

WATER RESOURCES SUMMARY

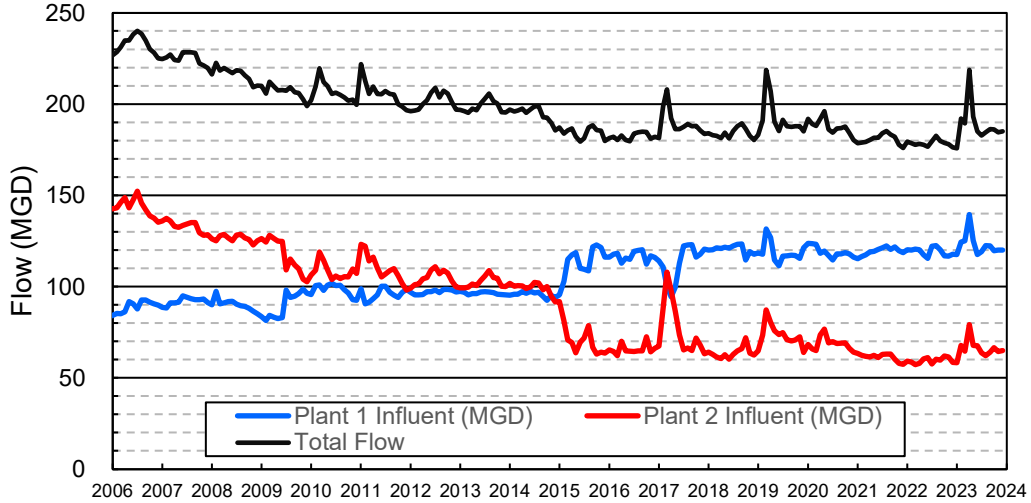
November 2023

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	16,864
Water into MWD Storage Account (excludes In Lieu)	0	0	0
SAR & Santiago Creek Flows (accounts for storage to/from recharge facilities)	11,272	63,970	30,238
GWRS Water to Forebay	8,209	37,213	27,381
GWRS Water to Mid-Basin Injection Wells	668	3,183	3,326
GWRS Water to Talbert Barrier	1,634	8,627	10,380
OC-44 and F. Valley Water to Talbert Barrier	2	6	7
Alamitos Barrier Water	140	811	1,209
Incidental Recharge (estimated)	1,200	7,200	8,500
Evaporation from Recharge Basins	(211)	(1,809)	(1,103)
River Flow Lost to Ocean	(42)	(401)	0
Total Groundwater Recharge	22,872	118,800	96,802
WATER PRODUCTION			
Groundwater Production	22,744	127,209	110,375
MWD Storage Program Withdrawals	0	0	0
Total Groundwater Production	22,744	127,209	110,375
BASIN BALANCE			
Change in Groundwater Storage	128	(8,409)	(13,573)
Change in Groundwater Storage excluding MWD Stored Water	128	(8,409)	(13,573)
Accumulated Overdraft	-----	197,412	271,576
Accumulated Overdraft excluding MWD Storage	-----	197,412	271,576
IN LIEU WATER			
OCWD In Lieu Purchases (MWD Cyclic Storage)	0	0	0
MWD In Lieu Storage	0	0	0
Total In Lieu	0	0	0
OTHER KEY INFORMATION			
1. MWD Water Deliveries to Producers	5,070	30,919	51,717
2. Basin Production Percentage	81.8%	80.4%	68.1%
3. Total Water Demand	29,573	167,444	171,148
4. Total GWRS Production	10,514	49,052	41,129
5. Green Acres Project Water	187	1,749	1,918
6. SAR Water Quality			
- Total Dissolved Solids (TDS) of SAR below Prado Dam (ppm)	620	-----	472
- Total Nitrogen of SAR below Prado Dam (ppm)	4.2	-----	4.2
7. Month-End Water Storage Behind Prado Dam	7	-----	64
8. Month-End Water Storage in Recharge Facilities	13,051	-----	13,864
9. Water Storage Change in Recharge Facilities	(1,733)	(8,198)	2,988
10. Total Artificial Recharge	21,672	111,600	88,302
11. Monthly Mean Temperature at Santa Ana Fire Station (°F)	67.0	-----	61.4
12. Rainfall at FHQ (inches)	0.02	2.80	2.96

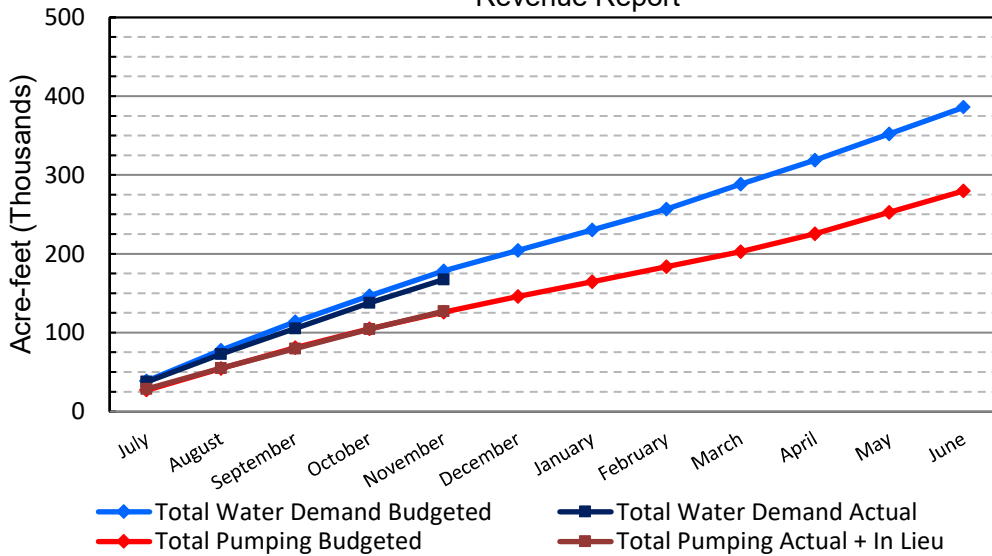
*** Note: Data are preliminary, subject to change

12/13/2023

Orange County Sanitation District Influent Flows Report

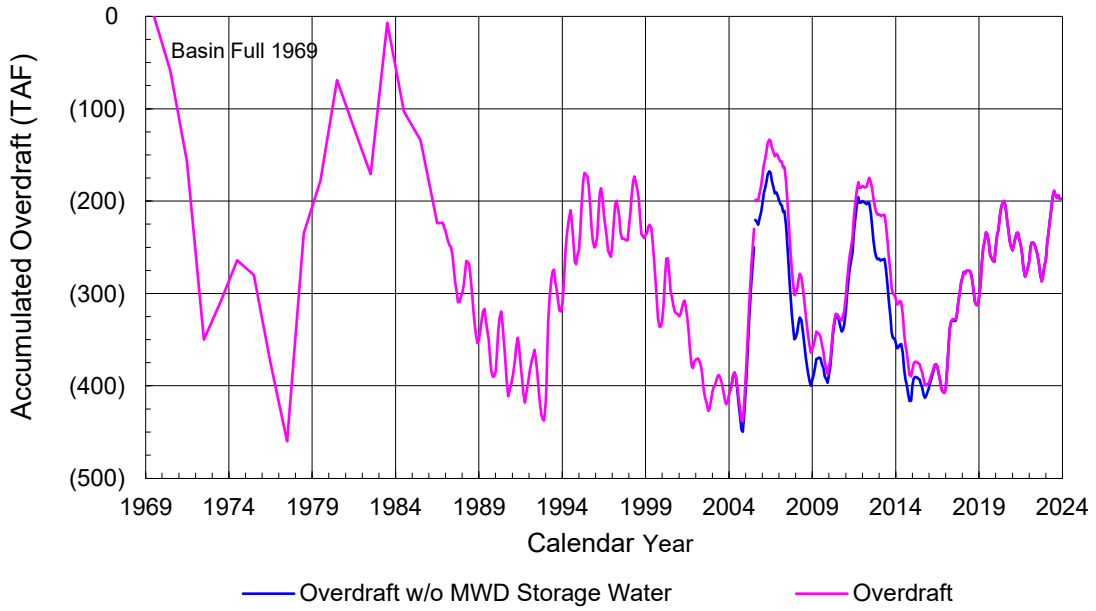


2023-24 Water Demands/Groundwater Pumping + In Lieu/RA Revenue Report

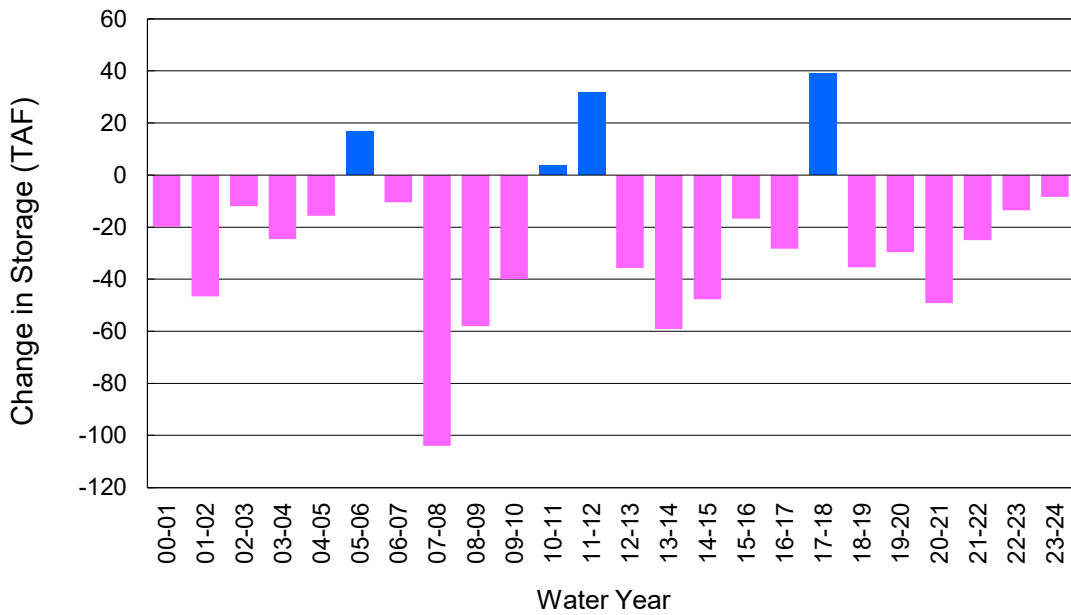


	Monthly		Accumulated Total for the Year			
	Budget	Actual	Budget	Actual	Difference	Percent
Total Water Demand	31,500	29,573	178,100	167,444	-10,656	94.02%
Total Pumping + In Lieu	20,800	22,744	125,800	127,209	1,409	101.12%
RA Revenue	\$9,609,600	\$10,507,948	\$58,119,600	\$58,770,648	\$651,048	101.12%

Accumulated Overdraft



YTD Change in Groundwater Storage in OCWD



PRODUCERS WATER USAGE SUMMARY

November 2023

(AF except BPP)

WATER AGENCY	Ground-water (1)	In Lieu	Reclaimed Water	Total Import (2)	Total Demand	2023-24 YTD Demand	2022-23 YTD Demand	YTD % Diff Demand	NOV 2023 BPP	2023-24 YTD BPP	2022-23 YTD BPP
Anaheim	2,437	0	0	1,971	4,408	24,408	25,779	95%	55.3%	48.6%	26.1%
Buena Park	946	0	0	4	950	5,663	5,829	97%	99.6%	88.6%	82.9%
East Orange County	0	0	0	65	66	387	378	102%	0.5%	0.4%	0.2%
Fountain Valley	709	0	88	0	798	4,327	4,350	99%	100.0%	100.0%	100.0%
Fullerton	1,373	0	0	340	1,713	10,879	10,440	104%	80.2%	76.5%	75.5%
Garden Grove	1,788	0	0	0	1,788	9,571	9,420	102%	100.0%	100.0%	61.7%
Golden State	1,138	0	0	613	1,750	9,782	9,835	99%	65.0%	60.1%	58.5%
West OC System	847	-	-	221	1,068	5,959	5,915	101%	na	na	na
East OC System	291	-	-	391	682	3,823	3,920	98%	na	na	na
Huntington Beach	1,730	0	0	245	1,975	11,006	11,253	98%	87.6%	83.0%	57.6%
Irvine Ranch	3,715	0	1,683	1	5,398	28,145	27,660	102%	100.0%	99.8%	99.5%
DRWF Clear	2,490	-	-	-	2,490	13,375	12,658	106%	na	na	na
DRWF Color	685	-	-	-	685	3,542	3,514	101%	na	na	na
Laguna Beach	0	0	0	270	270	1,428	1,463	na	0.0%	0.0%	8.1%
La Palma	138	0	0	0	138	772	772	100%	100.0%	100.0%	99.6%
Mesa Water (MW)	1,245	0	92	0	1,337	7,380	7,506	98%	100.0%	100.0%	99.9%
MW Clear	1,238	-	-	-	1,238	6,205	4,869	127%	na	na	na
MW Amber	7	-	-	-	7	761	2,160	35%	na	na	na
Newport Beach	559	0	50	417	1,026	6,082	6,534	93%	57.3%	86.8%	88.6%
Orange	1,749	0	0	182	1,931	11,147	11,385	98%	90.6%	84.5%	68.9%
OCWD (GAP)	136	0	0	0	136	840	644	131%	100.0%	100.0%	100.0%
Santa Ana	2,239	0	22	295	2,556	14,066	14,281	98%	88.4%	90.4%	63.1%
Seal Beach	258	0	0	0	258	1,366	1,329	103%	99.8%	99.7%	55.6%
Serrano	30	0	0	154	184	1,215	1,306	93%	16.4%	50.8%	77.0%
Tustin	252	0	0	281	533	4,330	4,746	91%	47.3%	62.6%	46.2%
Westminster	826	0	0	0	826	4,472	4,546	98%	100.0%	100.0%	95.2%
Yorba Linda	<u>1,208</u>	<u>0</u>	<u>0</u>	<u>227</u>	<u>1,435</u>	<u>8,641</u>	<u>8,823</u>	<u>98%</u>	<u>84.2%</u>	<u>83.5%</u>	<u>81.4%</u>
SUBTOTAL:	22,477	0	1,935	5,064	29,475	165,909	168,280	99%	81.8%	80.4%	68.1%
Other Producers (Est ~3% of Subtotal)	<u>293</u>	<u>0</u>	<u>0</u>	<u>7</u>	<u>301</u>	<u>1,535</u>	<u>2,867</u>	<u>54%</u>			
TOTAL:	22,770	0	1,935	5,071	29,776	167,444	171,148		81.8%	80.4%	68.1%
OCWD (Talbert Barrier)	0		1,634	0	1,634	8,633	10,387				
OCS D (GAP)	na		0	na	0	531	385				

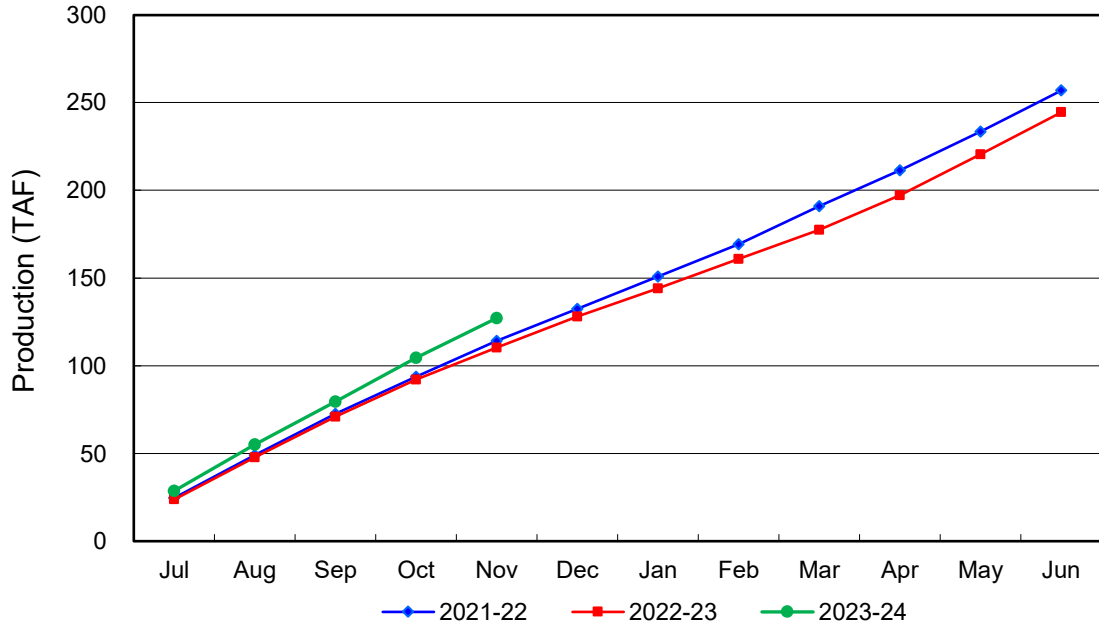
Estimated

(1) Excludes MWD CUP Withdrawals

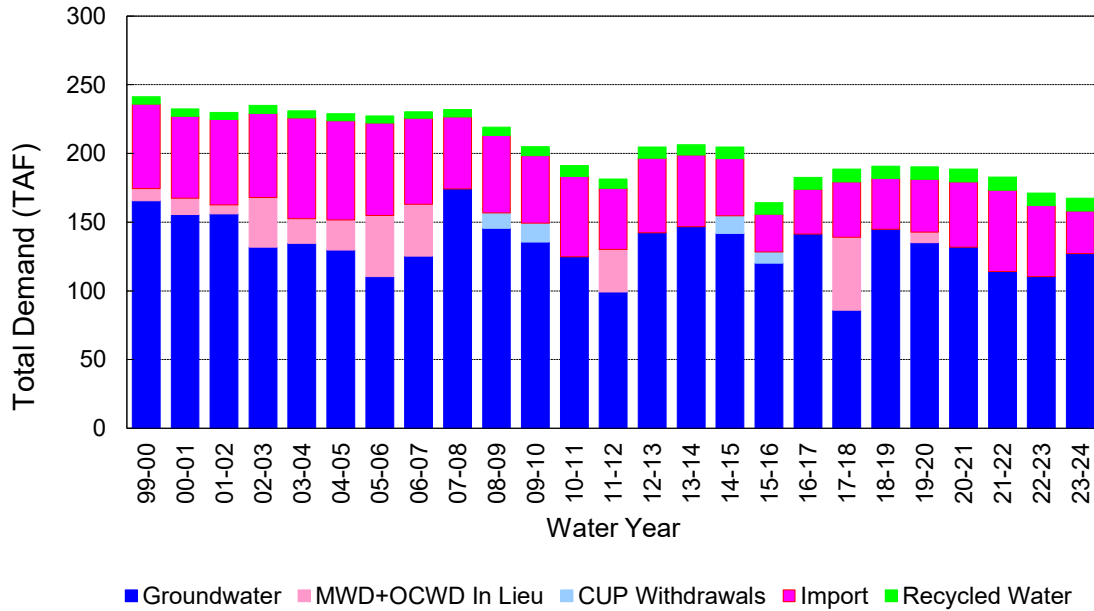
(2) Includes MWD CUP Withdrawals & In Lieu Water

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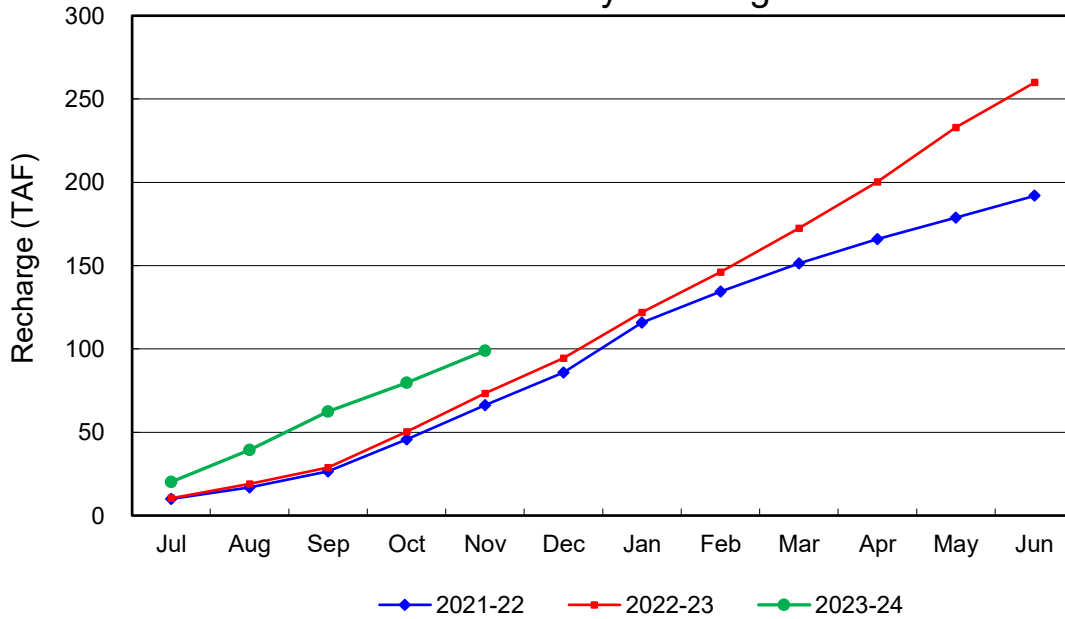
Annual Groundwater Production



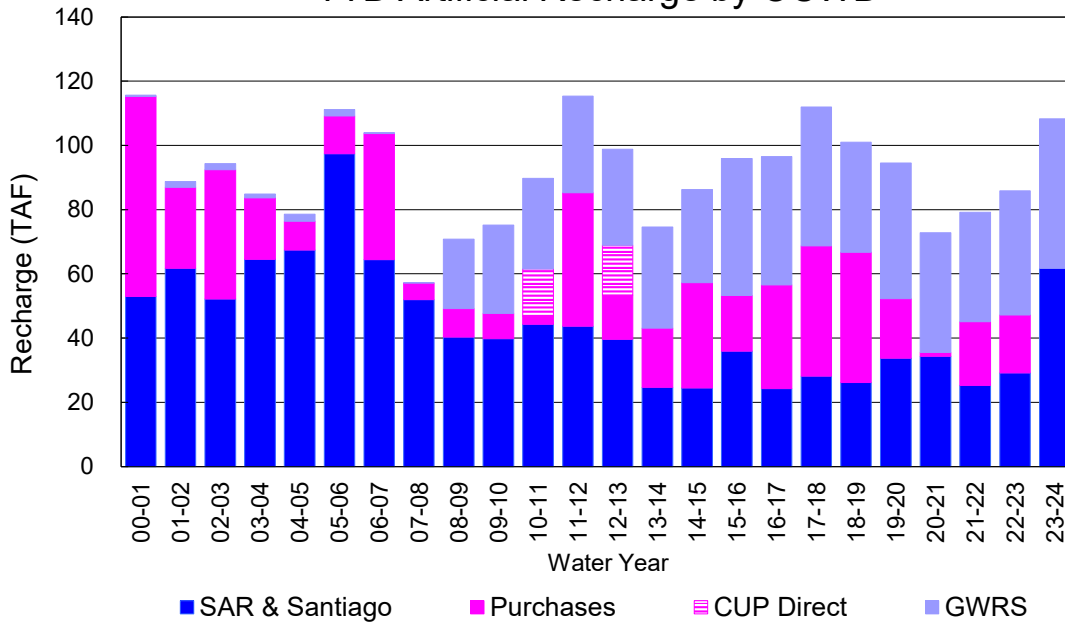
YTD Total Demand in OCWD



Annual Forebay Recharge



YTD Artificial Recharge by OCWD



RECHARGE AREAS REPORT

November 2023

	Percolation (AF)	Remarks
RIVER SYSTEM	4,958	83 cfs per day average perc
DESILTING SYSTEM	na	SAR
OFF-RIVER SYSTEM	1,750	SAR
WARNER SYSTEM	941	SAR
OLIVE BASIN	na	Passive System
ANAHEIM LAKE	na	
MINI-ANA LAKE	na	
MILLER BASIN	1,228	GWRS
KRAEMER BASIN	787	GWRS, SAR
LA PALMA BASIN	3,419	GWRS
MIRA LOMA	2,963	GWRS
LA JOLLA BASIN	375	SAR
PLACENTIA BASIN	na	
RAYMOND BASIN	242	SAR
FIVE COVES BASIN	na	SAR
BURRIS BASIN	162	SAR
RIVER VIEW BASIN	57	SAR/Burris pumping
FLETCHER BASIN	27	SAR/Burris pumping
SANTIAGO BASINS	2,237	SAR/Burris pumping
SANTIAGO CREEK	85	SAR/Burris pumping
TOTALS	19,231	
5-YR AVERAGE	18,202	

FLOWS TO RECHARGE AREAS (AF)	
Imperial Headgates (estimated)	9,240
GWRS	8,212
OC-28 (MWD)	0
OC-28a (MWD)	0
OC-59	0
Est'd local Forebay inflow below Imperial	50
Est'd local Santiago inflow (estimated)	248
Irvine lake releases (OC-13 MWD)	0
Villa Park Dam releases (estimated)	0
Precip at Warner Basin (inches)	0.02
Precip direct to open water surfaces	1
TOTAL INFLOW	17,751

LOSSES FROM RECHARGE AREAS (AF)	
Est'd SAR flow past Chapman Ave.	40
Est'd Santiago Cr. flow to SAR	2
Est'd flows past Raymond Basin	0
Calc'd evap (inches) Estimated	3.46
Est'd evaporative losses	211
TOTAL LOSSES	253

STORAGE CHANGES (AF)			
Facility	Begin	End	Net
Deep basins	5,080	5,031	-49
Santiago Pits	9,704	8,020	-1,684
River			
Off-river			
Irvine Lake			
TOTAL	14,784	13,051	-1,733

SUMMARY (AF)	
TOTAL INFLOW	17,751
TOTAL LOSSES	253
STORAGE CHANGE	-1,733
CALC'D PERCOLATION	19,231

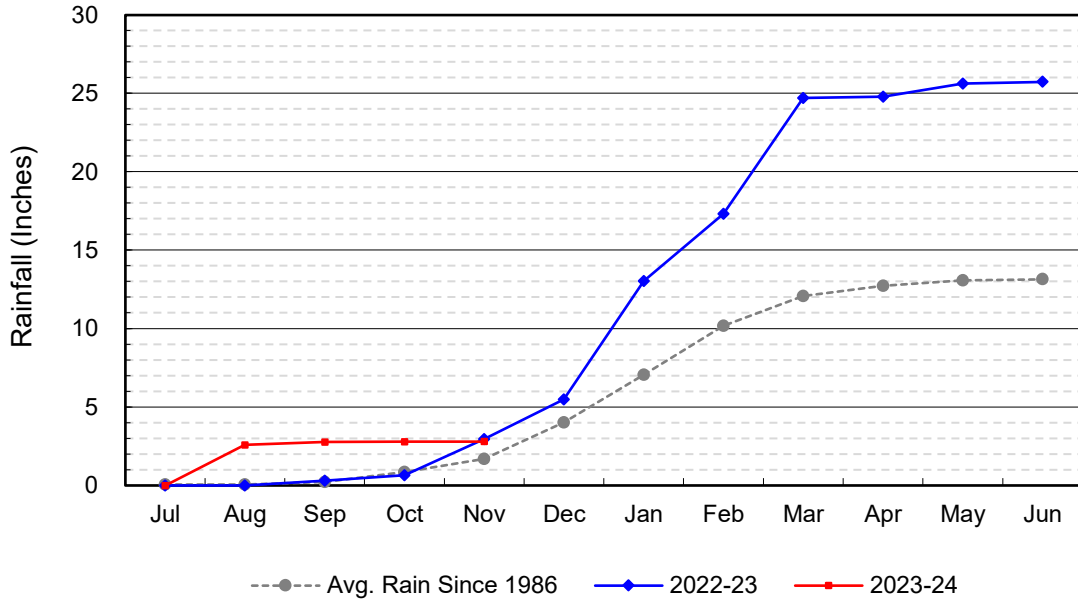
DEEP BASINS MONTHLY STATUS

November 2023

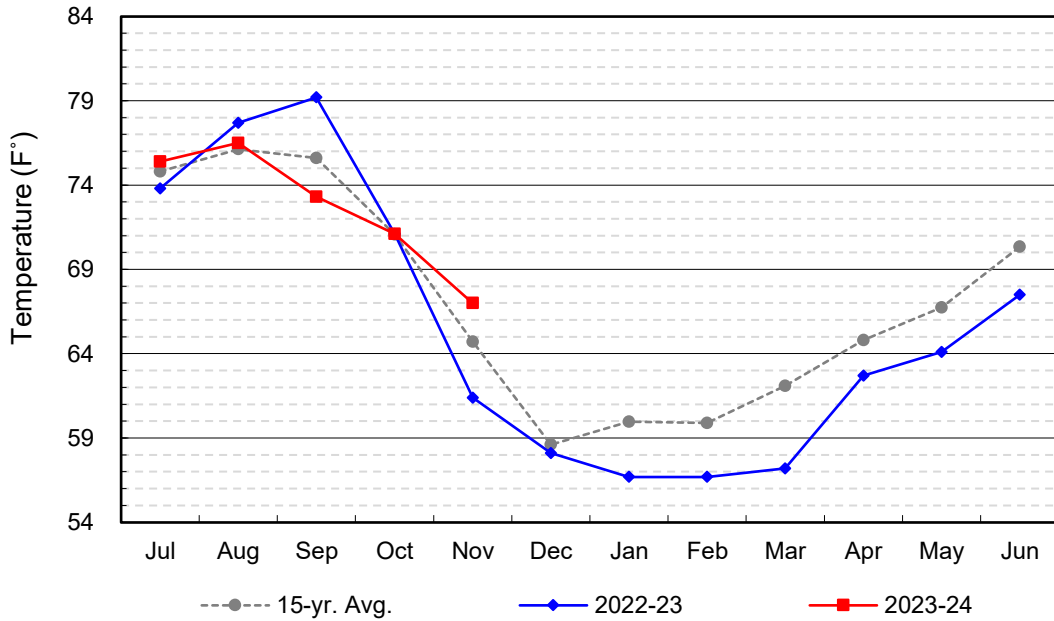
(values in acre-feet)

<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	230	252	na	na	na	na
Fos-Huckleberry	536	532	628	na	na	na	na
Conrock Basin	560	550	661	na	na	na	na
Warner Basins	2,882	2,902	2,900	941	na	na	238
Olive Pit	16	39	95	na	na	na	208
Anaheim Lake	0	0	2,300	na	na	na	na
Mini-Anaheim Lk	0	0	10	na	na	na	na
Miller Basin	96	0	350	1,228	112	41	205
Kraemer Basin	233	0	1,055	787	62	26	177
La Palma Basin	3	45	101	3,419	196	114	213
Mira Loma	31	25	53	2,963	107	99	218
La Jolla Basin	7	0	20	375	26	13	201
Placentia Basin	0	0	200	na	na	na	na
Raymond Basin	5	0	200	242	na	na	na
Five Coves Basins	0	242	329	na	na	na	na
Burris Pit	481	463	2,500	162	63	6	147
River View Basin	0	0	8	57	15	2	186
Fletcher Basin	0	3	15	27	8	1	185
Santiago (Bond)	6,392	5,426	8,312	2,237	104	77	255
Santiago (Blu Dia)	3,312	2,594	5,259	-	-	-	-
Totals	14,784	13,051	25,247	12,438			
Prado Dam	3	7	20,000				

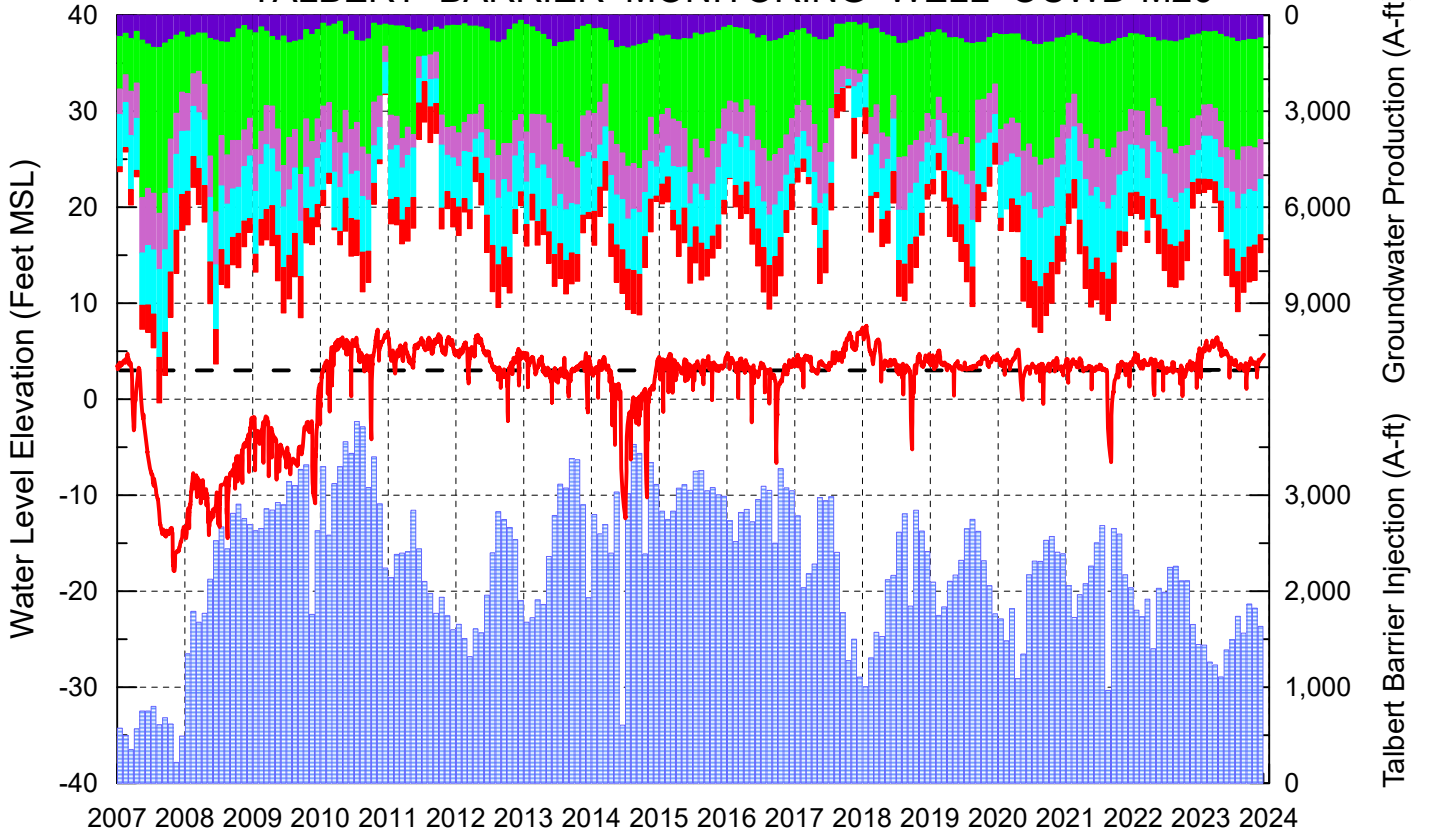
Cumulative Anaheim Field HQ Rainfall



Temperature at Santa Ana Fire Station



TALBERT BARRIER MONITORING WELL OCWD-M26



- Talbert/Lambda Aquifer Mergence Zone Perforated Interval: 71 - 135 ft. bgs
- ▨ Talbert Barrier Injection
- - - Protective Level to Prevent Seawater Intrusion
- ▨ Fountain Valley Groundwater Production
- ▨ IRWD Groundwater Production
- ▨ Mesa Water Groundwater Production
- ▨ Huntington Beach Groundwater Production
- ▨ Newport Beach Groundwater Production

