

# WATER RESOURCES SUMMARY

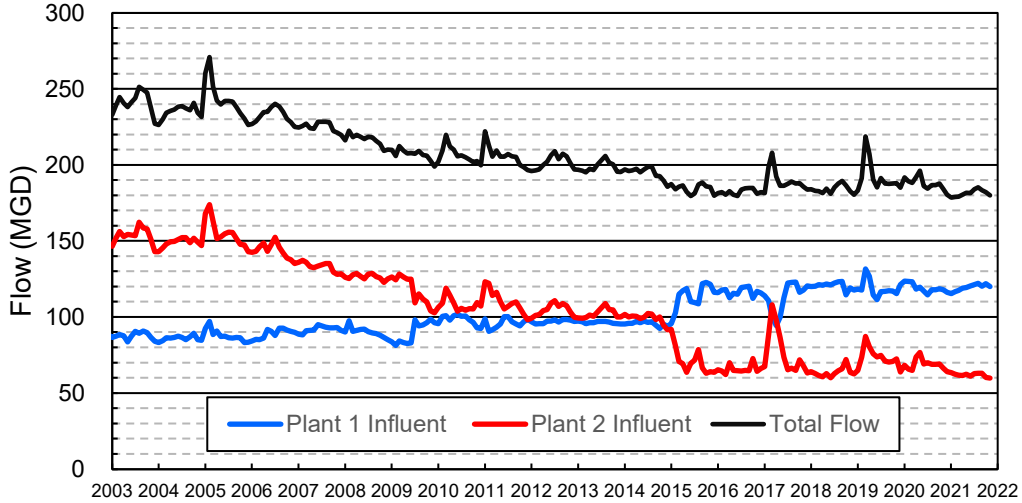
October 2021

INFLOWS & OUTFLOWS (acre-feet)	Total for Month	Year to Date - This Year    Last Year	
<b>BASIN SUPPLIES</b>			
Water Purchases from MWD (excludes In Lieu)	9,308	9,308	0
Water into MWD Storage Account (excludes In Lieu)	0	0	0
SAR & Santiago Creek Flows (accounts for storage to/from recharge facilities)	4,961	20,346	28,641
GWRS Water to Forebay	5,189	17,061	19,333
GWRS Water to Mid-Basin Injection Wells	919	2,541	3,860
GWRS Water to Talbert Barrier	2,596	8,901	9,724
OC-44 Water to Talbert Barrier	3	4	10
Alamitos Barrier Water	205	944	973
Incidental Recharge (estimated)	2,500	6,000	4,300
Evaporation from Recharge Basins	(208)	(943)	(1,455)
River Flow Lost to Ocean	<u>0</u>	<u>0</u>	<u>0</u>
Total Groundwater Recharge	25,473	64,162	65,386
<b>WATER PRODUCTION</b>			
Groundwater Production	20,951	93,070	108,329
MWD Storage Program Withdrawals	<u>0</u>	<u>0</u>	<u>0</u>
Total Groundwater Production	20,951	93,070	108,329
<b>BASIN BALANCE</b>			
Change in Groundwater Storage	4,522	(28,908)	(42,943)
Change in Groundwater Storage excluding MWD Stored Water	4,522	(28,908)	(42,943)
Accumulated Overdraft	-----	276,909	242,943
Accumulated Overdraft excluding MWD Storage	-----	276,909	242,943
<b>IN LIEU WATER</b>			
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
<b>OTHER KEY INFORMATION</b>			
1. MWD Water Deliveries to Producers	10,786	49,005	41,190
2. Basin Production Percentage	66.0%	65.5%	72.5%
3. Total Water Demand	33,238	148,631	156,050
4. Total GWRS Production	8,708	28,526	32,951
5. Green Acres Project Water	294	1,630	1,941
6. SAR Water Quality			
- Total Dissolved Solids (TDS) of SAR below Prado Dam (ppm)	640	-----	754
- Total Nitrogen of SAR below Prado Dam (ppm)	4.6	-----	5.3
7. Month-End Water Storage Behind Prado Dam	2	-----	2
8. Month-End Water Storage in Recharge Facilities	7,668	-----	8,481
9. Water Storage Change in Recharge Facilities	1,004	(992)	(7,258)
10. Total Artificial Recharge	22,973	58,162	61,086
11. Monthly Mean Temperature at Santa Ana Fire Station (°F)	68.1	-----	73.7
12. Rainfall at FHQ (inches)	0.55	0.87	0.00

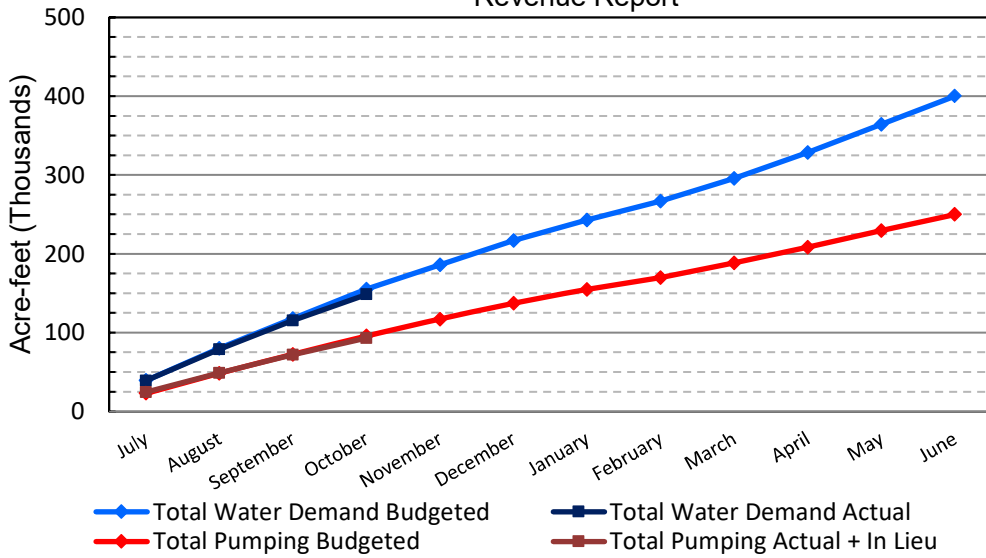
\*\*\* Note: Data are preliminary, subject to change

11/10/2021

### Orange County Sanitation District Influent Flows Report

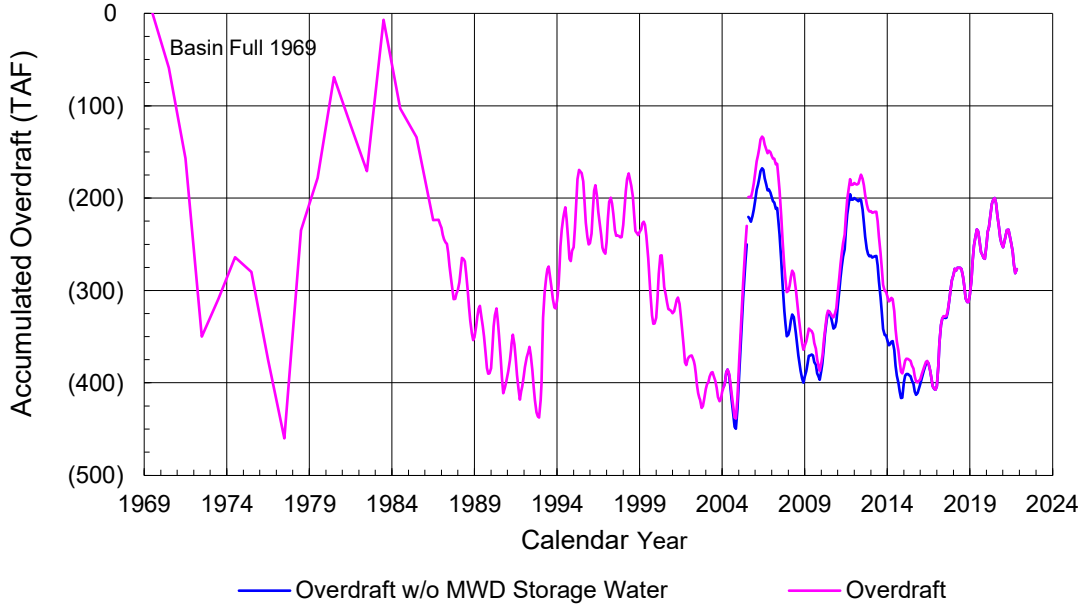


### 2021-22 Water Demands/Groundwater Pumping + In Lieu/RA Revenue Report

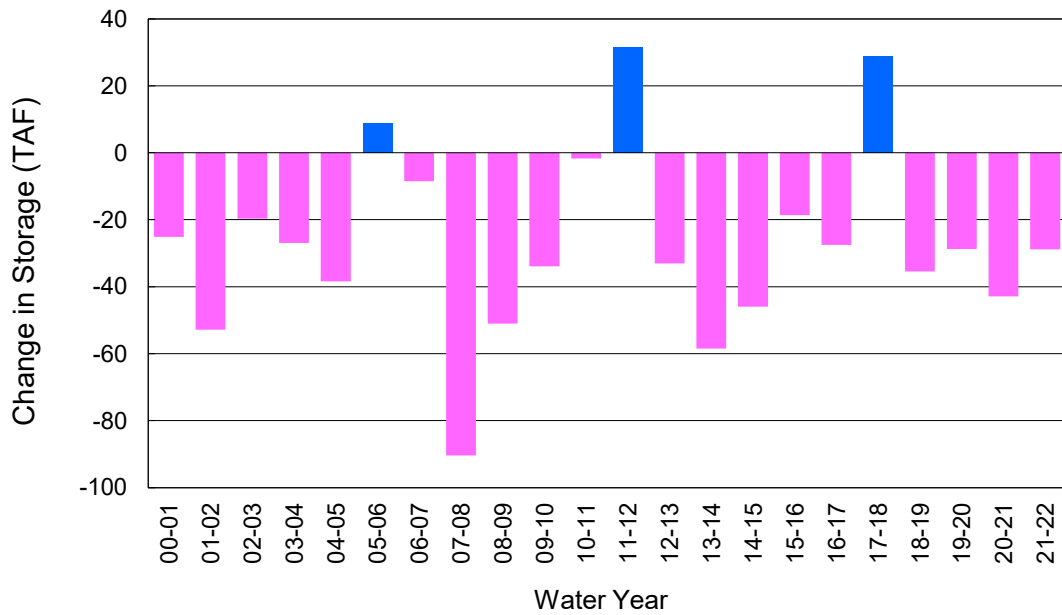


	Monthly		Accumulated Total for the Year			
	Budget	Actual	Budget	Actual	Difference	Percent
Total Water Demand	37,100	33,238	155,000	148,631	-6,369	95.89%
Total Pumping + In Lieu	23,600	20,951	96,100	93,070	-3,030	96.85%
RA Revenue	\$10,903,200	\$9,679,264	\$44,398,200	\$42,998,381	-\$1,399,819	96.85%

### Accumulated Overdraft



### YTD Change in Groundwater Storage in OCWD



## PRODUCERS WATER USAGE SUMMARY

**October 2021**

(AF except BPP)

WATER AGENCY	Ground-water (1)	In Lieu	Reclaimed Water	Total Import (2)	Total Demand	2021-22 YTD Demand	2020-21 YTD Demand	YTD % Diff Demand	OCT 2021 BPP	2021-22 YTD BPP	2020-21 YTD BPP
Anaheim	1,604	0	0	3,666	5,269	22,164	22,513	98%	30.4%	29.3%	26.3%
Buena Park	852	0	0	270	1,122	5,074	5,152	98%	76.0%	79.0%	85.3%
East Orange County	0	0	0	76	76	368	372	99%	0.4%	0.3%	0.0%
Fountain Valley	732	0	124	0	856	3,948	4,080	97%	100.0%	100.0%	100.0%
Fullerton	1,460	0	0	527	1,987	9,350	9,607	97%	73.5%	76.1%	74.9%
Garden Grove	1,659	0	0	221	1,879	8,334	8,754	95%	88.2%	78.3%	62.4%
Golden State	1,270	0	0	696	1,966	8,916	9,419	95%	64.6%	59.6%	70.8%
West OC System	1,192	-	-	3	1,196	5,325	5,510	97%	na	na	na
East OC System	78	-	-	693	771	3,591	3,909	92%	na	na	na
Huntington Beach	1,753	0	0	469	2,222	9,970	10,793	92%	78.9%	82.6%	76.0%
Irvine Ranch	4,010	0	1,269	55	5,334	22,727	23,558	96%	98.7%	98.1%	99.7%
DRWF Clear	2,174	-	-	-	2,174	10,689	11,797	91%	na	na	na
DRWF Color	699	-	-	-	699	2,369	2,794	85%	na	na	na
Laguna Beach	0	0	0	290	290	1,248	1,387	na	0.0%	0.0%	0.0%
La Palma	148	0	0	3	151	664	768	87%	97.9%	90.8%	100.0%
Mesa Water (MW)	1,339	0	57	213	1,609	6,713	6,778	99%	86.3%	96.6%	100.0%
MW Clear	1,126	-	-	-	1,126	4,360	4,435	98%	na	na	na
MW Amber	213	-	-	-	213	1,730	1,877	92%	na	na	na
Newport Beach	644	0	27	248	918	5,450	6,071	90%	72.2%	86.4%	93.2%
Orange	1,105	0	0	1,164	2,268	10,462	11,013	95%	48.7%	46.6%	69.6%
OCWD (GAP)	97	0	0	0	97	518	629	82%	100.0%	100.0%	100.0%
Santa Ana	2,089	0	22	626	2,737	12,237	12,968	94%	77.0%	76.5%	73.3%
Seal Beach	279	0	0	0	279	1,301	1,373	95%	99.9%	55.4%	37.2%
Serrano	0	0	0	244	244	1,119	1,164	96%	0.0%	0.0%	0.2%
Tustin	568	0	0	350	918	4,155	4,332	96%	61.9%	53.2%	95.1%
Westminster	906	0	0	0	906	4,033	4,086	99%	100.0%	100.0%	100.0%
Yorba Linda	<u>0</u>	<u>0</u>	<u>0</u>	<u>1,656</u>	<u>1,656</u>	<u>7,878</u>	<u>8,400</u>	<u>94%</u>	<u>0.0%</u>	<u>0.6%</u>	<u>81.9%</u>
SUBTOTAL:	20,514	0	1,498	10,772	32,785	146,628	153,216	96%	66.0%	65.5%	72.5%
Other Producers (Est ~3% of Subtotal)	<u>437</u>	<u>0</u>	<u>0</u>	<u>14</u>	<u>451</u>	<u>2,003</u>	<u>2,834</u>	<u>71%</u>			
<b>TOTAL:</b>	<b>20,951</b>	<b>0</b>	<b>1,498</b>	<b>10,786</b>	<b>33,235</b>	<b>148,631</b>	<b>156,050</b>		<b>66.0%</b>	<b>65.5%</b>	<b>72.5%</b>
OCWD (Talbert Barrier)	0		2,596	3	2,599	8,905	9,734				
OCSD (GAP)	na		61	na	61	237	521				

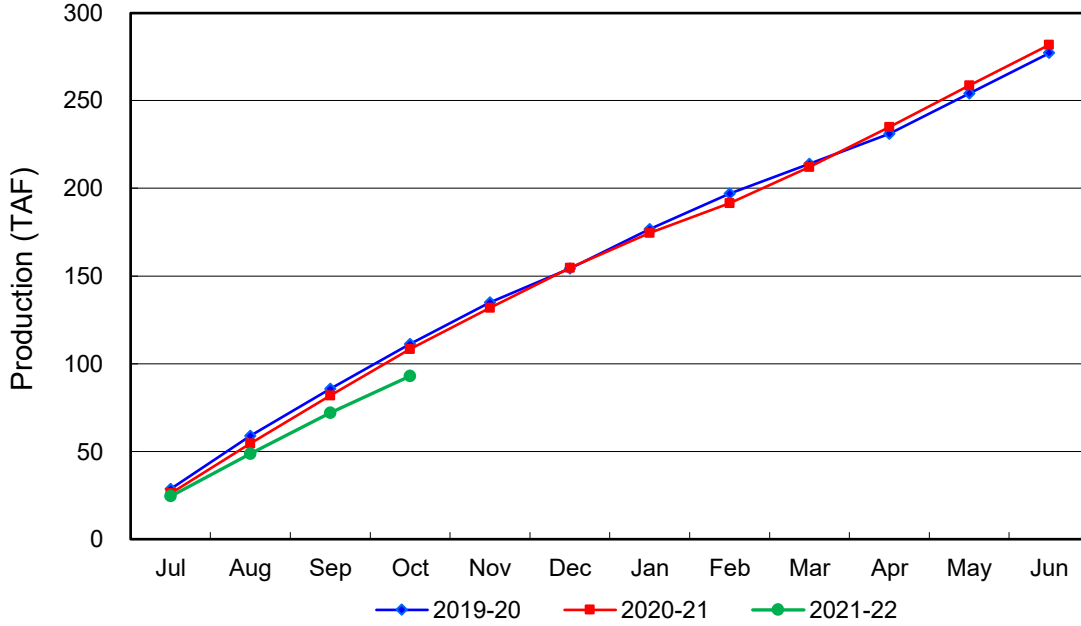
Estimated

(1) Excludes MWD CUP Withdrawals

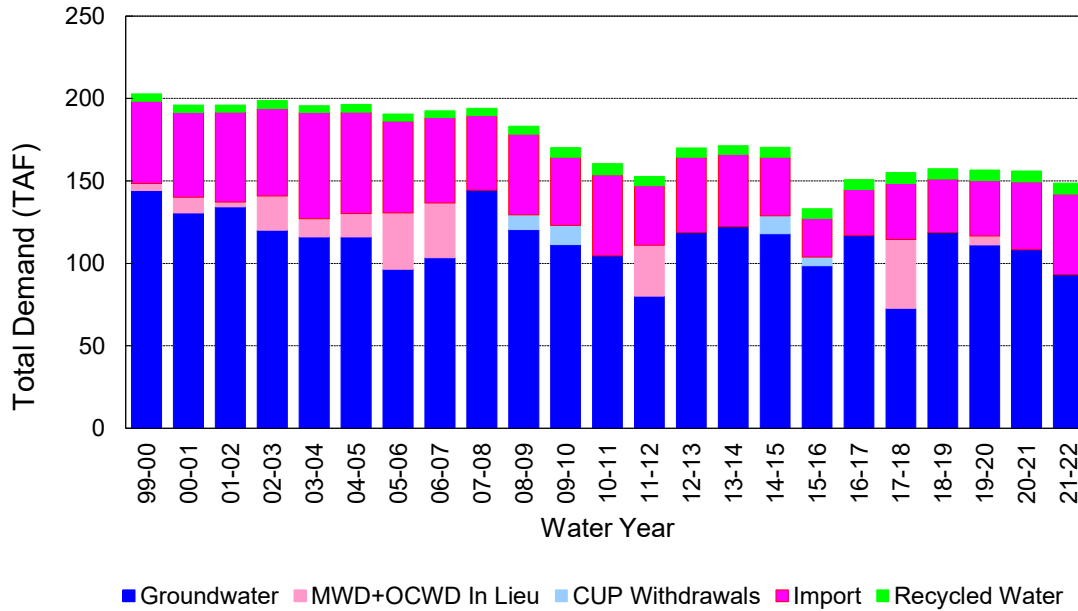
(2) Includes MWD CUP Withdrawals & In Lieu Water

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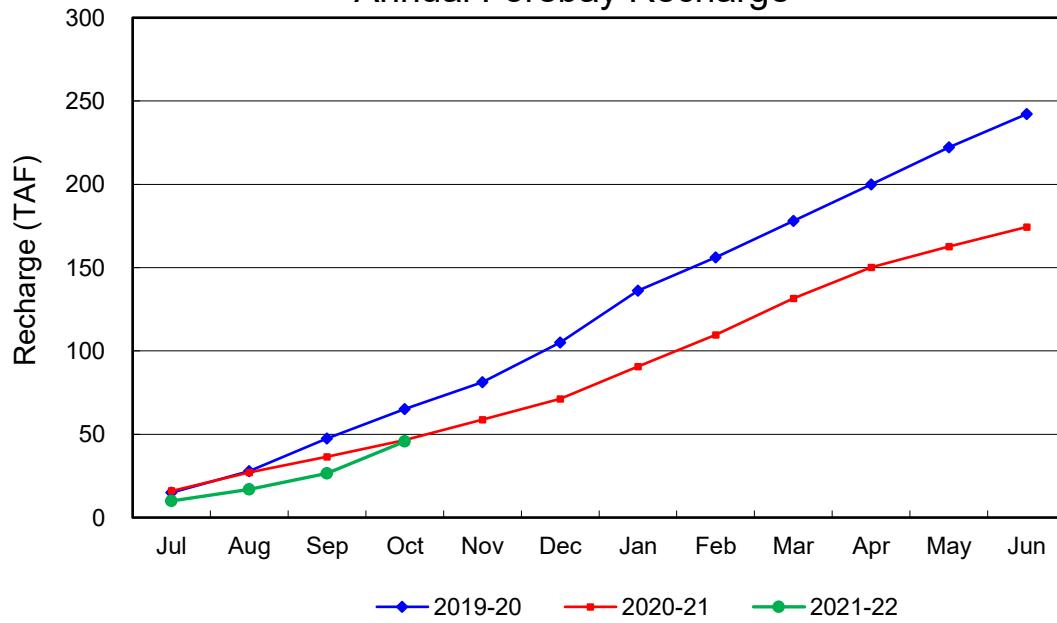
### Annual Groundwater Production



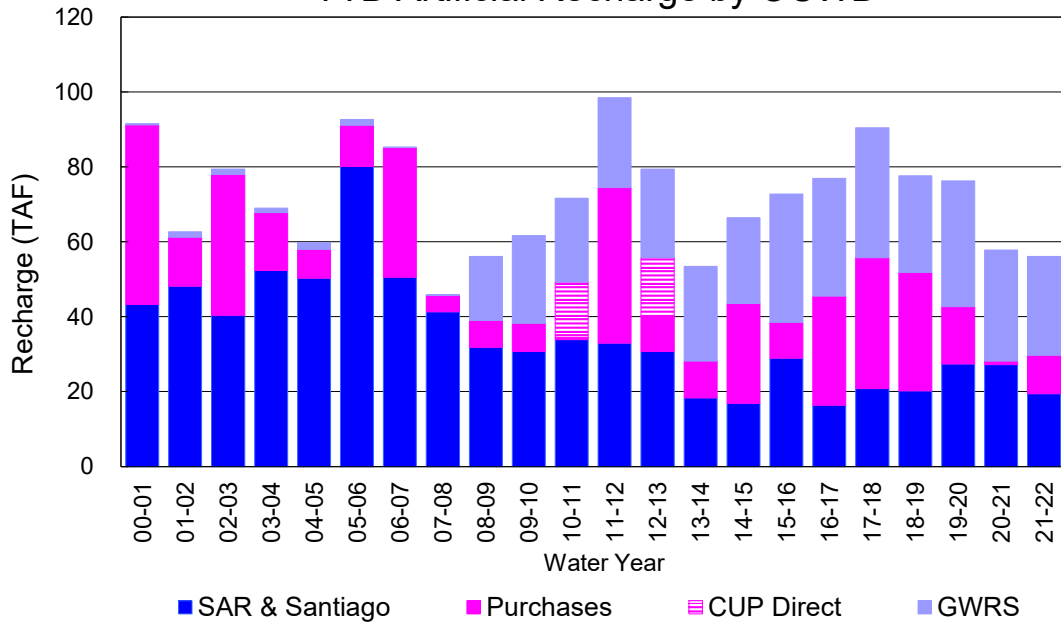
### YTD Total Demand in OCWD



### Annual Forebay Recharge



### YTD Artificial Recharge by OCWD



## RECHARGE AREAS REPORT

October 2021

	Percolation (AF)	Remarks
RIVER SYSTEM	4,531	74 cfs per day average perc
DESILTING SYSTEM	na	SAR
OFF-RIVER SYSTEM	339	SAR
WARNER SYSTEM	722	SAR
OLIVE BASIN	na	Passive System
ANAHEIM LAKE	1,988	Imported
MINI-ANA LAKE	414	Imported
MILLER BASIN	2,320	Imported
KRAEMER BASIN	2,559	Imported
LA PALMA BASIN	2,264	GWRS
MIRA LOMA	2,877	GWRS
LA JOLLA BASIN	760	Imported
PLACENTIA BASIN	na	
RAYMOND BASIN	248	Imported
FIVE COVES BASIN	na	
BURRIS BASIN	123	SAR
RIVER VIEW BASIN	0	
FLETCHER BASIN	8	
SANTIAGO BASINS	97	
SANTIAGO CREEK	0	
<b>TOTALS</b>	<b>19,251</b>	
<b>5-YR AVERAGE</b>	<b>17,228</b>	

FLOWS TO RECHARGE AREAS (AF)	
Imperial Headgates (estimated)	5,940
GWRS	5,190
OC-28 (MWD)	9,308
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)	0.55
Precip direct to open water surfaces	25
<b>TOTAL INFLOW</b>	<b>20,463</b>

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	4.65
Est'd evaporative losses	208
<b>TOTAL LOSSES</b>	<b>208</b>

STORAGE CHANGES (AF)			
Facility	Begin	End	Net
Deep basins	4,888	5,913	1,025
Santiago Pits	1,776	1,755	-21
River			
Off-river			
Irvine Lake			
<b>TOTAL</b>	<b>6,664</b>	<b>7,668</b>	<b>1,004</b>

SUMMARY (AF)	
TOTAL INFLOW	20,463
TOTAL LOSSES	208
STORAGE CHANGE	1,004
CALC'D PERCOLATION	19,251

## DEEP BASINS MONTHLY STATUS

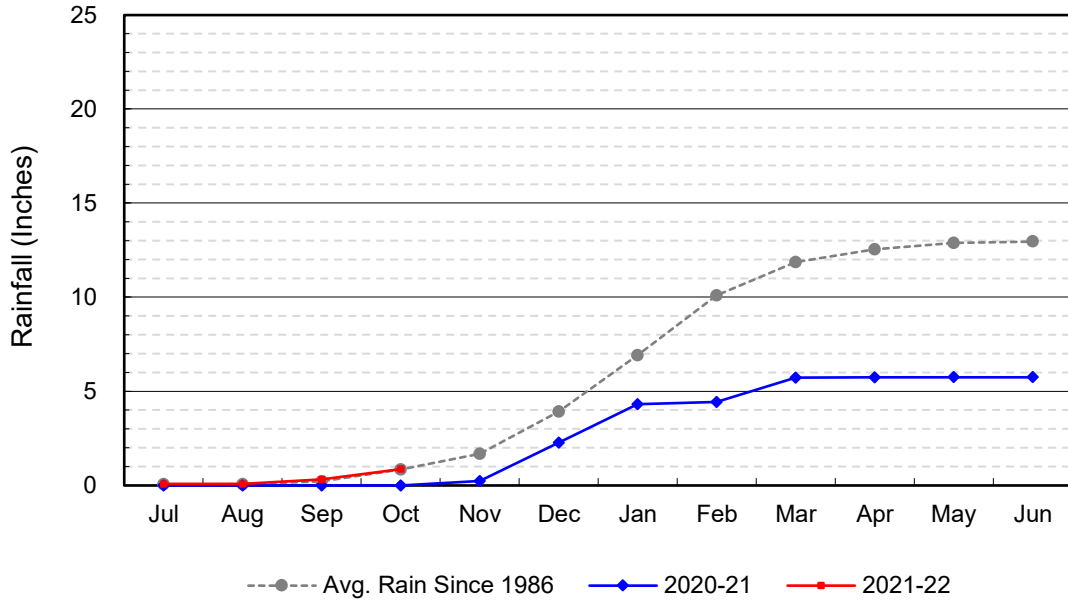
**October 2021**

(values in acre-feet)

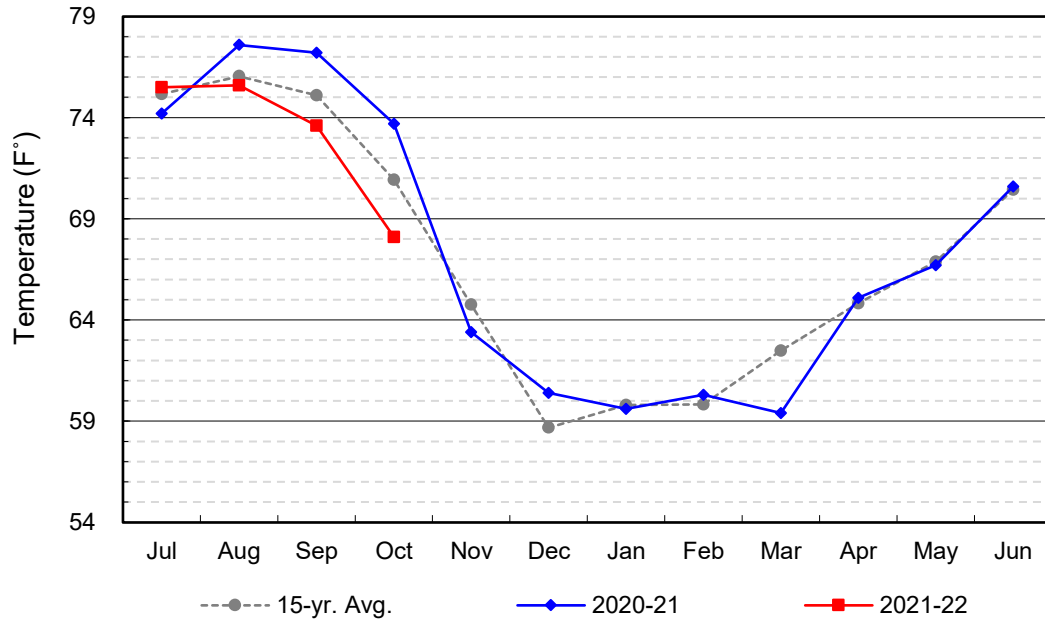
<i>Facility</i>	<i>Storage Start</i>	<i>Storage End</i>	<i>Maximum Storage</i>	<i>Total Perc</i>	<i>Max Perc</i>	<i>Avg Perc</i>	<i>Avg W.S. Elev</i>
Desilting Ponds	190	220	252	na	na	na	na
Fos-Huckleberry	518	469	628	na	na	na	na
Conrock Basin	533	551	661	na	na	na	na
Warner Basins	2,635	2,734	2,900	722	na	na	236
Olive Pit	11	7	95	na	na	na	196
Anaheim Lake	0	728	2,300	1,988	95	64	189
Mini-Anaheim Lk	0	5	10	414	14	13	223
Miller Basin	0	57	350	2,320	98	75	209
Kraemer Basin	0	210	1,055	2,559	105	83	177
La Palma Basin	2	16	101	2,264	135	73	212
Mira Loma	22	7	53	2,877	145	93	217
La Jolla Basin	0	3	20	760	52	25	201
Placentia Basin	0	0	200	na	na	na	na
Raymond Basin	0	50	200	248	na	na	na
Five Coves Basins	0	0	329	na	na	na	na
Burris Pit	977	856	2,500	123	8	4	154
River View Basin	0	0	8	0	0	0	187
Fletcher Basin	0	0	15	8	2	0	184
Santiago (Bond)	1,059	1,048	8,312	97	12	3	183
Santiago (Blu Dia)	717	707	5,259	-	-	-	-
<b>Totals</b>	<b>6,664</b>	<b>7,668</b>	<b>25,247</b>	<b>14,380</b>			
Prado Dam	1	2	25,000				



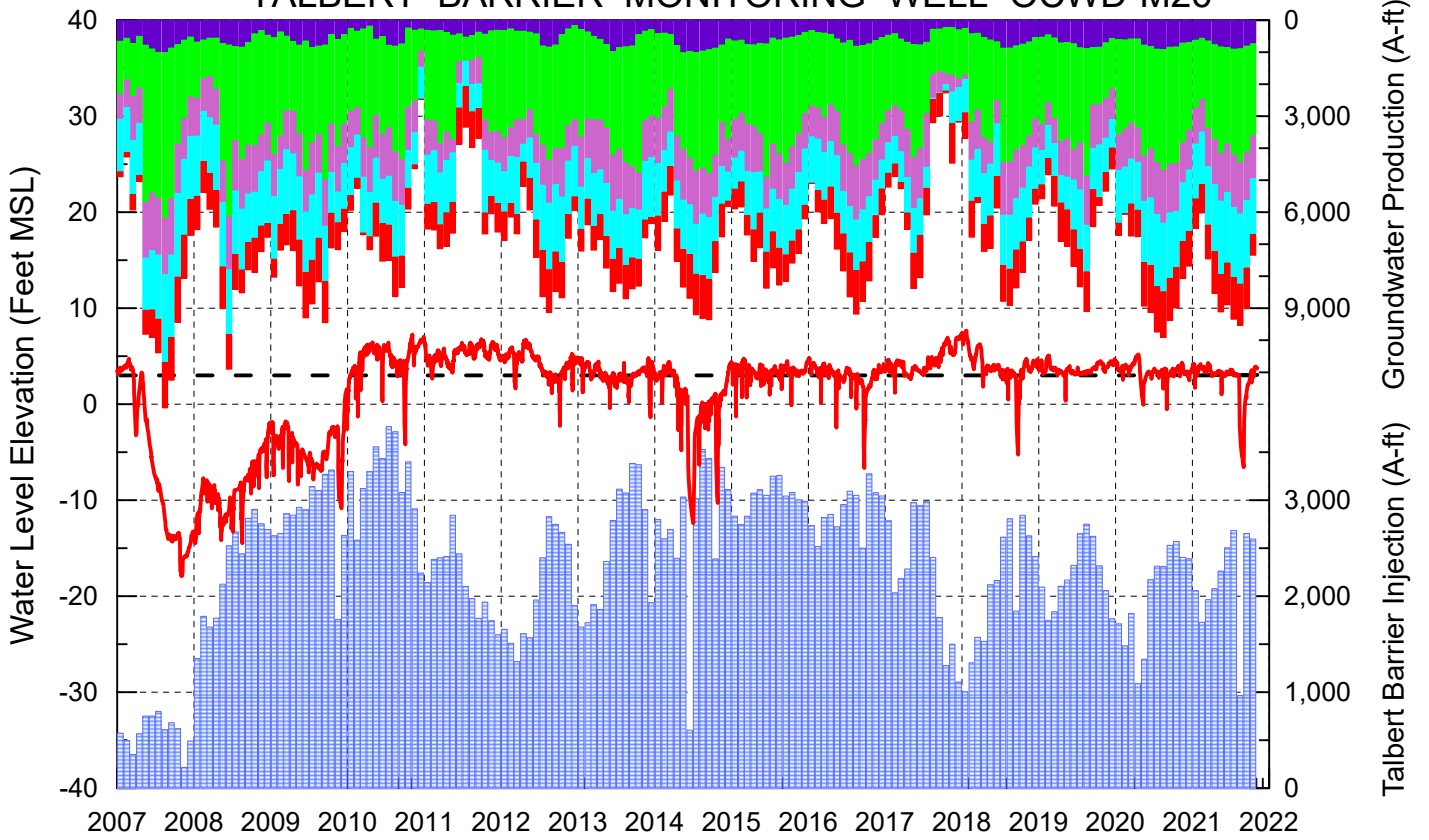
### Cumulative Anaheim Field HQ Rainfall



### 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

