



Water Supply Report

September 9, 2022

WATER RESOURCES SUMMARY

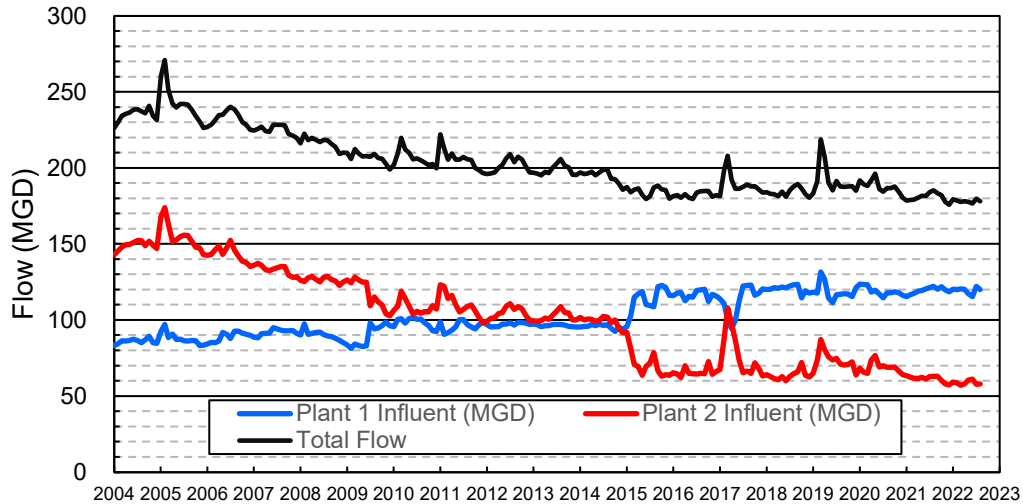
July 2022

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	0
Water into MWD Storage Account (excludes In Lieu)		0	0	0
SAR & Santiago Creek Flows		5,533	5,533	5,022
(accounts for storage to/from recharge facilities)				
GWRS Water to Forebay		5,258	5,258	5,267
GWRS Water to Mid-Basin Injection Wells		676	676	818
GWRS Water to Talbert Barrier		2,249	2,249	2,684
OC-44 and F. Valley Water to Talbert Barrier		0	0	0
Alamitos Barrier Water		210	210	269
Incidental Recharge (estimated)		1,200	1,200	1,000
Evaporation from Recharge Basins		(259)	(259)	(275)
River Flow Lost to Ocean		<u>0</u>	<u>0</u>	<u>0</u>
Total Groundwater Recharge		14,868	14,868	14,786
WATER PRODUCTION				
Groundwater Production		23,688	23,688	24,526
MWD Storage Program Withdrawals		<u>0</u>	<u>0</u>	<u>0</u>
Total Groundwater Production		23,688	23,688	24,526
BASIN BALANCE				
Change in Groundwater Storage		(8,820)	(8,820)	(9,739)
Change in Groundwater Storage excluding MWD Stored Water		(8,820)	(8,820)	(9,739)
Accumulated Overdraft		-----	261,145	257,742
Accumulated Overdraft excluding MWD Storage		-----	261,145	257,742
IN LIEU WATER				
OCWD In Lieu Purchases (MWD Cyclic Storage)		0	0	0
MWD In Lieu Storage		<u>0</u>	<u>0</u>	<u>0</u>
Total In Lieu		0	0	0
OTHER KEY INFORMATION				
1. MWD Water Deliveries to Producers		11,194	11,194	13,025
2. Basin Production Percentage		67.9%	67.9%	65.3%
3. Total Water Demand		36,317	36,317	39,272
4. Total GWRS Production		8,191	8,191	8,778
5. Green Acres Project Water		443	443	476
6. SAR Water Quality				
- Total Dissolved Solids (TDS) of SAR below Prado Dam (ppm)		690	-----	700
- Total Nitrogen of SAR below Prado Dam (ppm)		3.6	-----	3.3
7. Month-End Water Storage Behind Prado Dam		0	-----	25
8. Month-End Water Storage in Recharge Facilities		8,905	-----	8,028
9. Water Storage Change in Recharge Facilities		(1,971)	(1,971)	(632)
10. Total Artificial Recharge		13,668	13,668	13,786
11. Monthly Mean Temperature at Santa Ana Fire Station (°F)		73.8	-----	75.5
12. Rainfall at FHQ (inches)		0.00	0.00	0.08

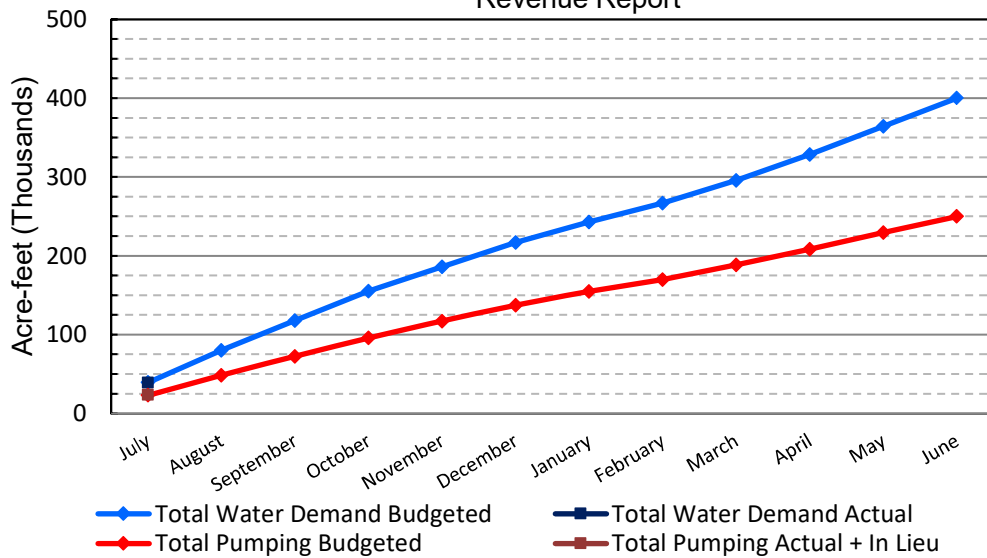
*** Note: Data are preliminary, subject to change

8/11/2022

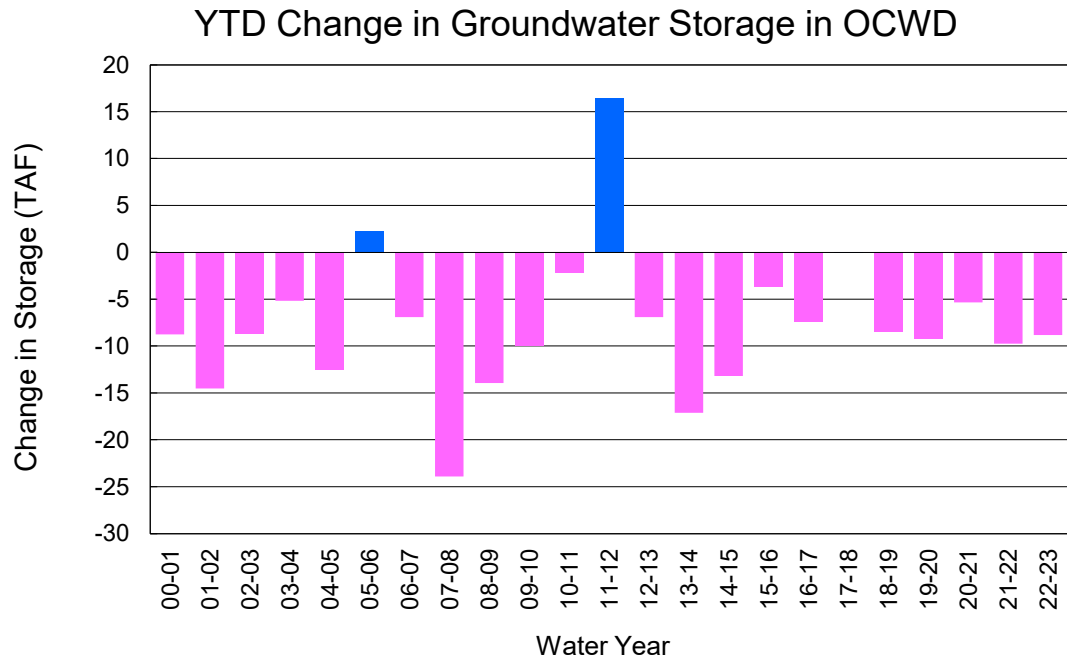
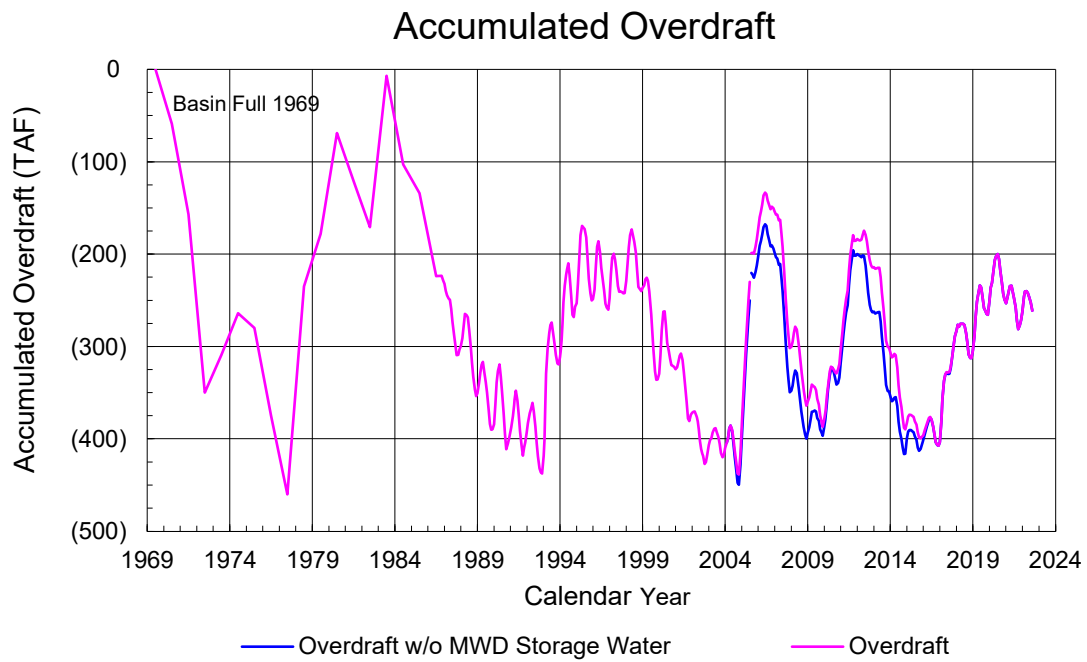
Orange County Sanitation District Influent Flows Report



2022-23 Water Demands/Groundwater Pumping + In Lieu/RA Revenue Report



	Monthly		Accumulated Total for the Year			
	Budget	Actual	Budget	Actual	Difference	Percent
Total Water Demand	39,400	36,317	39,400	36,317	-3,083	92.18%
Total Pumping + In Lieu	23,200	23,688	23,200	23,688	488	102.10%
RA Revenue	\$10,718,400	\$10,943,921	\$10,718,400	\$10,943,921	\$225,521	102.10%



PRODUCERS WATER USAGE SUMMARY

July 2022

(AF except BPP)

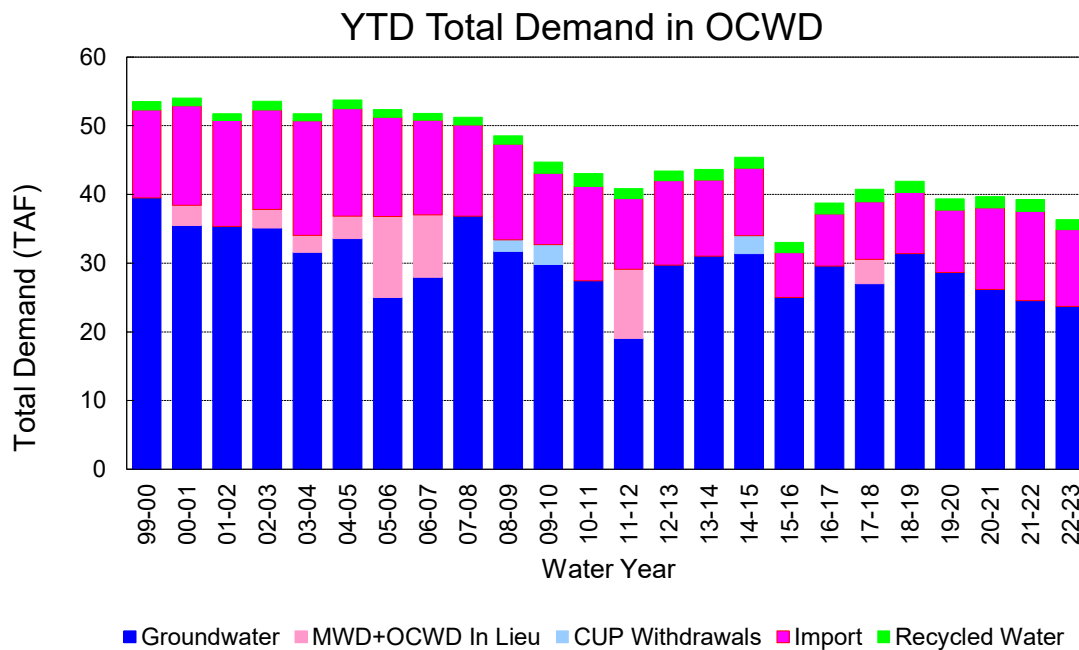
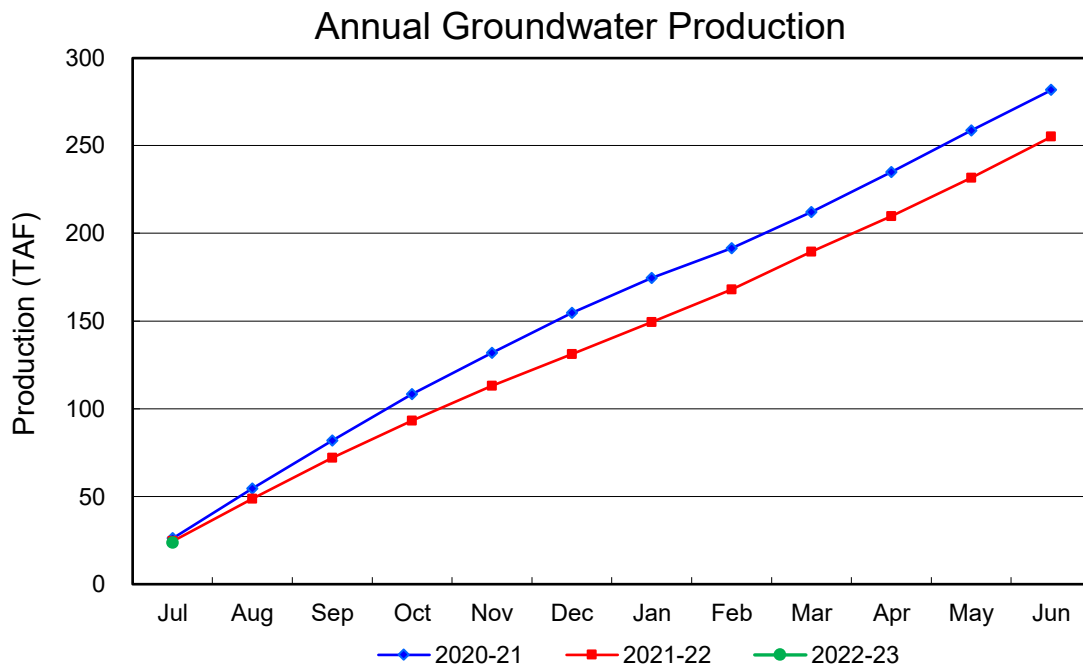
WATER AGENCY	Ground- water (1)	In Lieu	Reclaimed Water	Total Import (2)	Total Demand	2022-23 YTD Demand	2021-22 YTD Demand	YTD % Diff Demand	JUL 2022 BPP	2022-23 YTD BPP	2021-22 YTD BPP
Anaheim	1,566	0	0	0	1,566	5,091	5,530	92%	30.8%	30.8%	28.6%
Buena Park	1,022	0	0	0	1,022	1,257	1,356	93%	81.4%	81.4%	85.0%
East Orange County	0	0	0	0	0	84	100	84%	0.0%	0.0%	0.2%
Fountain Valley	809	0	171	0	980	980	1,082	91%	100.0%	100.0%	100.0%
Fullerton	1,737	0	0	0	1,737	2,293	2,511	91%	75.7%	75.7%	78.3%
Garden Grove	1,212	0	0	0	1,212	2,070	2,240	92%	58.5%	58.5%	74.8%
Golden State	1,346	0	0	0	1,346	2,147	2,390	90%	62.7%	62.7%	58.5%
West OC System	1,269	-	-	0	1,269	1,272	1,427	89%	na	na	na
East OC System	76	-	-	0	76	875	963	91%	na	na	na
Huntington Beach	1,440	0	0	0	1,440	2,451	2,672	92%	58.8%	58.8%	81.9%
Irvine Ranch	4,362	0	1,019	0	5,380	5,407	5,780	94%	99.4%	99.4%	97.7%
DRWF Clear	2,643	-	-	-	2,643	2,643	2,680	99%	na	na	na
DRWF Color	730	-	-	-	730	730	611	120%	na	na	na
Laguna Beach	0	0	0	0	0	300	330	na	0.0%	0.0%	0.0%
La Palma	165	0	0	0	165	167	179	93%	98.5%	98.5%	100.0%
Mesa Water (MW)	1,549	0	124	0	1,673	1,673	1,777	94%	100.0%	100.0%	100.0%
MW Clear	973	-	-	-	973	973	1,121	87%	na	na	na
MW Amber	577	-	-	-	577	577	527	109%	na	na	na
Newport Beach	1,312	0	77	0	1,389	1,591	1,655	96%	86.7%	86.7%	82.6%
Orange	1,253	0	0	0	1,253	2,470	2,794	88%	50.7%	50.7%	46.4%
OCWD (GAP)	131	0	0	0	131	131	134	98%	100.0%	100.0%	100.0%
Santa Ana	1,902	0	44	0	1,945	3,041	3,250	94%	63.4%	63.4%	81.0%
Seal Beach	0	0	0	0	0	304	354	86%	0.1%	0.1%	0.1%
Serrano	261	0	0	0	261	285	308	92%	91.6%	91.6%	0.0%
Tustin	487	0	0	0	487	1,042	1,101	95%	46.7%	46.7%	47.5%
Westminster	996	0	0	0	996	996	1,083	92%	100.0%	100.0%	100.0%
Yorba Linda	<u>1,646</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1,646</u>	<u>2,029</u>	<u>2,115</u>	<u>96%</u>	<u>81.1%</u>	<u>81.1%</u>	<u>0.0%</u>
SUBTOTAL:	23,194	0	1,435	0	24,629	35,809	38,744	92%	67.9%	67.9%	65.3%
Other Producers (Est ~3% of Subtotal)	<u>494</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>494</u>	<u>508</u>	<u>528</u>	<u>96%</u>			
TOTAL:	23,688	0	1,435	0	25,123	36,317	39,272		67.9%	67.9%	65.3%
OCWD (Talbert Barrier)	0		2,249	0	2,249	2,249	2,684				
OCSD (GAP)	na		27	na	27	27	60				

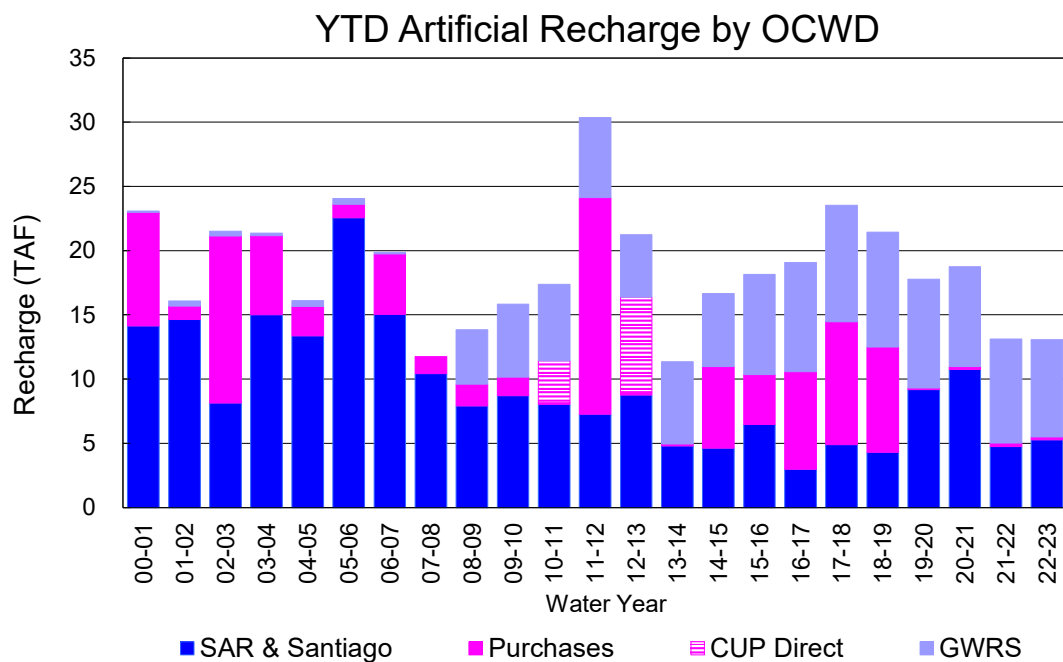
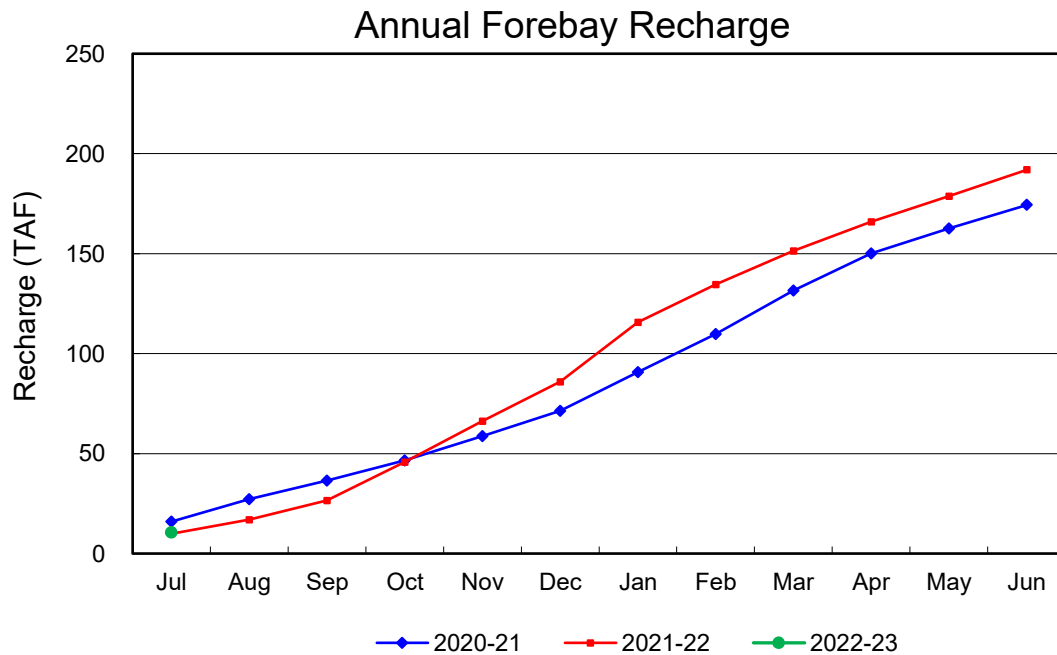
Estimated

(1) Excludes MWD CUP Withdrawals

(2) Includes MWD CUP Withdrawals & In Lieu Water

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RECHARGE AREAS REPORT

July 2022

	Percolation (AF)	Remarks
RIVER SYSTEM	2,219	36 cfs per day average perc
DESILTING SYSTEM	na	SAR
OFF-RIVER SYSTEM	46	SAR
WARNER SYSTEM	1,103	SAR
OLIVE BASIN	na	
ANAHEIM LAKE	1,022	Imported Water
MINI-ANA LAKE	0	
MILLER BASIN	74	GWRS
KRAEMER BASIN	0	
LA PALMA BASIN	4,073	GWRS
MIRA LOMA	1,082	GWRS
LA JOLLA BASIN	0	
PLACENTIA BASIN	na	
RAYMOND BASIN	0	
FIVE COVES BASIN	na	
BURRIS BASIN	369	SAR
RIVER VIEW BASIN	0	
FLETCHER BASIN	0	
SANTIAGO BASINS	546	
SANTIAGO CREEK	0	
TOTALS	10,534	
5-YR AVERAGE	14,070	

FLOWS TO RECHARGE AREAS (AF)	
Imperial Headgates (estimated)	3,562
GWRS	5,260
OC-28 (MWD)	0
OC-28a (MWD)	0
OC-59	0
Est'd local Forebay inflow below Imperial	0
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)	0.00
Precip direct to open water surfaces	0
TOTAL INFLOW	8,822

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	7.16
Est'd evaporative losses	259
TOTAL LOSSES	259

STORAGE CHANGES (AF)			
Facility	Begin	End	Net
Deep basins	6,824	5,399	-1,425
Santiago Pits	4,052	3,506	-546
River			
Off-river			
Irvine Lake			
TOTAL	10,876	8,905	-1,971

SUMMARY (AF)	
TOTAL INFLOW	8,822
TOTAL LOSSES	259
STORAGE CHANGE	-1,971
CALC'D PERCOLATION	10,534

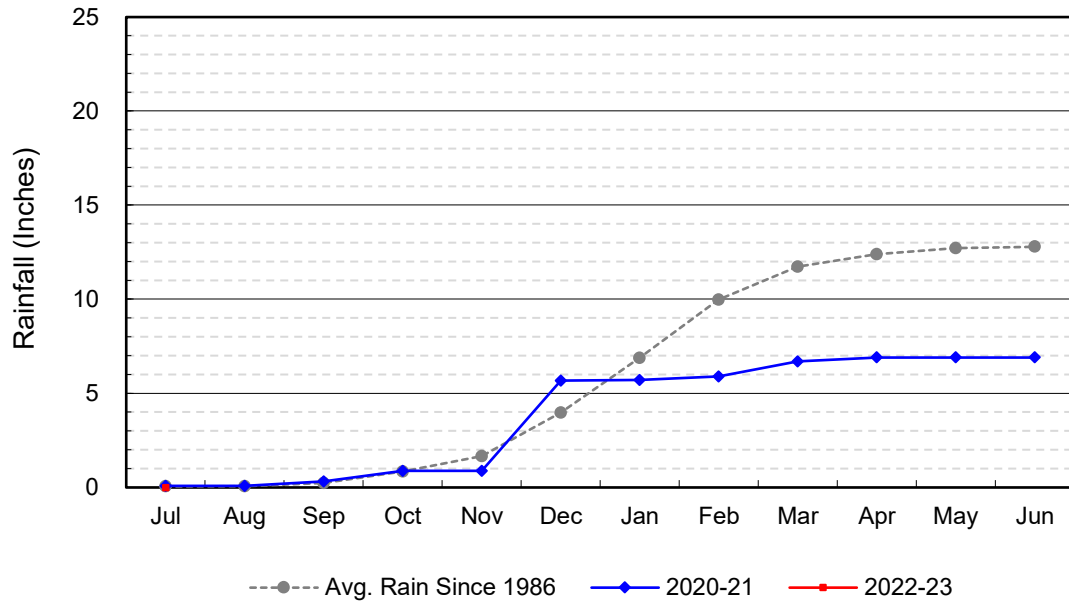
DEEP BASINS MONTHLY STATUS

July 2022

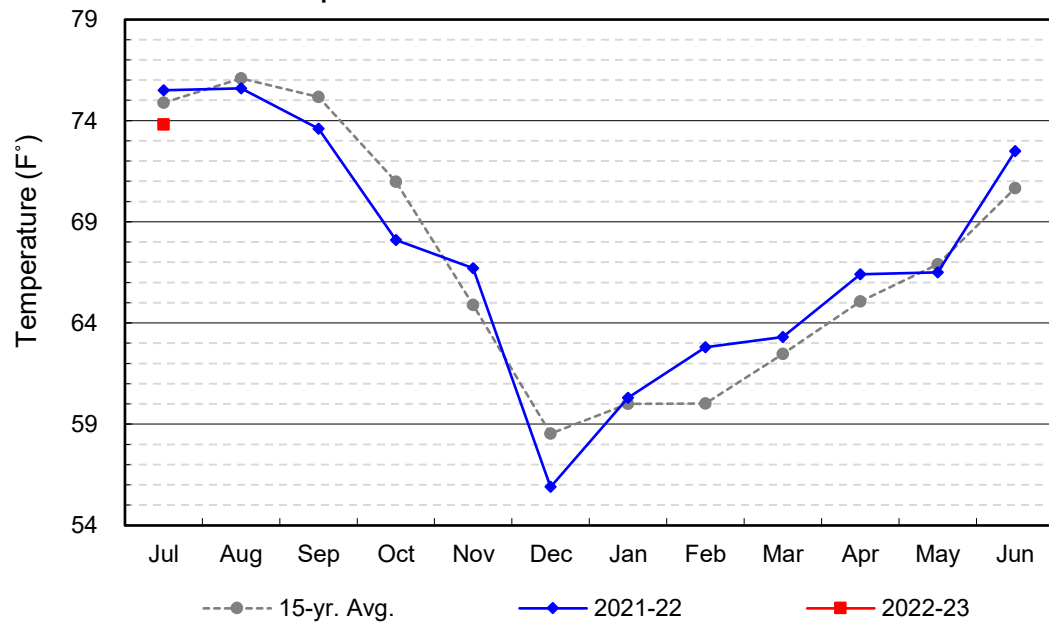
(values in acre-feet)

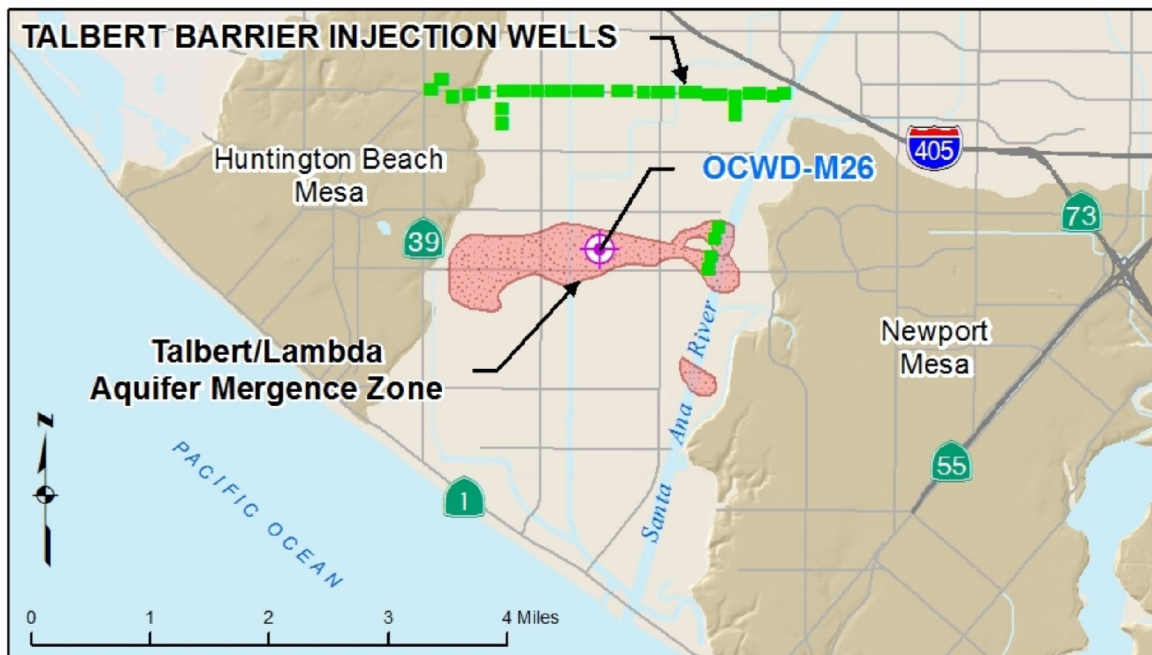
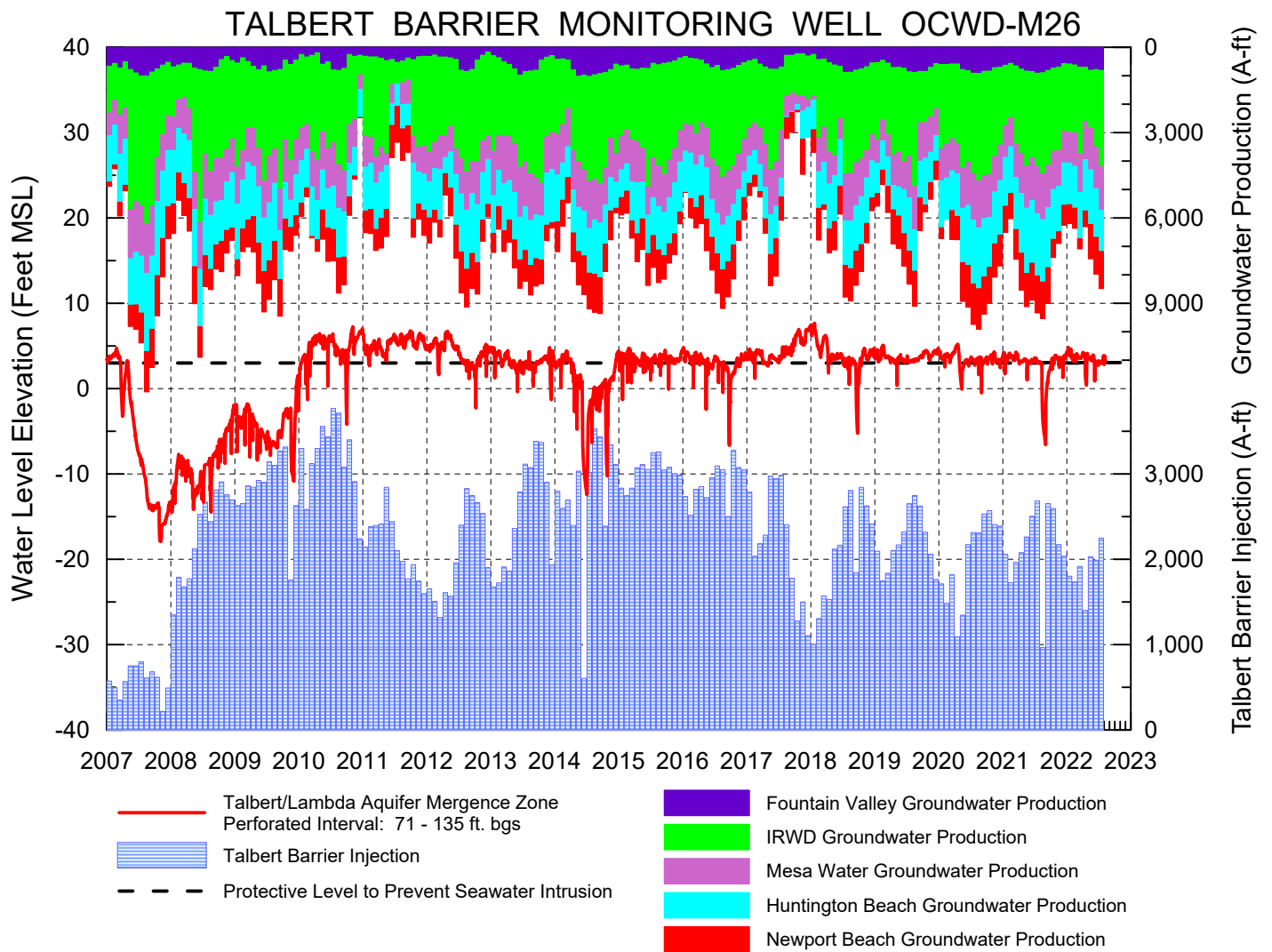
<i>Facility</i>	<i>Storage Start</i>	<i>Storage End</i>	<i>Maximum Storage</i>	<i>Total Perc</i>	<i>Max Perc</i>	<i>Avg Perc</i>	<i>Avg W.S. Elev</i>
Desilting Ponds	220	220	252	na	na	na	na
Fos-Huckleberry	528	528	628	na	na	na	na
Conrock Basin	546	552	661	na	na	na	na
Warner Basins	2,816	2,748	2,900	1,103	na	na	237
Olive Pit	0	0	95	na	na	na	187
Anaheim Lake	1,022	0	2,300	1,022	125	32	178
Mini-Anaheim Lk	0	0	10	0	0	0	220
Miller Basin	0	0	350	74	17	2	201
Kraemer Basin	0	0	1,055	0	0	0	164
La Palma Basin	53	82	101	4,073	162	131	216
Mira Loma	35	34	53	1,082	37	35	218
La Jolla Basin	0	0	20	0	0	0	199
Placentia Basin	0	0	200	na	na	na	na
Raymond Basin	0	0	200	0	na	na	na
Five Coves Basins	0	0	329	na	na	na	na
Burris Pit	1,604	1,235	2,500	369	16	12	161
River View Basin	0	0	8	0	0	0	187
Fletcher Basin	0	0	15	0	0	0	184
Santiago (Bond)	3,053	2,709	8,312	546	53	18	215
Santiago (Blu Dia)	999	797	5,259	-	-	-	-
Totals	10,876	8,905	25,247	8,269			
Prado Dam	0	0	20,000				

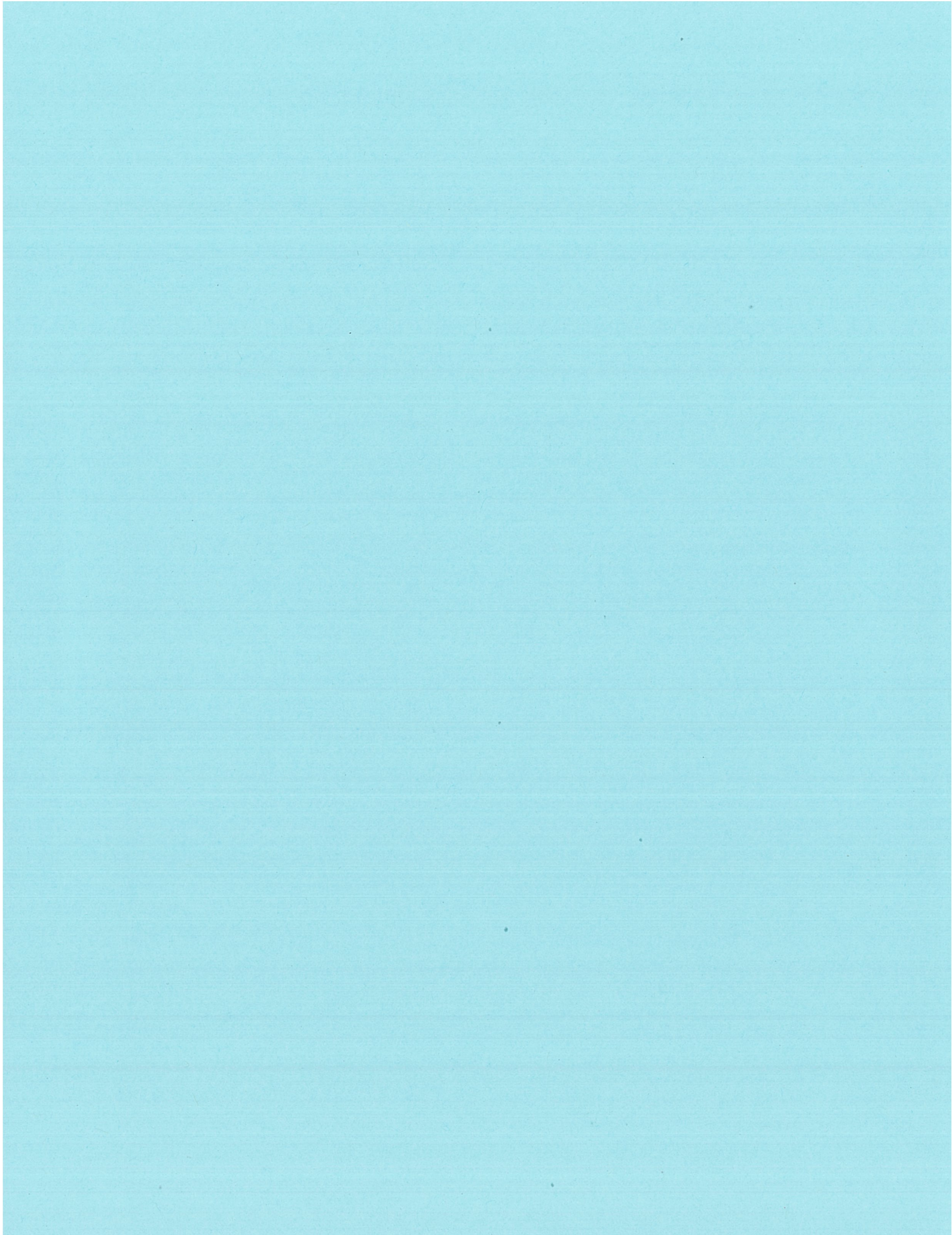
Cumulative Anaheim Field HQ Rainfall



Temperature at Santa Ana Fire Station







Archived Report Products:

[\(index.html\) 08-31](#)



Daily Hydrologic and Climate Information Summary (08/31/2022)

Report generated: August 31, 2022 13:07

RESERVOIR STORAGE AS OF 08/30/2022 AT 11:59:59 PM							
RESERVOIR	RIVER	Storage (in Acre Feet)	% Capacity	% Average	Storage Year Ago This Date	% Capacity Year Ago This Date	% Average Year Ago This Date
Trinity Lake	Trinity	607,688	25	38	856,816	35	53
Shasta Lake	Sacramento	1,592,122	35	58	1,230,515	27	45
Lake Oroville	Feather	1,316,076	37	63	800,924	23	39
New Bullards Bar Res	Yuba	681,827	71	104	425,341	44	65
Folsom Lake	American	447,224	46	82	233,669	24	43
New Melones Res	Stanislaus	642,012	27	47	906,987	38	66
Don Pedro Res	Tuolumne	1,121,968	55	76	1,074,740	53	73
Lake McClure	Merced	265,262	26	46	252,425	25	44
Millerton Lake	San Joaquin	251,924	48	92	233,144	45	85
Pine Flat Res	Kings	134,356	13	39	197,743	20	58
San Luis Res	(Offstream)	571,083	28	73	278,984	14	36
Terminus	Kaweah	15,822	9	78	26,537	14	130

RESERVOIR STORAGE AS OF 08/30/2022 AT 11:59:59 PM							
RESERVOIR	RIVER	Storage (in Acre Feet)	% Capacity	% Average	Storage Year Ago This Date	% Capacity Year Ago This Date	% Average Year Ago This Date
Success	Tule	10,291	13	69	9,536	12	64
Isabella	Kern	43,941	8	23	55,230	10	29
SNOWPACK WATER CONTENT AS OF 06/13/2022							
Region	Water Content (in inches)	% Average to Date	% of Apr 1 Average	Water Content (in inches) Last Year This Date	% Average Last Year This Date		
Northern Sierra	0.40	16	2	-9999.00	-9,999		
Central Sierra	0.00	0	0	-9999.00	-9,999		
Southern Sierra	0.00	0	0	-9999.00	-9,999		
Statewide	0.10	0	0	-9999.00	-9,999		
PRECIPITATION INDEX ACCUMULATION AS OF 08/31/2022							
Index	Season to Date	% Average to Date		Season to Date Last Year	% Average Last Year		
Northern Sierra	41.44	79		23.20	44		
Southern Sierra	24.74	62		18.73	47		
Tulare Basin	16.60	59		9.83	35		
DAILY PRECIPITATION (IN INCHES) FOR SELECTED STATIONS AS OF 08/31/2022							
Station	Oct 1 to Date 2021-2022	% Average	Season to Date 2020-2021	% Average Last Year	% Average Oct 1 - Sep 30		
Mount Shasta	19.64	46	14.57	34	45		
Eureka	25.04	63	22.57	57	62		
Redding	18.52	55	12.23	36	53		
South Lake Tahoe	18.93	96	8.94	45	93		

DAILY PRECIPITATION (IN INCHES) FOR SELECTED STATIONS AS OF 08/31/2022					
Station	Oct 1 to Date 2021-2022	% Average	Season to Date 2020-2021	% Average Last Year	% Average Oct 1 - Sep 30
Sacramento Executive Airport	16.54	91	6.31	35	89
Santa Rosa (Sonoma Co AP)	24.40	68	10.92	30	67
San Francisco	17.89	76	8.40	36	76
Stockton	9.81	71	7.74	56	70
Yosemite	4.66	12	13.91	37	12
Monterey	10.35	65	7.21	45	64
Paso Robles	8.46	67	6.50	52	66
Fresno	6.34	56	6.04	53	55
Bakersfield	5.33	83	2.53	40	82
Death Valley	2.32	108	1.56	73	98
Los Angeles	11.45	78	5.75	39	77
Riverside	4.65	38	3.43	28	38
Palm Springs	1.53	28	1.25	23	27
San Diego	6.00	59	3.22	32	58

Orange County Rainfall Report

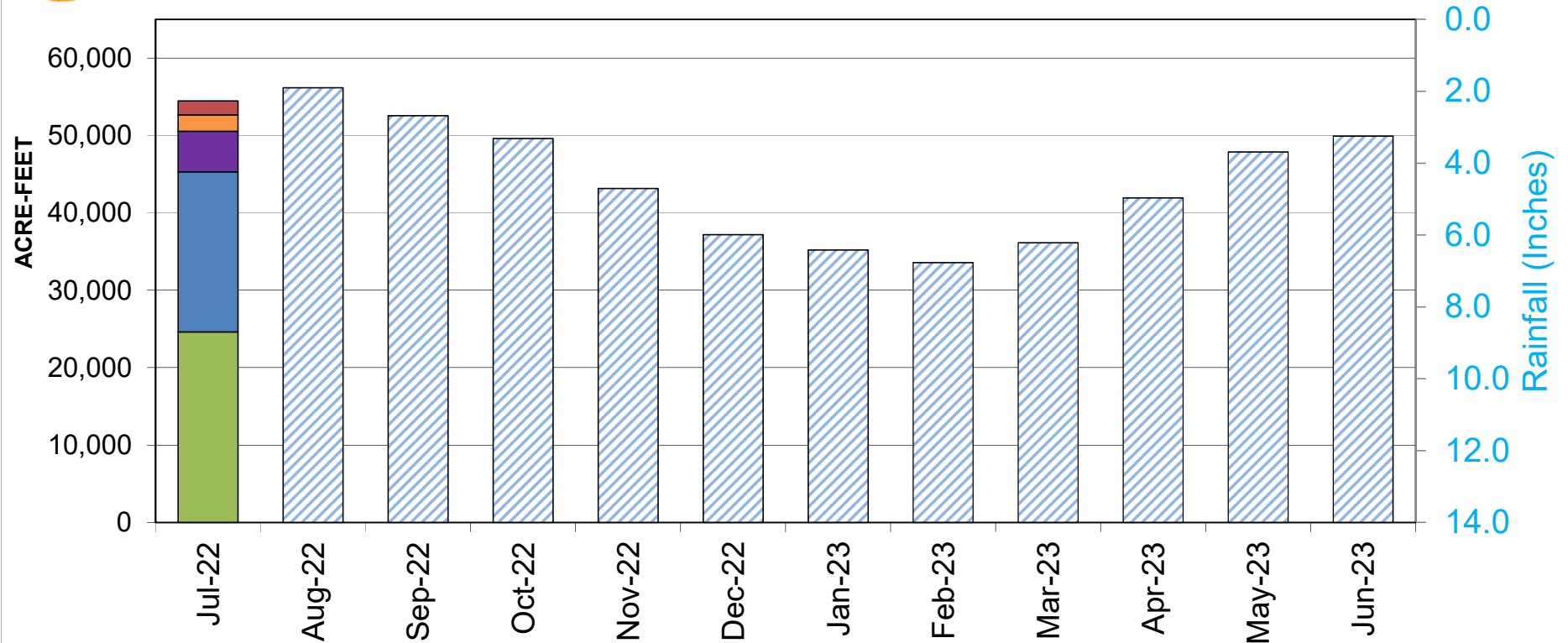
August 31, 2022



MWDOC WATER SUPPLY DATA



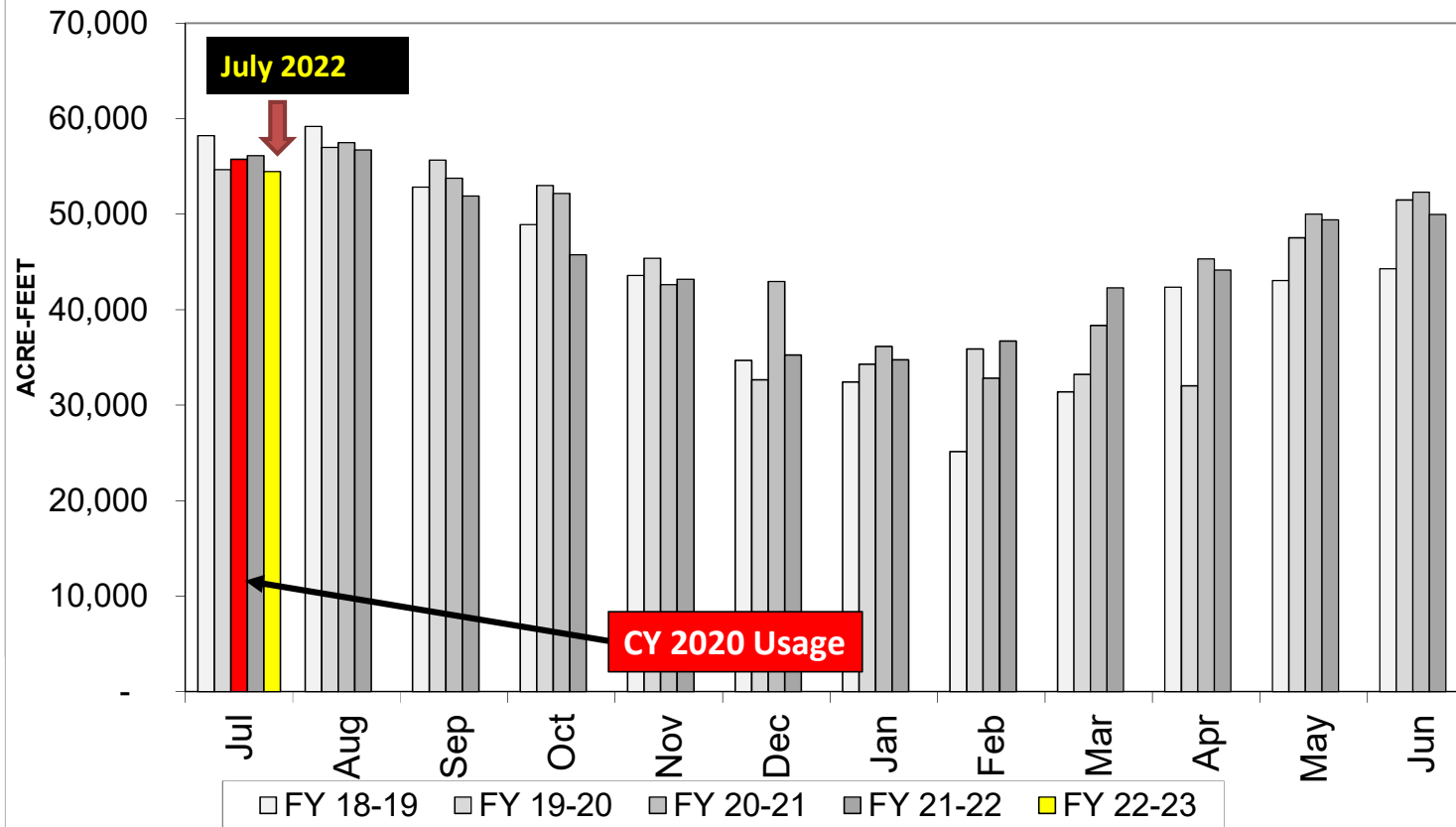
**Fig. 1 OC Water Usage, Monthly by Supply
with projection to end of fiscal year**



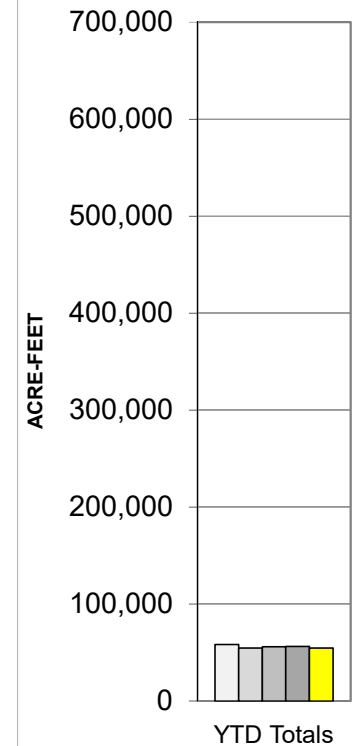
- [1] Imported water for consumptive use. Includes "In-Lieu" deliveries and CUP water extraction. Excludes "Direct Replenishment" deliveries of spreading water and deliveries into Irvine Lake.
- [2] GW for consumptive use only. Excludes In-Lieu water deliveries and CUP water extraction that are counted with Import. BPP in FY '22-23 is 77%.
- [3] MWD OC'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

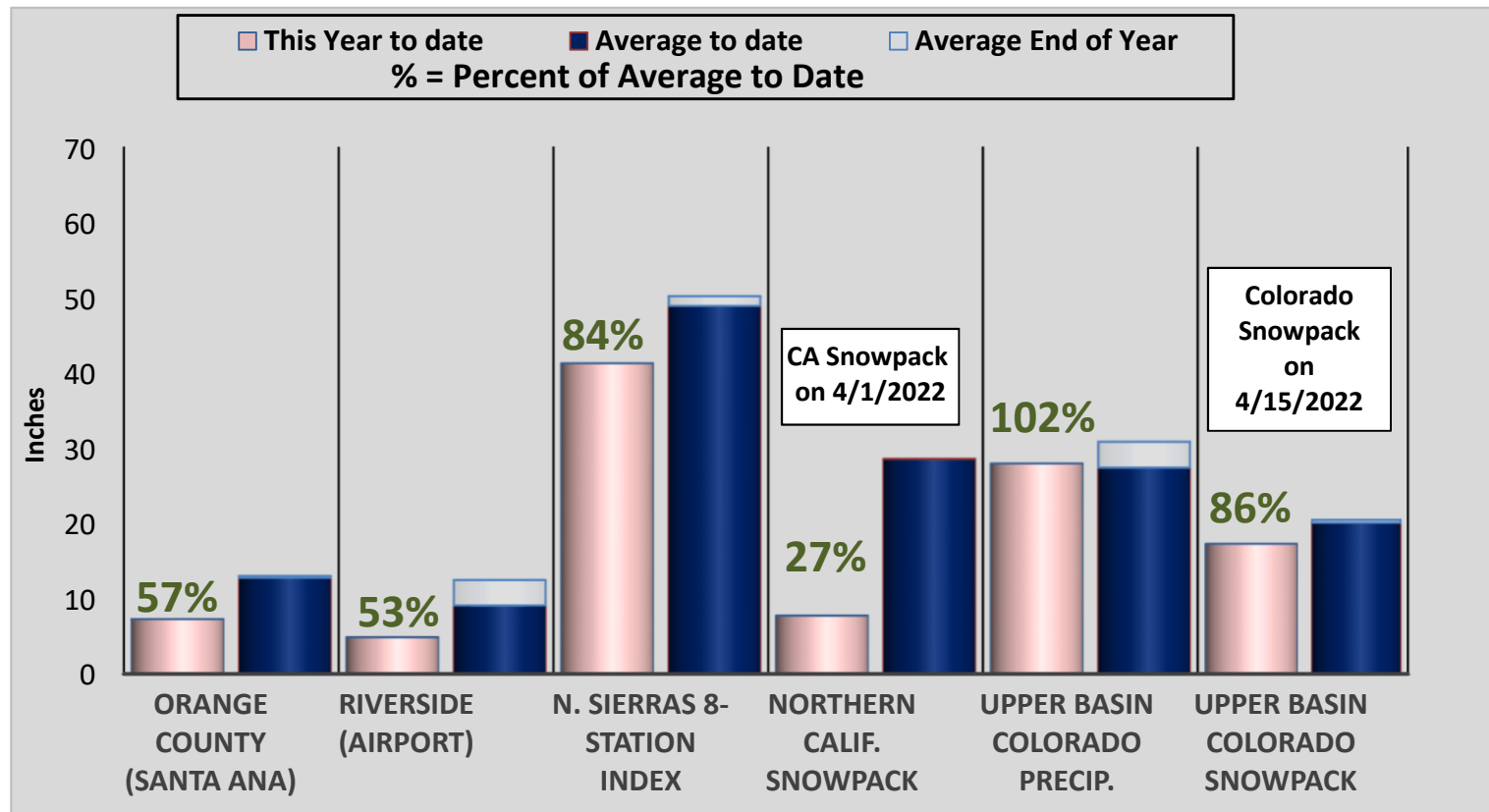


Partial Year Subtotals



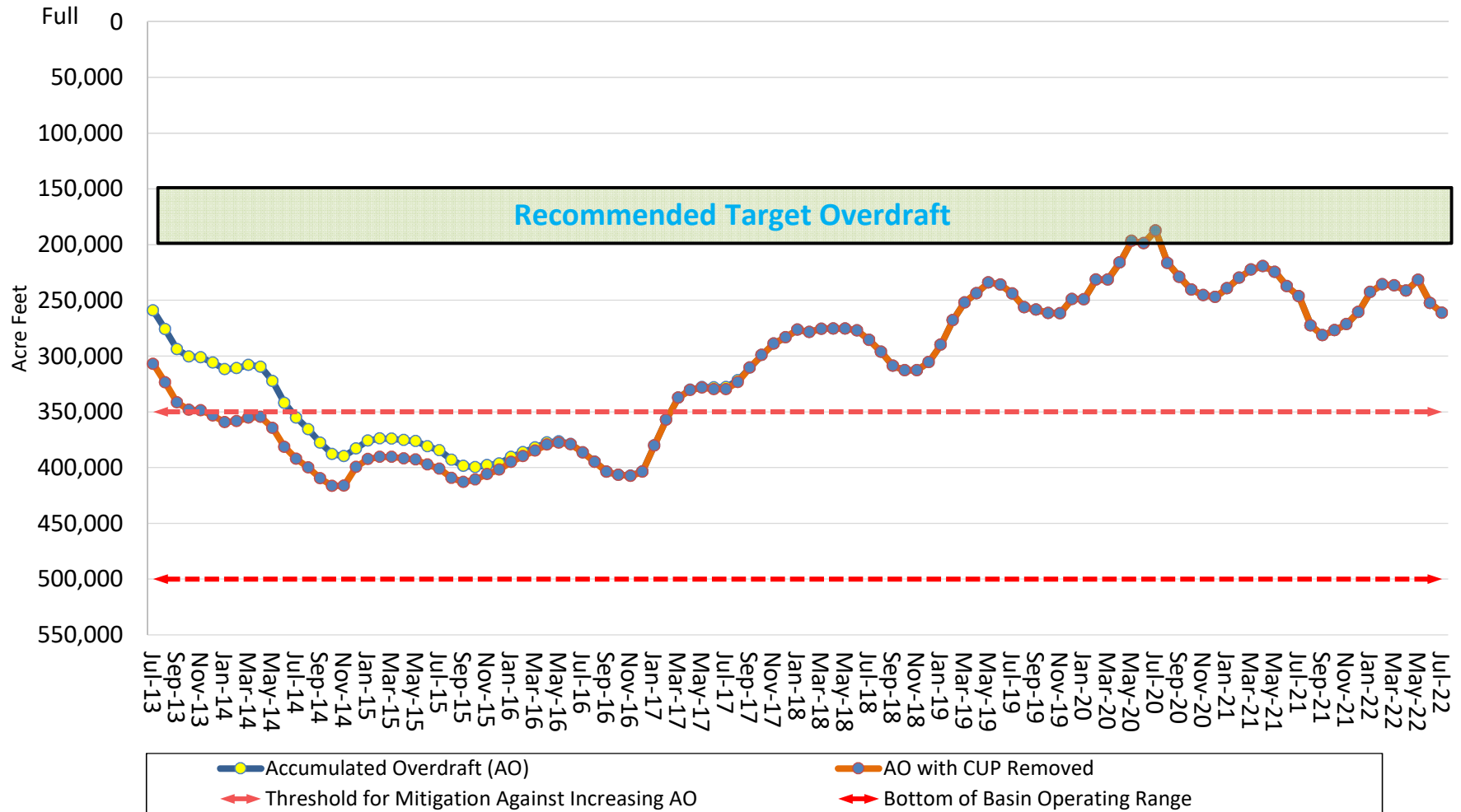
[1] Sum of Imported water for consumptive use (includes "In-Lieu" deliveries; excludes "Direct Replenishment" and "Barrier Replenishment") and Local water for consumptive use (includes recycled and non-potable water and excludes GWRS production) Recent months numbers include some estimation.

Accumulated Precipitation for the Oct.-Sep. water year, late August 2022



* 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 July 2022



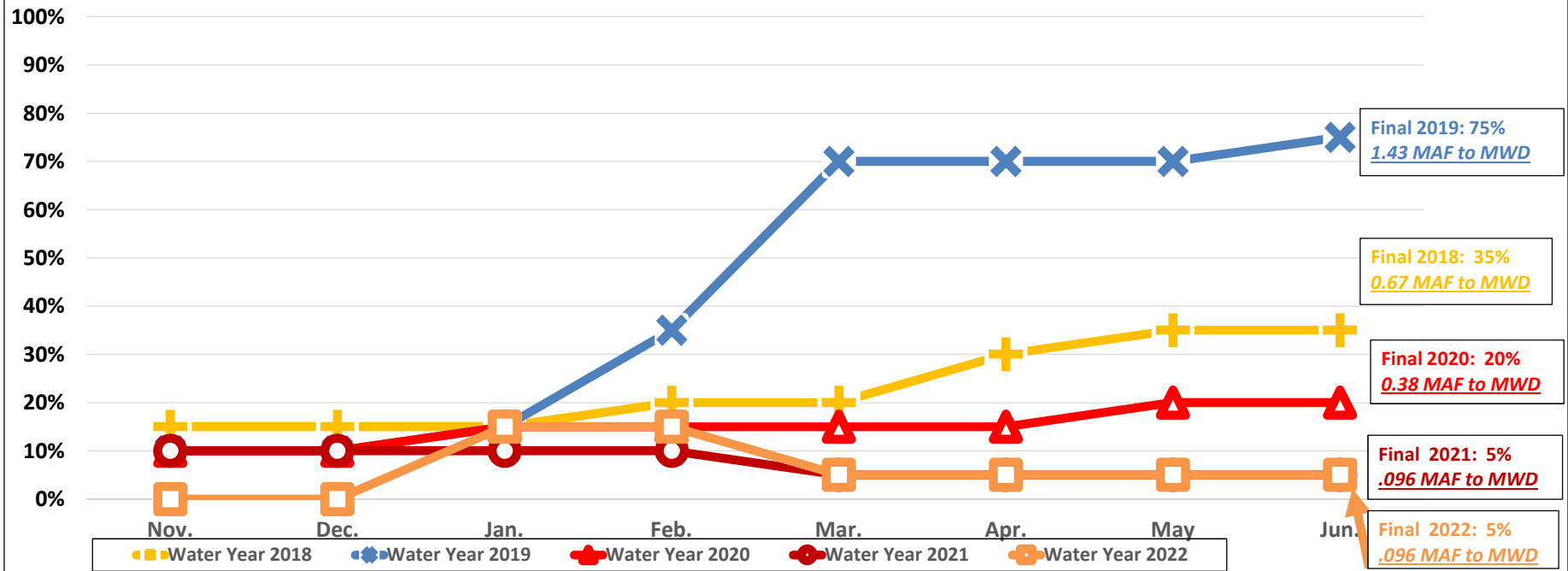
	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22
AO (AF)	246,350	272,443	281,354	276,909	271,455	260,387	242,511	235,744	236,708	241,450	231,699	252,348
AO w/CUP removed (AF)	246,350	272,442	281,354	276,909	271,455	260,387	242,510	235,744	236,708	241,450	231,699	252,348
	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23
AO (AF)	261,145											
AO w/CUP removed (AF)	261,145											

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



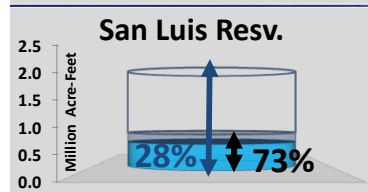
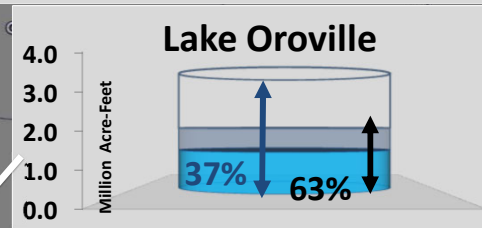
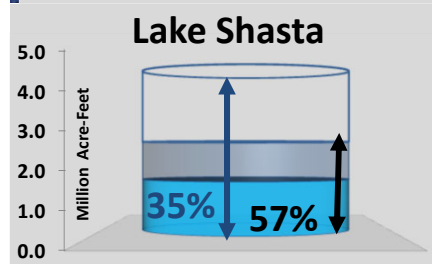
SWP TABLE A ALLOCATION PERCENTAGE

FOR STATE WATER PROJECT CONTRACTORS



State Water Project, Colorado River, and MWD Reservoir Storage

as of August 29, 2022

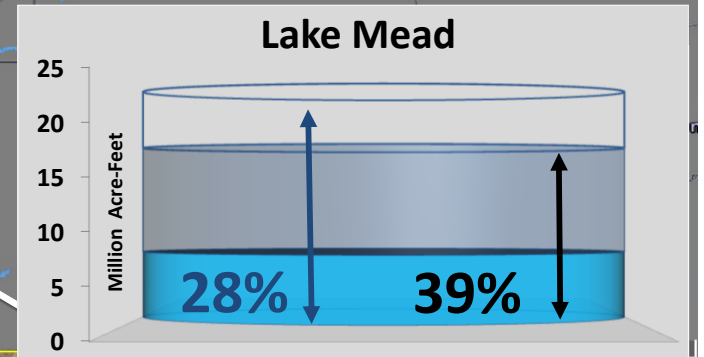
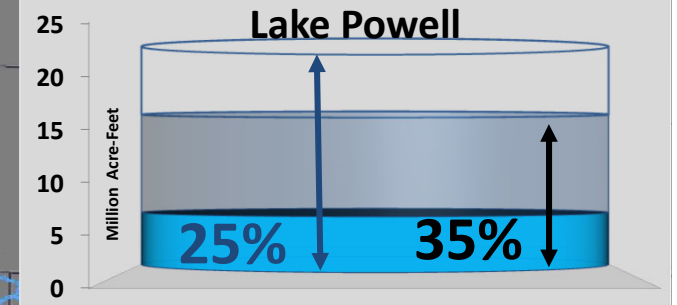


Reservoir Storage
Historical Reservoir Storage

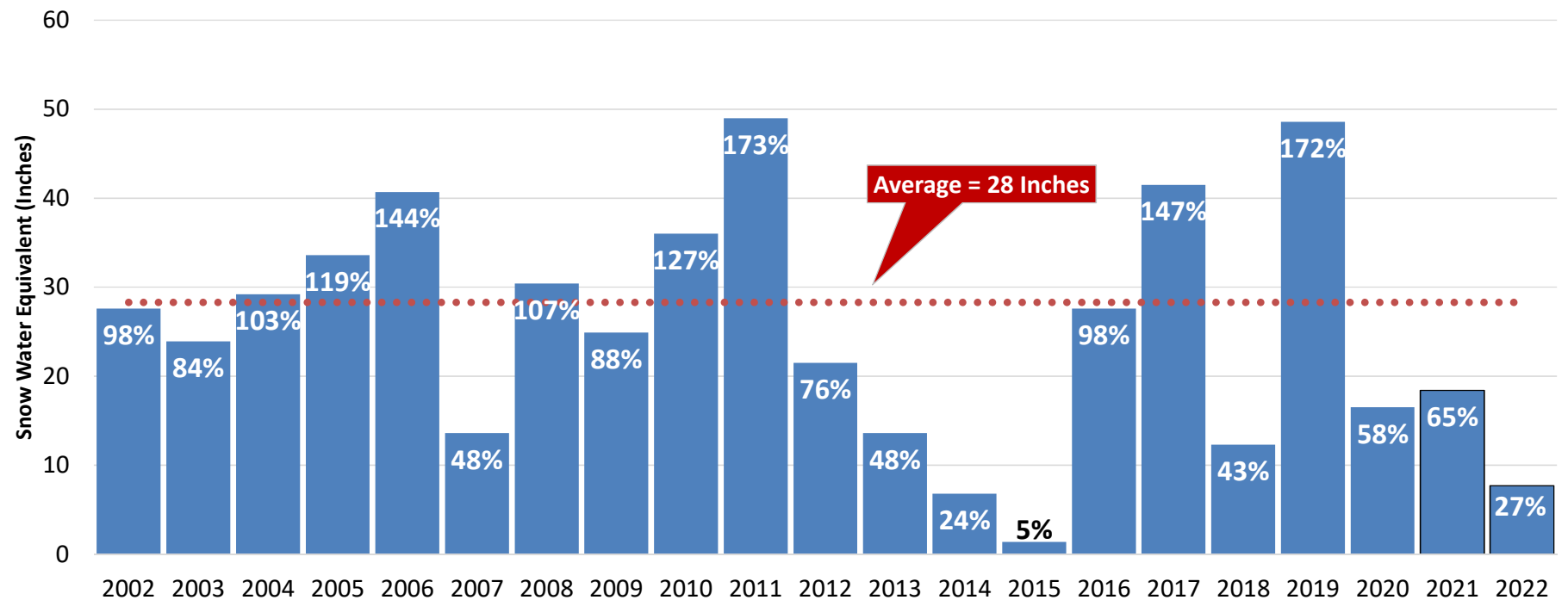
SWP Take Capacity = 0.188 MAF
CRA Take Capacity = 0.255 MAF
In Region Take Capacity = 0.437 MAF



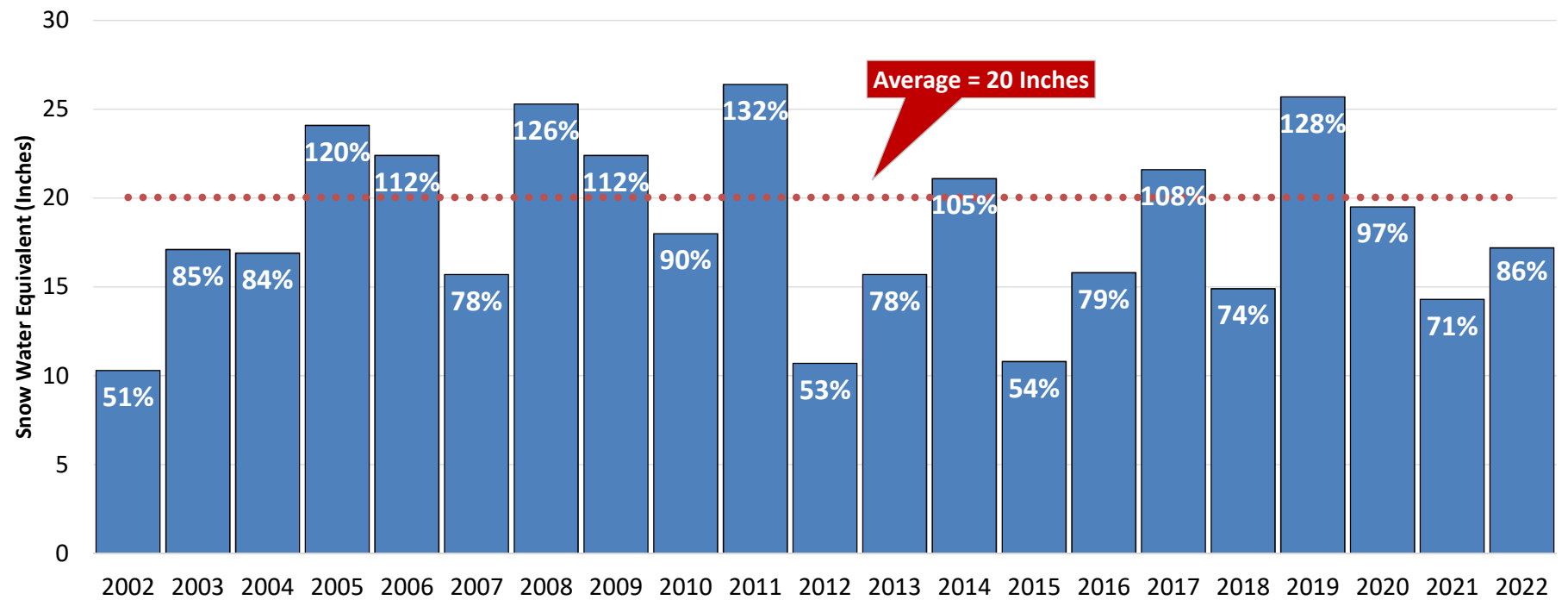
prepared by the Municipal Water District of Orange County
*Number are Subject to Change



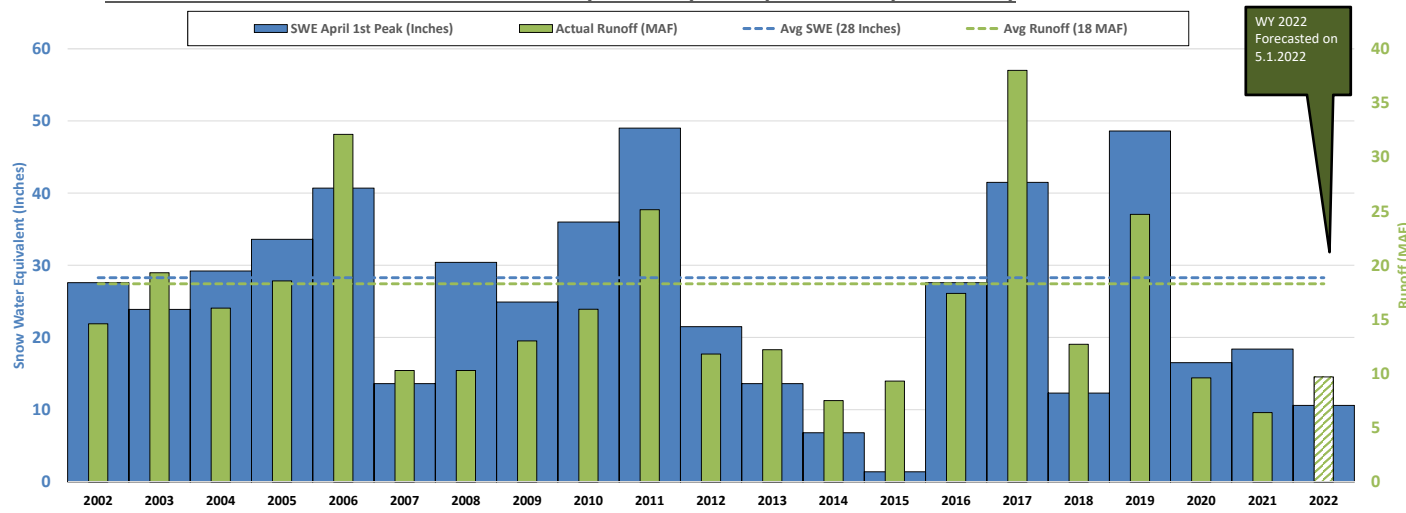
Historical Northern California April 1st Peak Snow Water Equivalent



Historical Colorado Basin April 15th Peak Snow Water Equivalent



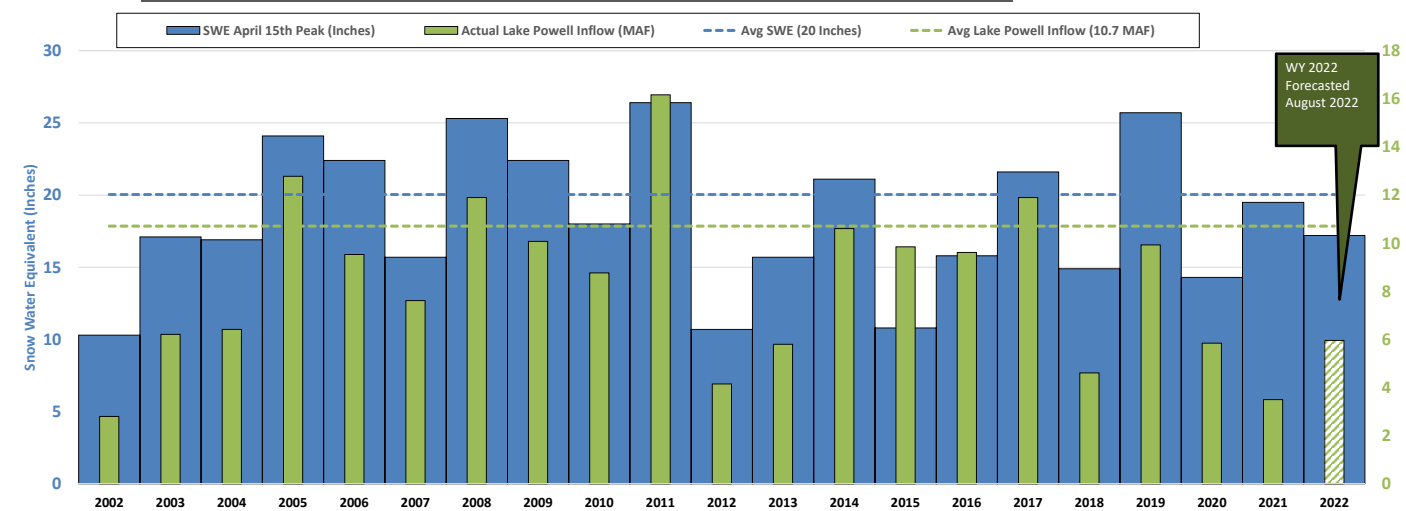
Northern California Historical Snow Water Equivalent (Inches) Vs Runoff (Million AF)



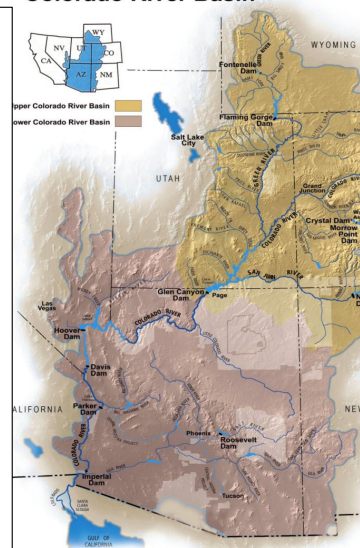
Sacramento River Basin



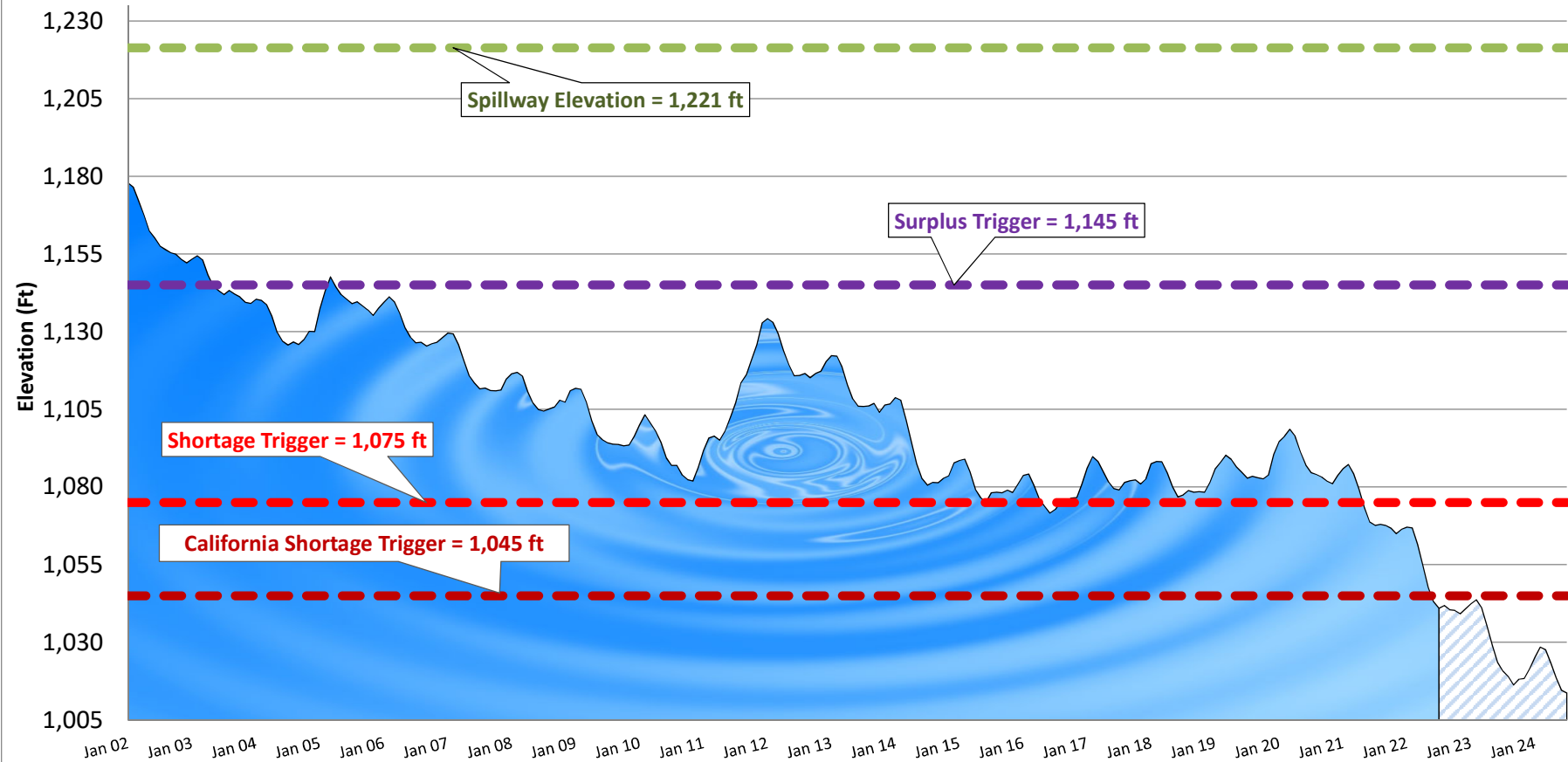
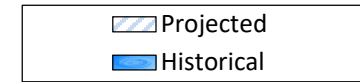
Upper Colorado Historical Snow Water Equivalent (Inches) Vs Runoff (Million AF)



Colorado River Basin

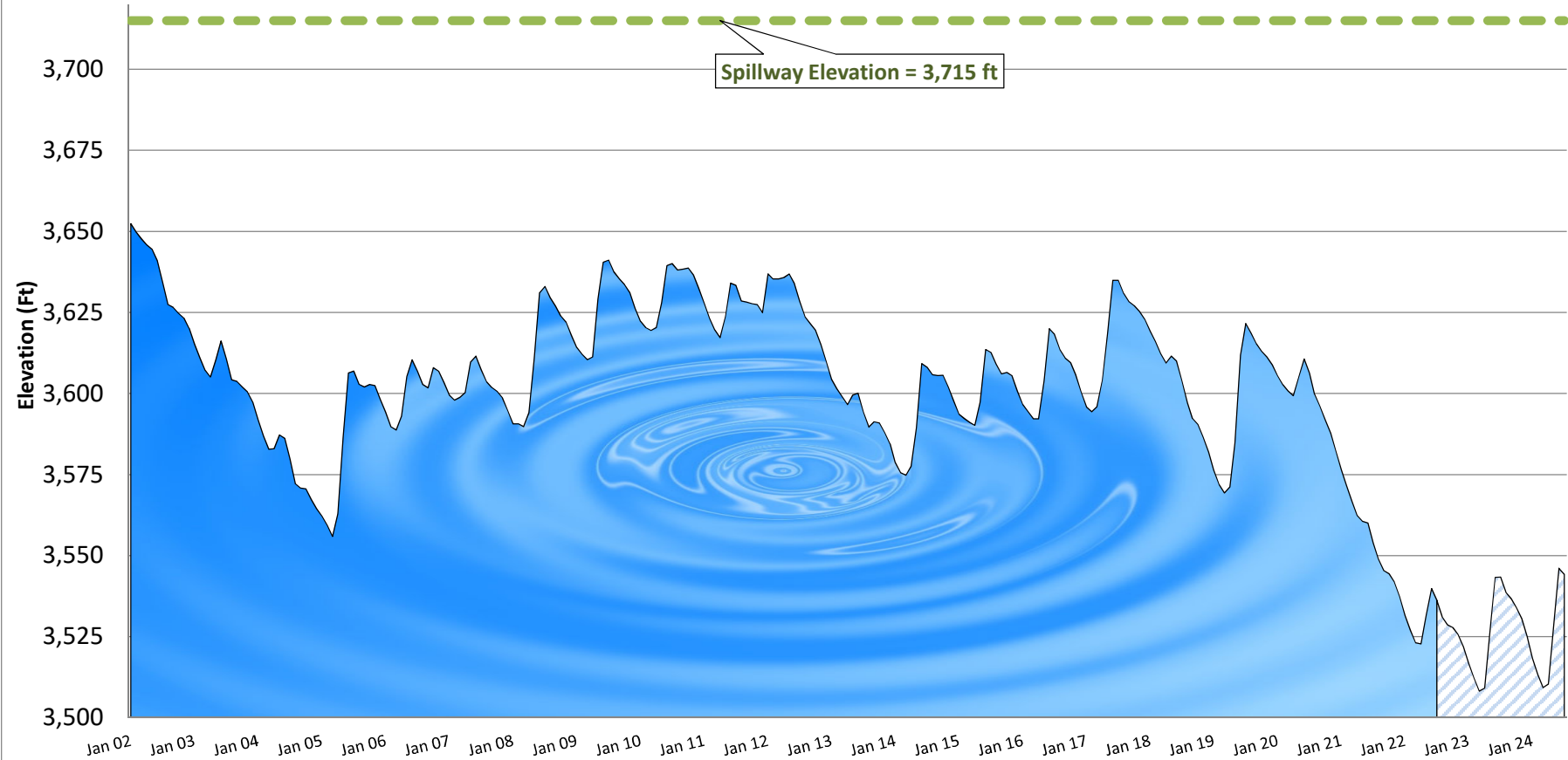


Lake Mead Levels: Historical and Projected projection per USBR 24-Month Study

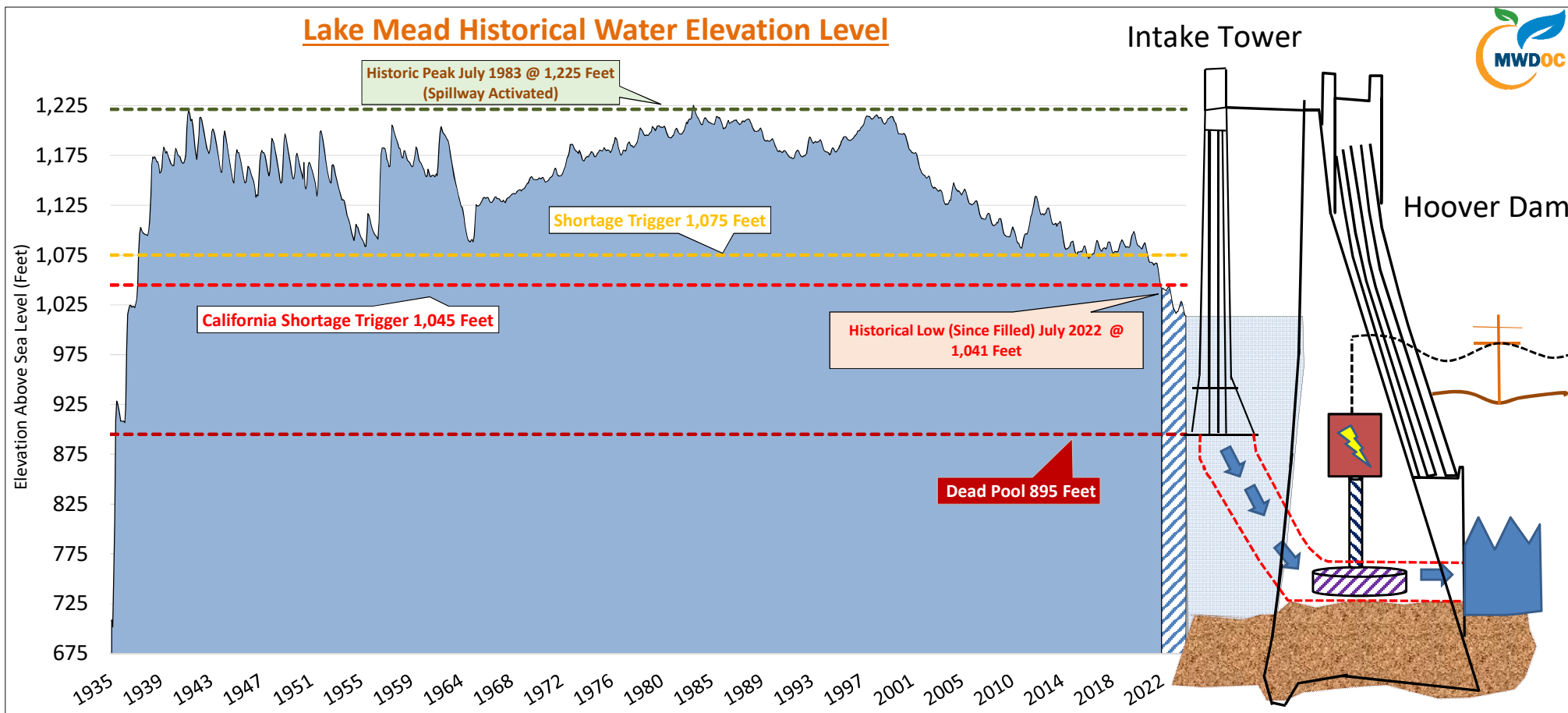


Lake Powell Levels: Historical and Projected projection per USBR 24-Month Study

■ Historical □ Projected



Lake Mead Historical Water Elevation Level



Lake Mead Storage Level

