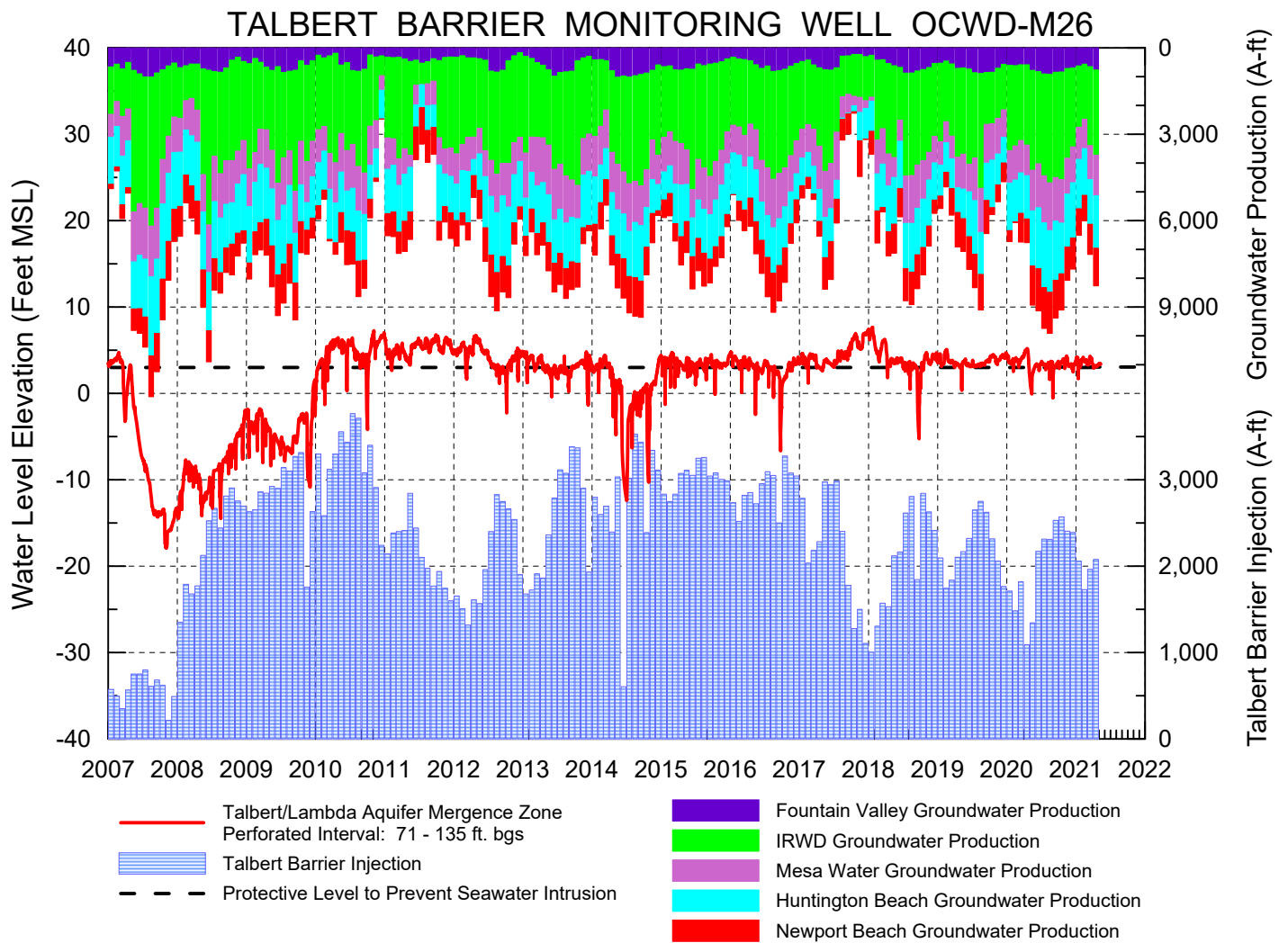
<i>Facility</i>	<i>Storage Start</i>	<i>Storage End</i>	<i>Maximum Storage</i>	<i>Total Perc</i>	<i>Max Perc</i>	<i>Avg Perc</i>	<i>Avg W.S. Elev</i>
Desilting Ponds	230	220	252	na	na	na	na
Fos-Huckleberry	570	522	628	na	na	na	na
Conrock Basin	605	549	661	na	na	na	na
Warner Basins	2,858	2,890	2,900	621	na	5	238
Olive Pit	50	29	95	na	36	24	211
Anaheim Lake	2,013	1,299	2,300	1,875	86	63	216
Mini-Anaheim Lk	7	1	10	140	10	5	223
Miller Basin	178	0	350	965	67	32	208
Kraemer Basin	797	185	1,055	1,721	94	57	204
La Palma Basin	89	64	101	2,731	120	91	217
Mira Loma	16	24	53	2,652	106	88	217
La Jolla Basin	7	5	20	671	39	22	201
Placentia Basin	0	0	200	na	na	na	na
Raymond Basin	75	100	200	242	na	na	na
Five Coves Basins	316	249	329	na	na	na	na
Burris Pit	2,506	2,483	2,500	958	35	32	172
River View Basin	0	0	8	na	na	na	na
Fletcher Basin	0	0	15	na	na	na	na
Santiago (Bond)	1,313	1,275	8,312	79	9	3	188
Santiago (Blu Dia)	880	866	5,259	-	-	-	-
Totals	12,510	10,761	25,247	12,655			
Prado Dam	3,605	2	25,000				

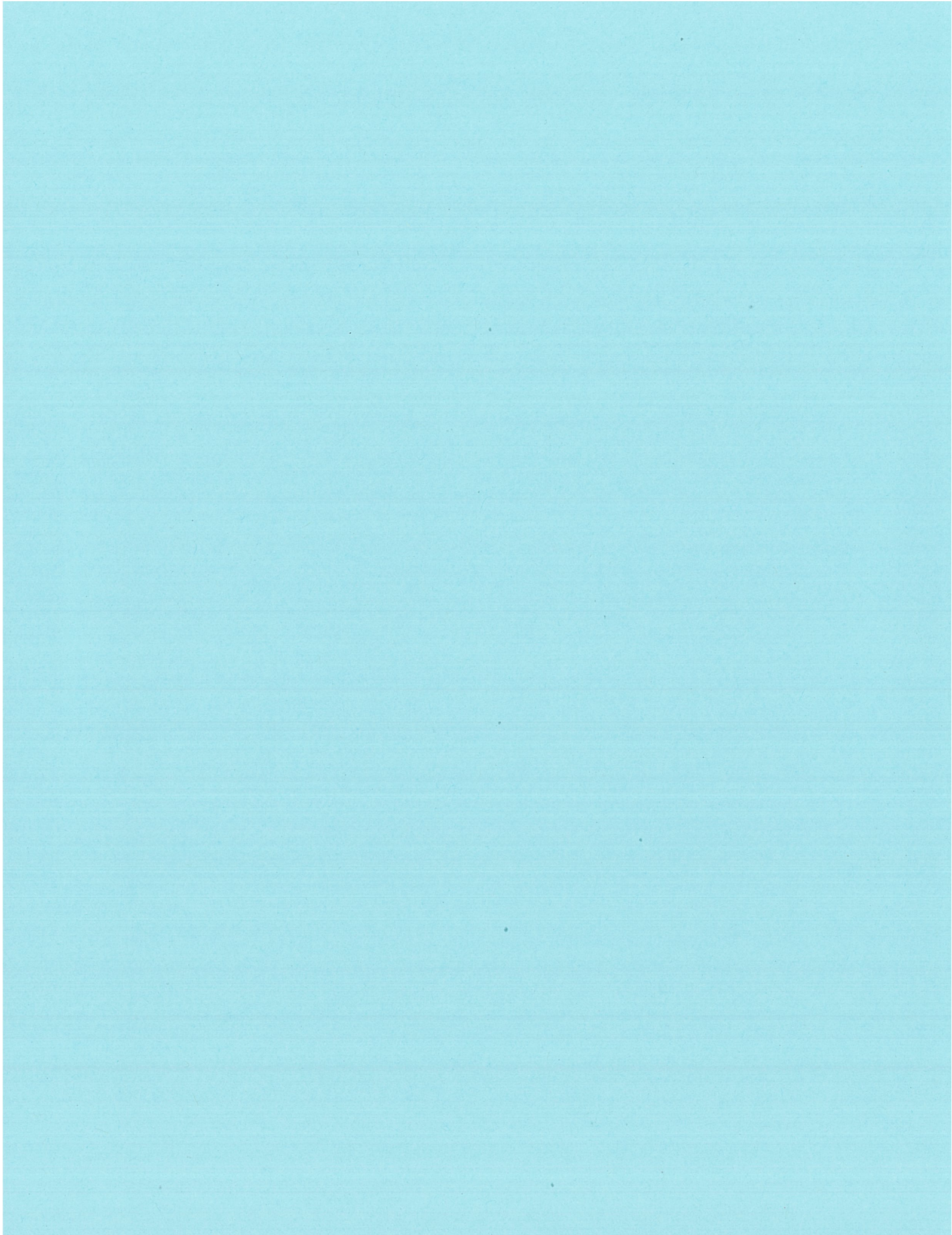
Cumulative Anaheim Field HQ Rainfall



Temperature at Santa Ana Fire Station







Executive Update

Hydrologic Conditions in California (02/01/2019)

Northern Sierra Precipitation Accumulation (1)

Rainfall & Snow Water Content (in inches)

Water Year Amount to Date (since Oct. 1, 2018):	26.10
Average to Date:	27.90
Percent of Average to Date:	94 %
Average for the Water Year (Oct. 1 through Sep. 30)	51.80
Percent of Average for the Water Year (Oct. 1 through Sep. 30)	50 %

(1) Northern Sierra (Sacramento, Feather, Yuba, and American River Basins)

Snowpack Water Content

Region	Water Content (in inches)	% Avg to Date	% April 1 Avg (2)
Northern Sierra	18.00	100	63
Central Sierra	19.20	102	63
Southern Sierra	14.20	97	56
Statewide	17.50	100	61

(2) April 1 is the date of normal maximum accumulation for the season.

Forecast of Regional Water Supply Indices (3)

Index	Value	Year Type
8 River Index for January (in 1000 AF)	2,860	n/a
Sacramento Valley Water Year Type Index (40-30-30) @ 50%	6.9	Below Normal
Sacramento Valley Water Year Type Index (40-30-30) @ 90%	6.0	Dry
San Joaquin Valley Water Year Type Index (60-20-20) @ 50%	3.0	Below Normal
San Joaquin Valley Water Year Type Index (60-20-20) @ 75%	2.8	Below Normal

(3) For more information see Sacramento & San Joaquin Valley Water Year Type Index forecast: [Latest](#) | [Previous](#)
(Issued monthly from December 1 through May 1)

Key Reservoir Storage As of 02/01/2019 midnight

Reservoir	River	Storage (in 1000 AF)	Avg Storage (in 1000 AF)	% Average	Capacity (in 1000 AF)	% Capacity	Flood Control (4) Encroachment (in 1000 AF)
Trinity Lake	Trinity	1,590	1,733	92	2,448	65	---
Shasta Lake	Sacramento	2,925	3,081	95	4,552	64	-774
Lake Oroville	Feather	1,413	2,323	61	3,538	40	-1,540
New Bullards Bar Res	Yuba	652	585	111	966	68	-144
Folsom Lake	American	526	509	103	977	54	-51
New Melones Res	Stanislaus	1,872	1,424	131	2,400	78	-98
Don Pedro Res	Tuolumne	1,501	1,393	108	2,030	74	-189
Lake McClure	Merced	614	491	125	1,025	60	-61
Millerton Lake	San Joaquin	320	334	96	520	61	-115
Pine Flat Res	Kings	386	472	82	1,000	39	-357
Isabella	Kern	77	173	44	568	14	-115
San Luis Res	(Offstream)	1,750	1,612	109	2,041	86	---

(4) Temporary encroachment into seasonally reserved flood storage space; requirements can vary considerably on a daily basis due to numerous variables: rainfall amounts, anticipated snowmelt, time of year, soil moisture, etc.

Daily Precipitation (in inches) for Selected Stations as of 02/01/2019

Station	Oct 1 to Date 2018 - 2019	% Average	Season to Date 2017 - 2018	% Average	% Average Oct 1 - Sep 30
Mount Shasta	19.30	85	9.69	43	44
Eureka	16.22	72	18.60	82	40
Redding	17.07	90	10.51	55	49
South Lake Tahoe	8.47	79	8.19	77	42
Sacramento Executive Airport	9.01	90	7.09	71	49
Santa Rosa (Sonoma Co AP)	17.88	85	12.43	59	49
San Francisco	11.09	82	8.50	63	47
Stockton	7.89	104	3.99	53	56
Yosemite	16.75	86	8.40	43	44
Monterey	8.38	100	5.23	62	52
Paso Robles	6.74	104	2.31	36	53
Fresno	4.48	78	1.64	29	39
Bakersfield	2.37	75	1.10	35	37
Death Valley	0.58	60	0.47	49	25
Los Angeles	10.18	140	1.86	26	68
Riverside	5.82	100	1.58	27	47
Palm Springs	2.96	103	1.45	51	52
San Diego	7.20	140	1.87	36	70

Updated Information and Data

[Hydrologic Regional Summary \(table & map\) as of 1st of month \(Feb - May\)](#)

[Daily Statewide Hydrologic Update\(Interactive\)](#)

[Forecast of April to July Unimpaired Runoff as of 1st of Month \(Feb - May\)](#)

[Weekly Update to Unimpaired Runoff Forecast \(Feb - Jun\)](#)

[Unimpaired Forecast Discussion \(Weekly/Monthly, Dec - June\)](#)

[Bulletin 120, Water Conditions in California \(Monthly, Feb - May\)](#)

Statewide Hydrologic Conditions (As of February 1, 2019)

As of February 1, 2019, statewide hydrologic conditions were as follows: precipitation, 96 percent of average to date; runoff, 68 percent of average to date; and reservoir storage, 100 percent of average to date.

Unimpaired Runoff

<http://cdec.water.ca.gov/reportapp/javareports?name=FLOWOUT>

Northern Sierra 8-Station Precipitation Index

http://cdec.water.ca.gov/cgi-progs/products/PLOT_ESI.pdf

San Joaquin 5-Station Precipitation Index

http://cdec.water.ca.gov/cgi-progs/products/PLOT_FSI.pdf

Tulare Basin 6-Station Precipitation Index

http://cdec.water.ca.gov/cgi-progs/products/PLOT_TSI.pdf

Long-Range Weather Forecast

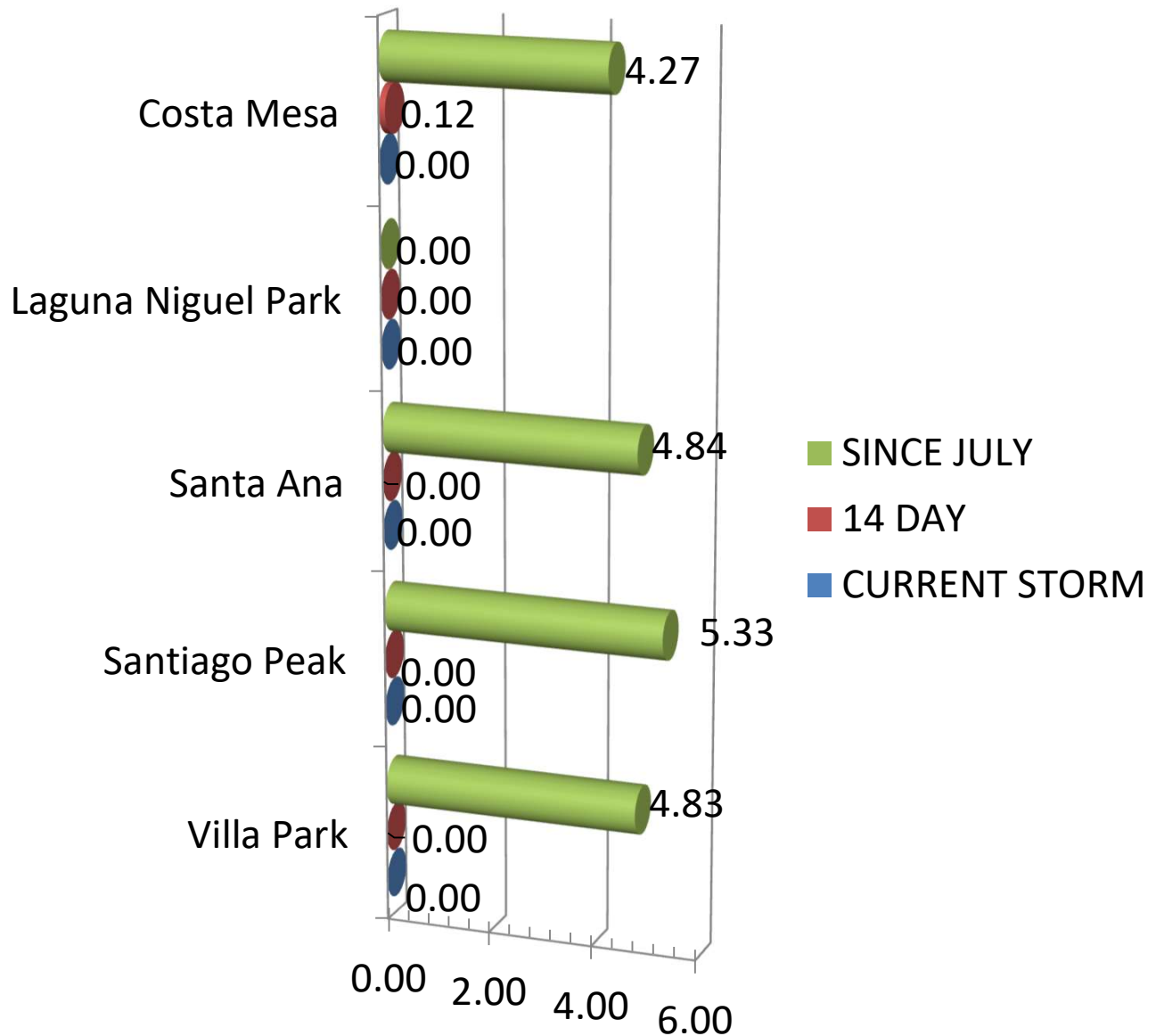
The latest National Weather Service Climate Prediction Center (CPC) long-range, 1-month precipitation outlook for February 2019, issued January 31, 2019, suggests above normal precipitation for Southern California and normal precipitation for Northern California.

Next Update

This product is updated mid-month, for conditions at the beginning of the month. The next update will be about March 15, 2019, for conditions on March 1, 2019.

Orange County Rainfall Report

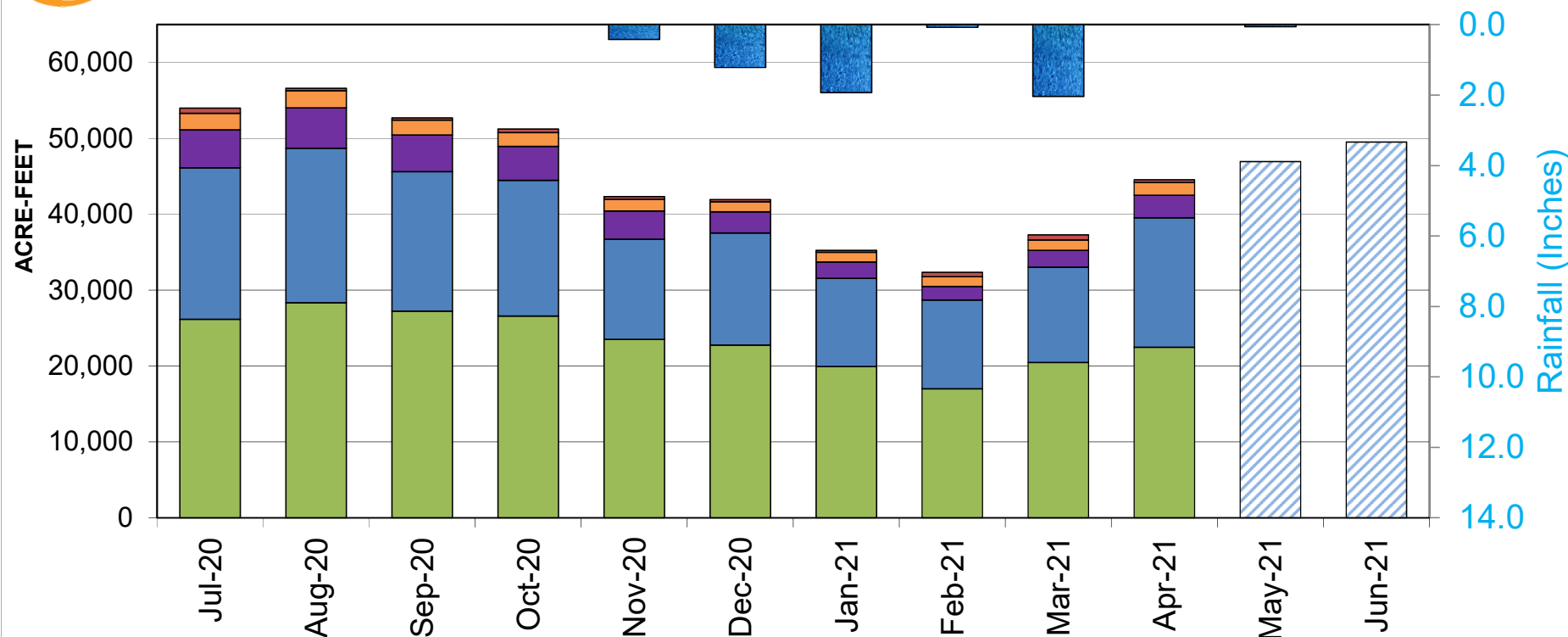
May 28, 2021



MWDOC WATER SUPPLY DATA



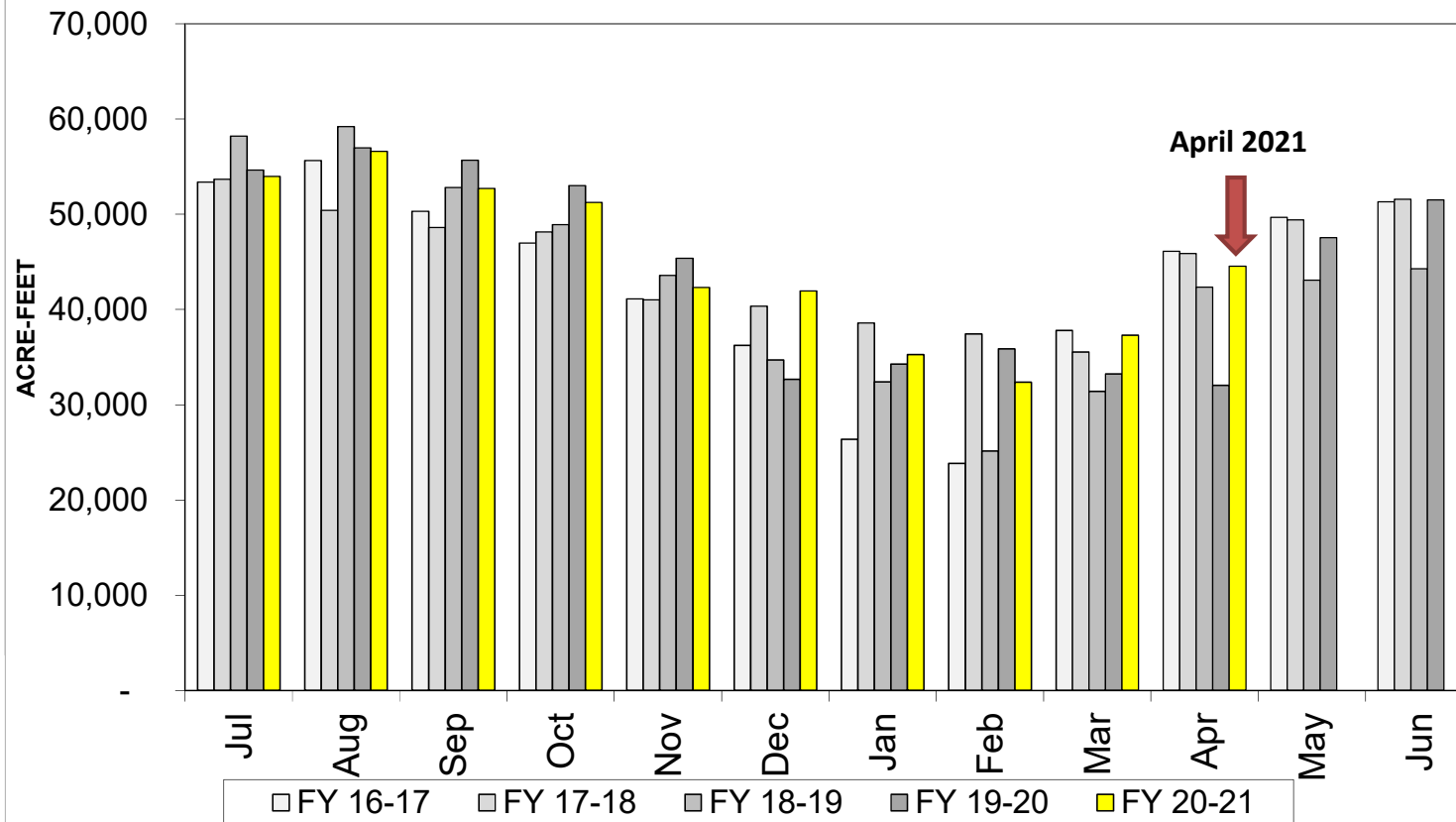
Fig. 1 OC Water Usage, Monthly by Supply with projection to end of fiscal year



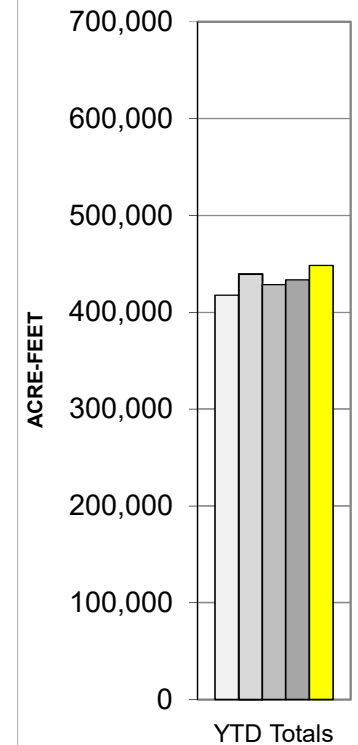
- [1] Imported water for consumptive use. Includes "In-Lieu" deliveries and CUP water extraction. Excludes "Direct Replenishment" deliveries of spreading water and deliveries into Irvine Lake.
- [2] GW for consumptive use only. Excludes In-Lieu water deliveries and CUP water extraction that are counted with Import. BPP in FY '20-21 is 77%.
- [3] MWDOC's estimate of monthly demand is based on the projected 5 Year historical retail water demand and historical monthly demand patterns.
- [4] Total water usage includes IRWD groundwater agricultural use and usage by non-retail water agencies.



Fig. 2 OC Monthly Water Usage [1]: Comparison to Last 4 Fiscal Years

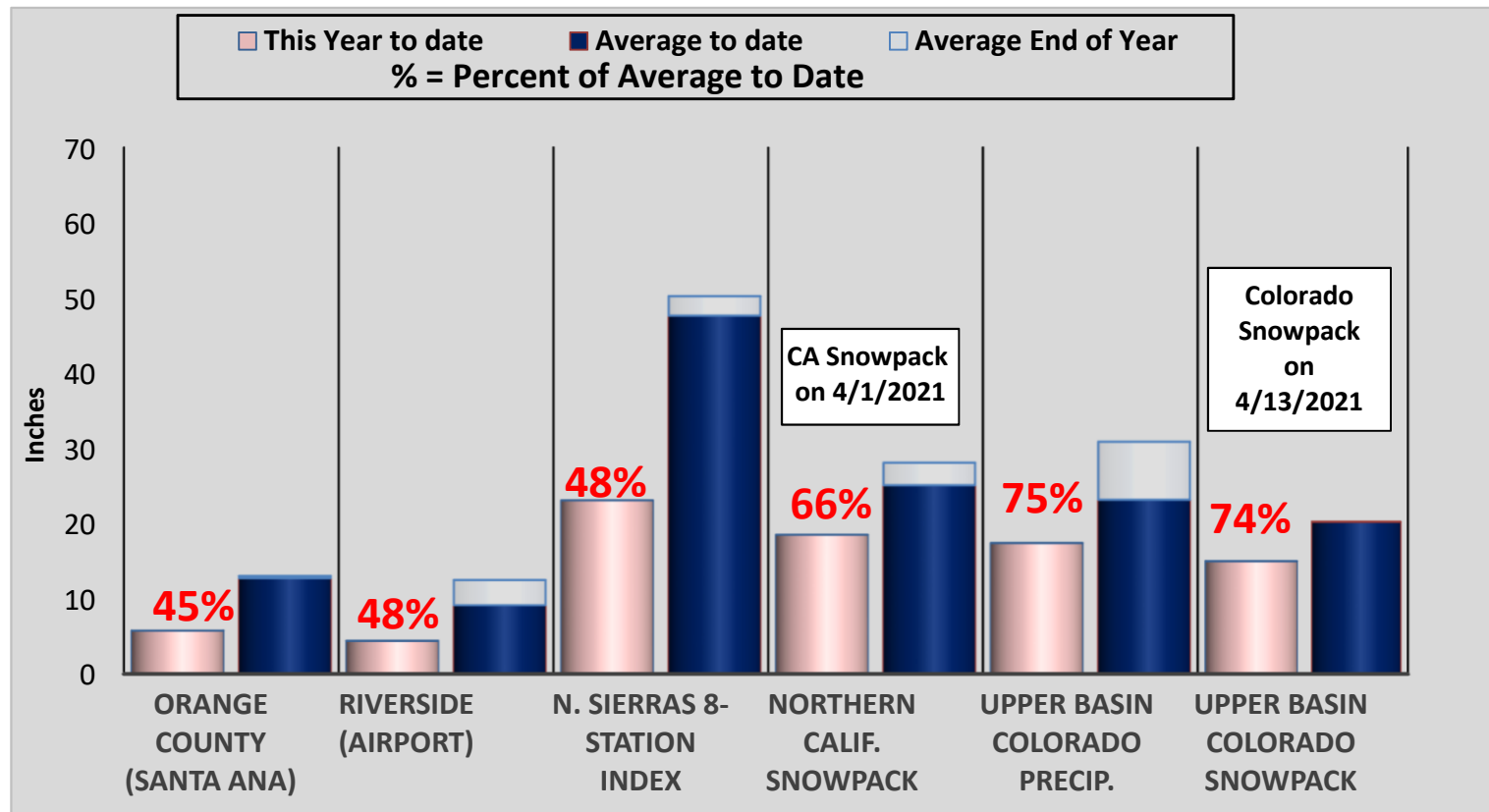


Partial Year Subtotals



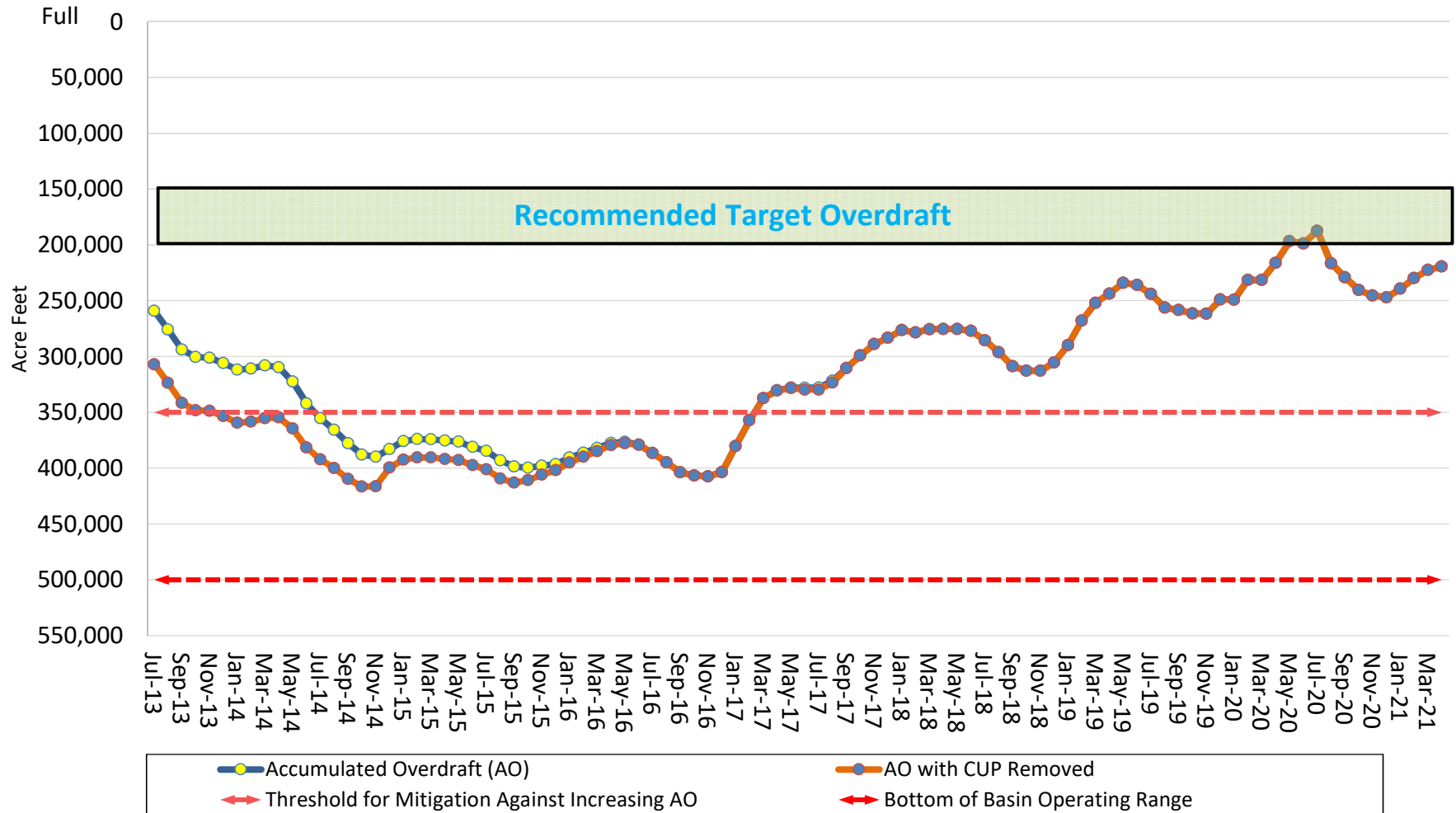
[1] Sum of Imported water for consumptive use (includes "In-Lieu" deliveries; excludes "Direct Replenishment" and "Barrier Replenishment") and Local water for consumptive use (includes recycled and non-potable water and excludes GWRS production) Recent months numbers include some estimation.

Accumulated Precipitation for the Oct.-Sep. water year, late May 2021



* The date of maximum snowpack accumulation (April 1st in Northern Calif. , April 15th in the Upper Colorado Basin) is used for year to year comparison.

Accumulated Overdraft of the OCWD Groundwater Basin as of April 2021



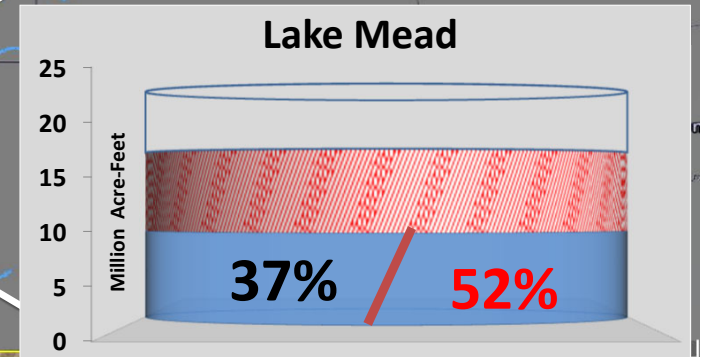
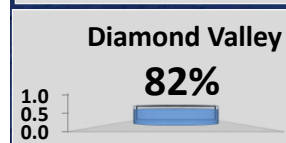
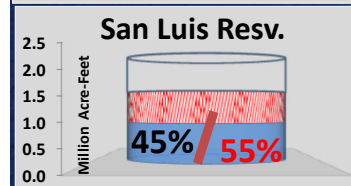
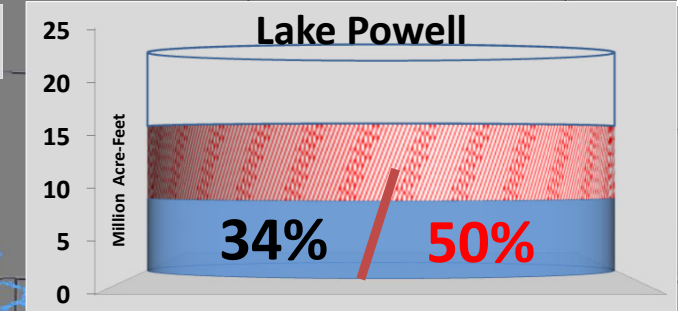
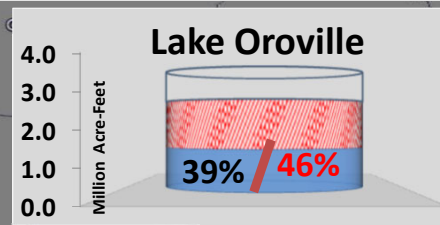
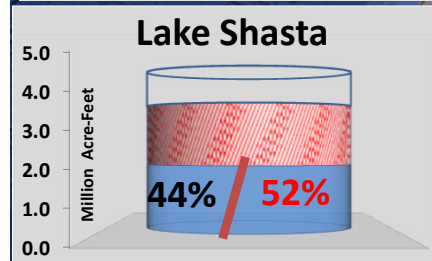
	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20
AO (AF)	244,057	256,239	258,445	261,464	261,645	248,909	249,051	231,354	231,354	216,098	196,677	198,754
AO w/CUP removed (AF)	244,057	256,239	258,446	261,464	261,645	248,909	249,051	231,354	231,354	216,098	196,677	198,754
	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21
AO (AF)	187,392	216,548	229,124	240,414	245,441	246,998	239,329	229,738	222,470	219,388		
AO w/CUP removed (AF)	187,392	216,548	229,124	240,414	245,441	246,998	239,329	229,738	222,470	219,388		

* Source ~ OCWD Monthly Board of Directors Packet, Water Resources Summary



State Water Project, Colorado River, and MWD Reservoir Storage

as of May 26, 2021



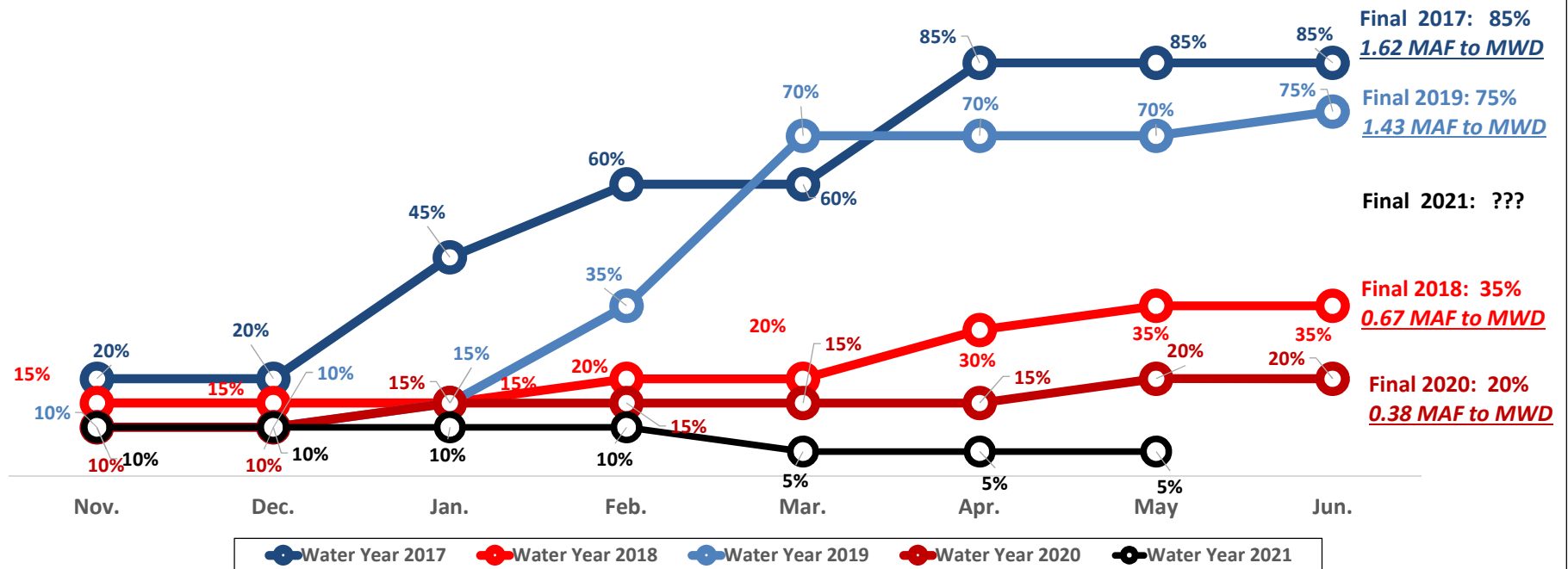
% of Capacity

% of Historical Avg.

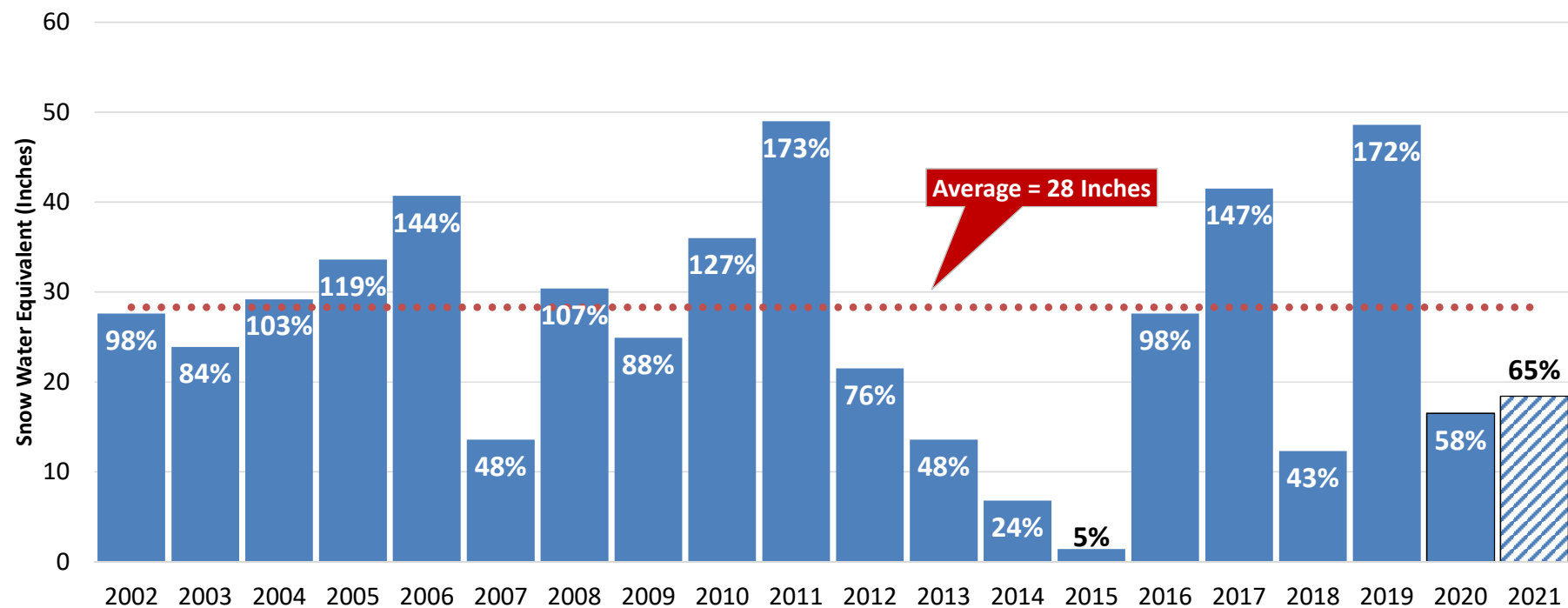


SWP TABLE A ALLOCATION

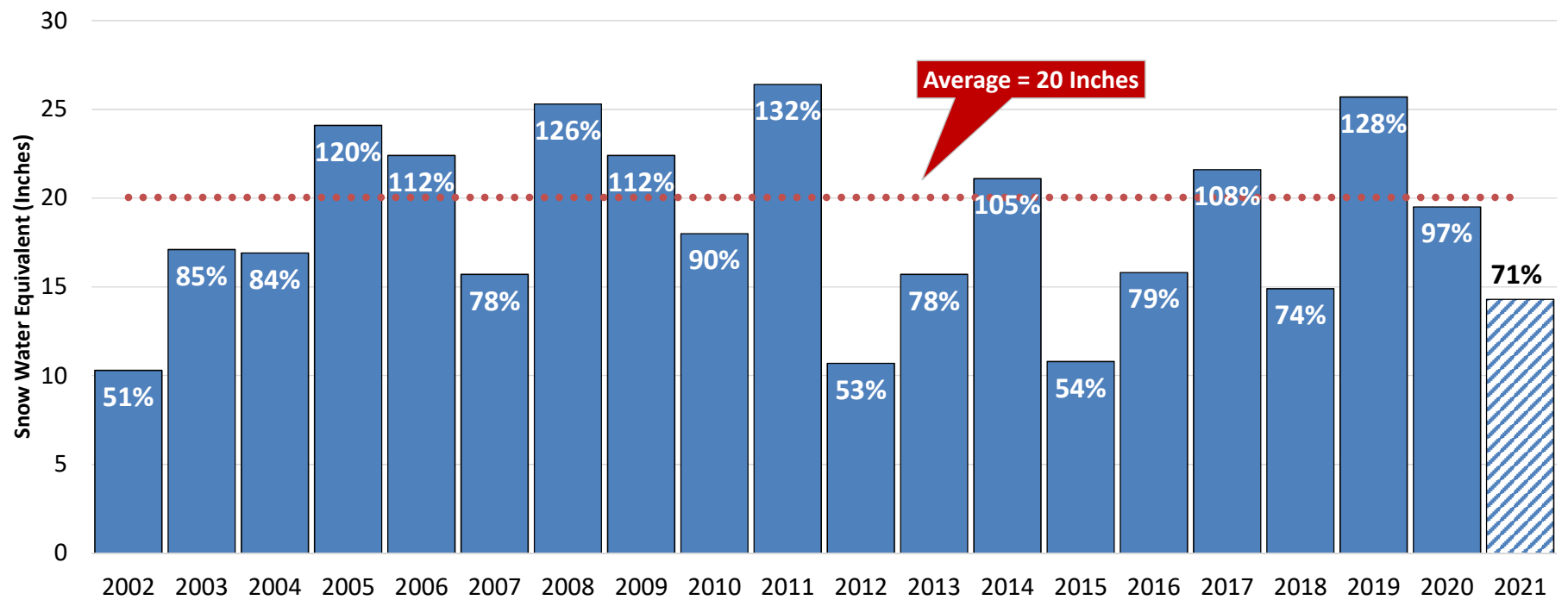
FOR STATE WATER PROJECT CONTRACTORS



Historical Northern California April 1st Peak Snow Water Equivalent

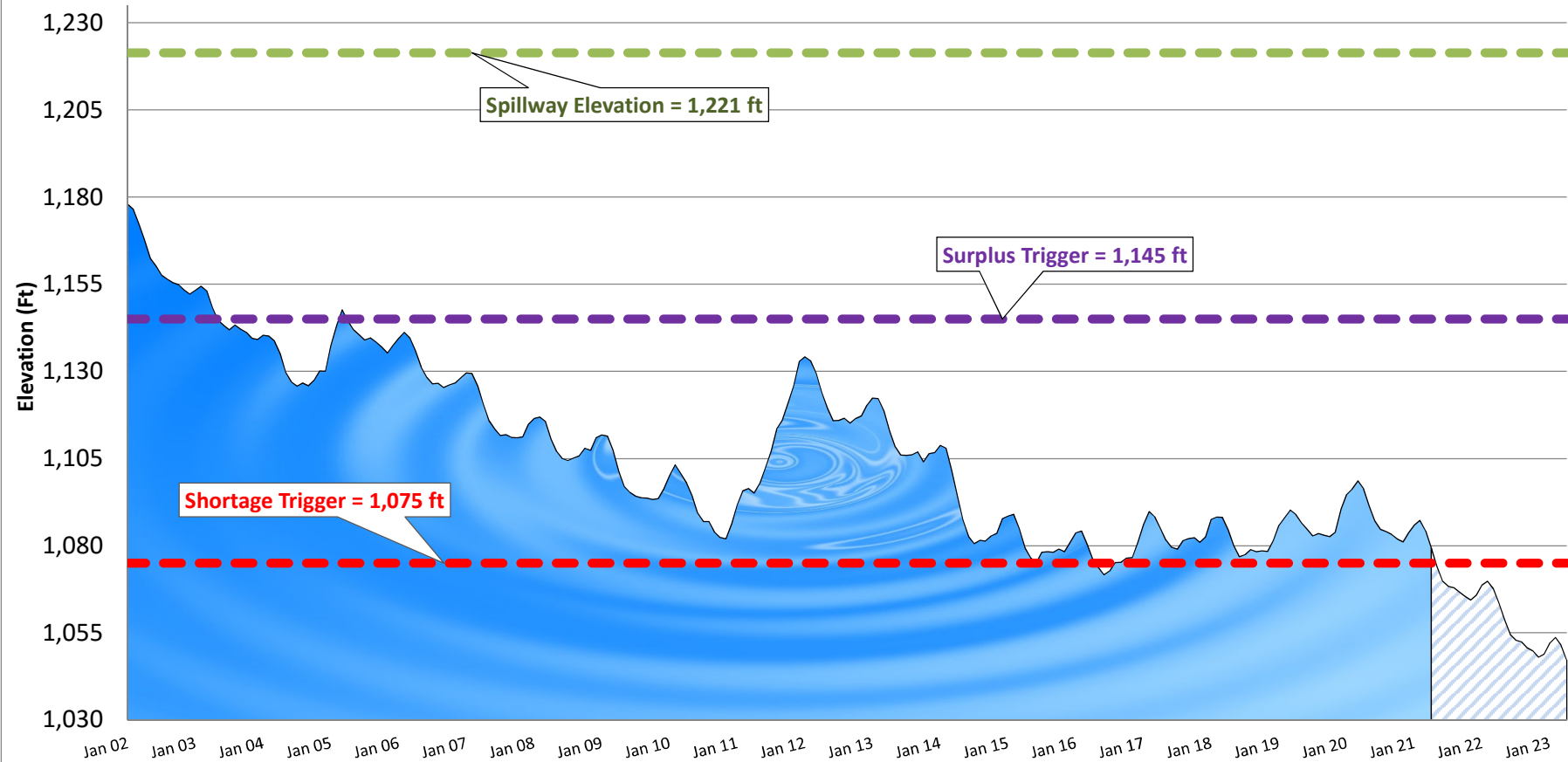


Historical Colorado Basin April 15th Peak Snow Water Equivalent



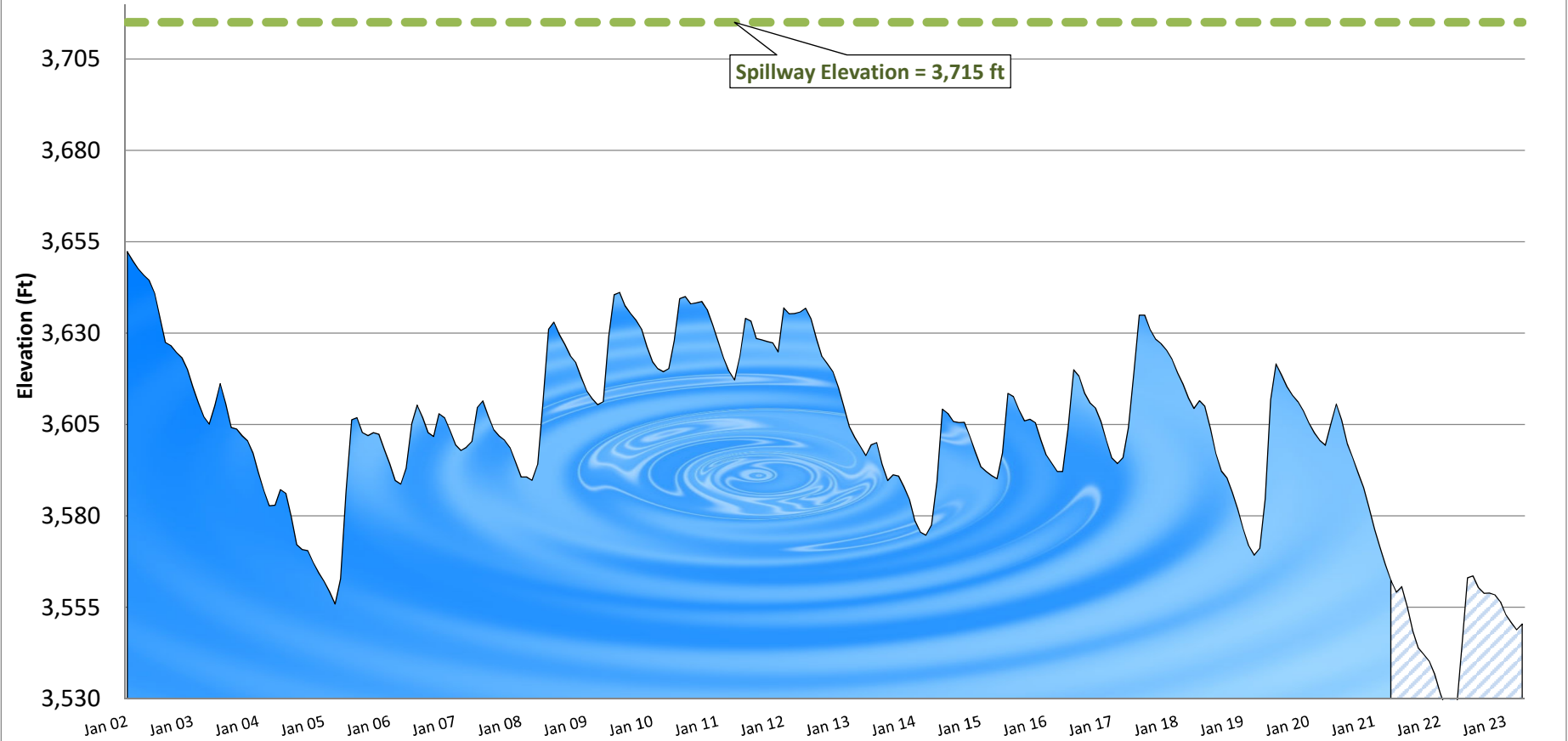
Lake Mead Levels: Historical and Projected projection per USBR 24-Month Study

■ Historical □ Projected



Lake Powell Levels: Historical and Projected projection per USBR 24-Month Study

■ Historical ■ Projected



Lake Mead Historical Water Elevation Level

