

# WATER RESOURCES SUMMARY

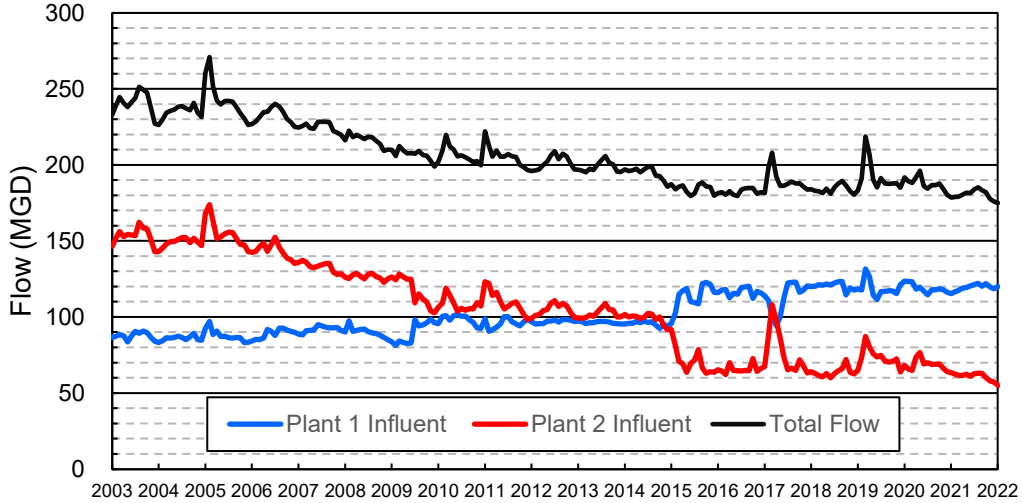
December 2021

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)	1,504	20,003	0
Water into MWD Storage Account (excludes In Lieu)	0	0	0
SAR & Santiago Creek Flows (accounts for storage to/from recharge facilities)	29,114	55,465	44,312
GWRS Water to Forebay	5,439	27,924	29,458
GWRS Water to Mid-Basin Injection Wells	699	3,969	5,711
GWRS Water to Talbert Barrier	2,038	13,109	14,521
OC-44 and F. Valley Water to Talbert Barrier	2	6	14
Alamitos Barrier Water	273	1,557	1,497
Incidental Recharge (estimated)	6,500	14,300	8,500
Evaporation from Recharge Basins	(163)	(1,263)	(1,849)
River Flow Lost to Ocean	<u>(16,269)</u>	<u>(16,269)</u>	<u>(621)</u>
Total Groundwater Recharge	29,137	118,800	101,543
<b>WATER PRODUCTION</b>			
Groundwater Production	18,102	131,185	154,675
MWD Storage Program Withdrawals	<u>0</u>	<u>0</u>	<u>0</u>
Total Groundwater Production	18,102	131,185	154,675
<b>BASIN BALANCE</b>			
Change in Groundwater Storage	11,036	(12,385)	(53,132)
Change in Groundwater Storage excluding MWD Stored Water	11,036	(12,385)	(53,132)
Accumulated Overdraft	-----	260,387	253,133
Accumulated Overdraft excluding MWD Storage	-----	260,387	253,133
<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	6,943	66,100	54,274
2. Basin Production Percentage	72.3%	66.5%	74.0%
3. Total Water Demand	26,489	206,831	218,310
4. Total GWRS Production	8,178	45,032	49,732
5. Green Acres Project Water	187	2,102	2,483
6. SAR Water Quality			
- Total Dissolved Solids (TDS) of SAR below Prado Dam (ppm)	524	-----	696
- Total Nitrogen of SAR below Prado Dam (ppm)	4.5	-----	5.3
7. Month-End Water Storage Behind Prado Dam	14,861	-----	3,585
8. Month-End Water Storage in Recharge Facilities	17,476	-----	10,263
9. Water Storage Change in Recharge Facilities	9,305	8,816	(5,476)
10. Total Artificial Recharge	22,637	104,500	93,043
11. Monthly Mean Temperature at Santa Ana Fire Station (°F)	55.9	-----	60.4
12. Rainfall at FHQ (inches)	4.81	5.68	2.27

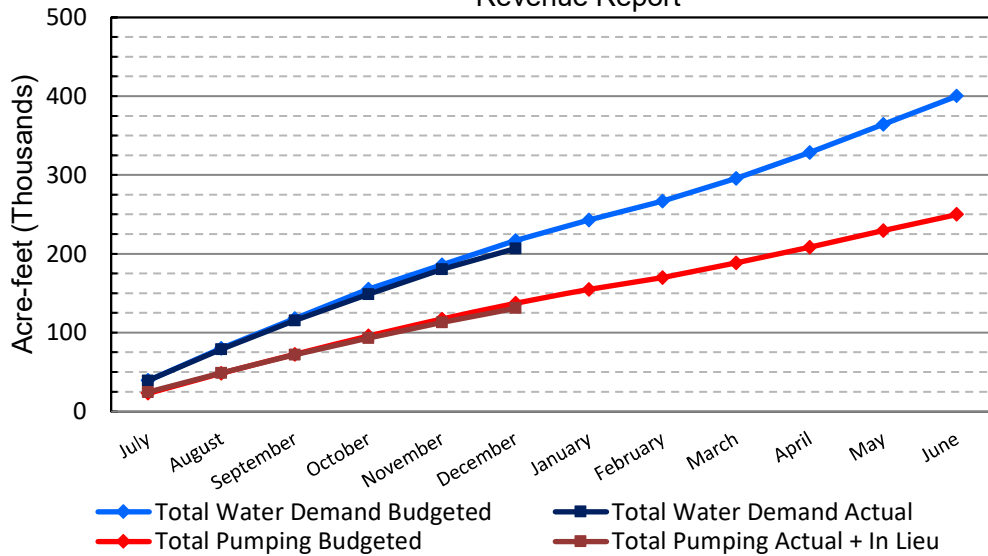
\*\*\* Note: Data are preliminary, subject to change

1/13/2022

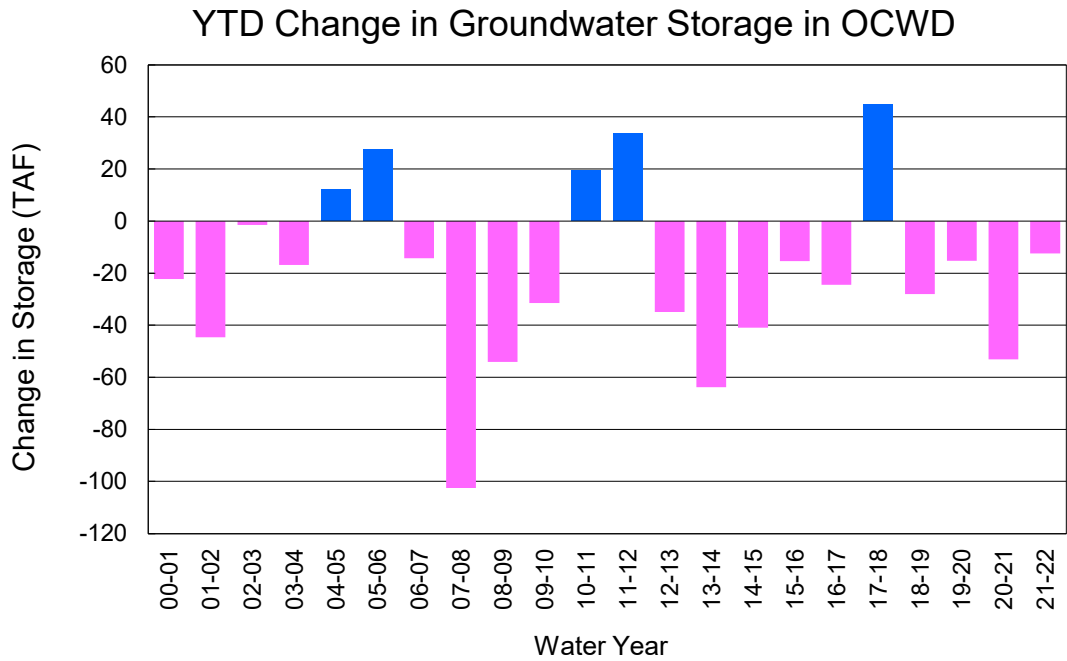
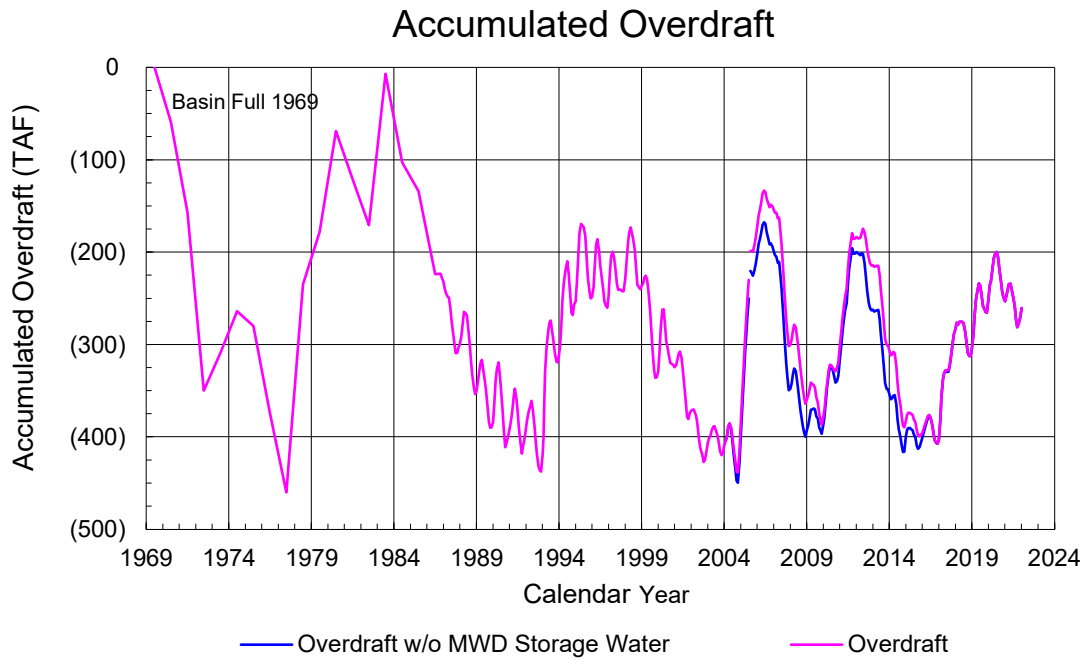
### Orange County Sanitation District Influent Flows Report



### 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	30,800	26,489	216,800	206,831	-9,969	95.40%
Total Pumping + In Lieu	20,200	18,102	137,100	131,185	-5,915	95.69%
RA Revenue	\$9,332,400	\$8,362,966	\$63,340,200	\$60,607,605	-\$2,732,595	95.69%



## PRODUCERS WATER USAGE SUMMARY

**December 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	DEC 2021 BPP	2021-22 YTD BPP	2020-21 YTD BPP
Anaheim	1,369	0	0	2,742	4,111	31,596	32,002	99%	33.3%	30.3%	26.1%
Buena Park	780	0	0	53	833	6,949	7,134	97%	93.6%	80.7%	87.1%
East Orange County	0	0	0	48	48	489	569	86%	0.0%	0.3%	9.8%
Fountain Valley	580	0	96	0	676	5,429	5,664	96%	100.0%	100.0%	100.0%
Fullerton	1,056	0	0	363	1,419	12,636	13,280	95%	74.4%	75.5%	73.3%
Garden Grove	1,493	0	0	7	1,500	11,598	12,293	94%	99.5%	83.2%	69.1%
Golden State	1,026	0	0	462	1,487	12,248	13,167	93%	69.0%	61.6%	71.3%
West OC System	939	-	-	1	940	7,386	7,802	95%	na	na	na
East OC System	87	-	-	461	548	4,862	5,365	91%	na	na	na
Huntington Beach	1,498	0	0	238	1,736	13,487	15,001	90%	86.3%	84.0%	79.7%
Irvine Ranch	3,361	0	1,315	3	4,679	32,752	33,202	99%	99.9%	98.6%	99.7%
DRWF Clear	1,659	-	-	-	1,659	14,779	16,257	91%	na	na	na
DRWF Color	720	-	-	-	720	3,640	4,184	87%	na	na	na
Laguna Beach	0	0	0	214	214	1,712	1,942	na	0.0%	0.0%	7.4%
La Palma	116	0	0	0	116	918	1,074	85%	100.0%	93.3%	100.0%
Mesa Water (MW)	1,093	0	15	0	1,107	9,144	9,373	98%	100.0%	97.5%	100.0%
MW Clear	1,078	-	-	-	1,078	6,610	6,540	101%	na	na	na
MW Amber	15	-	-	-	15	1,837	2,267	81%	na	na	na
Newport Beach	703	0	7	457	1,167	7,684	8,387	92%	60.6%	75.9%	94.9%
Orange	1,139	0	0	545	1,684	14,245	15,233	94%	67.6%	48.8%	76.0%
OCWD (GAP)	116	0	0	0	116	755	860	88%	100.0%	100.0%	100.0%
Santa Ana	1,738	0	11	585	2,334	17,216	18,379	94%	74.8%	76.3%	74.7%
Seal Beach	205	0	0	1	205	1,772	1,889	94%	99.7%	67.2%	54.3%
Serrano	0	0	0	155	155	1,515	1,588	95%	0.0%	0.0%	0.2%
Tustin	499	0	0	192	690	5,733	6,108	94%	72.2%	56.7%	96.5%
Westminster	763	0	0	0	763	5,664	5,803	98%	100.0%	100.0%	100.0%
Yorba Linda	<u>192</u>	<u>0</u>	<u>0</u>	<u>869</u>	<u>1,061</u>	<u>10,468</u>	<u>11,332</u>	<u>92%</u>	<u>18.1%</u>	<u>2.3%</u>	<u>84.8%</u>
SUBTOTAL:	17,724	0	1,445	6,934	26,103	204,011	214,278	95%	72.3%	66.5%	74.0%
Other Producers (Est ~3% of Subtotal)	<u>377</u>	<u>0</u>	<u>0</u>	<u>9</u>	<u>386</u>	<u>2,819</u>	<u>4,031</u>	<u>70%</u>			
<b>TOTAL:</b>	<b>18,102</b>	<b>0</b>	<b>1,445</b>	<b>6,943</b>	<b>26,489</b>	<b>206,831</b>	<b>218,310</b>		<b>72.3%</b>	<b>66.5%</b>	<b>74.0%</b>
OCWD (Talbert Barrier)	0		2,038	1	2,039	13,115	14,535				
OCSA (GAP)	na		57	na	57	358	710				

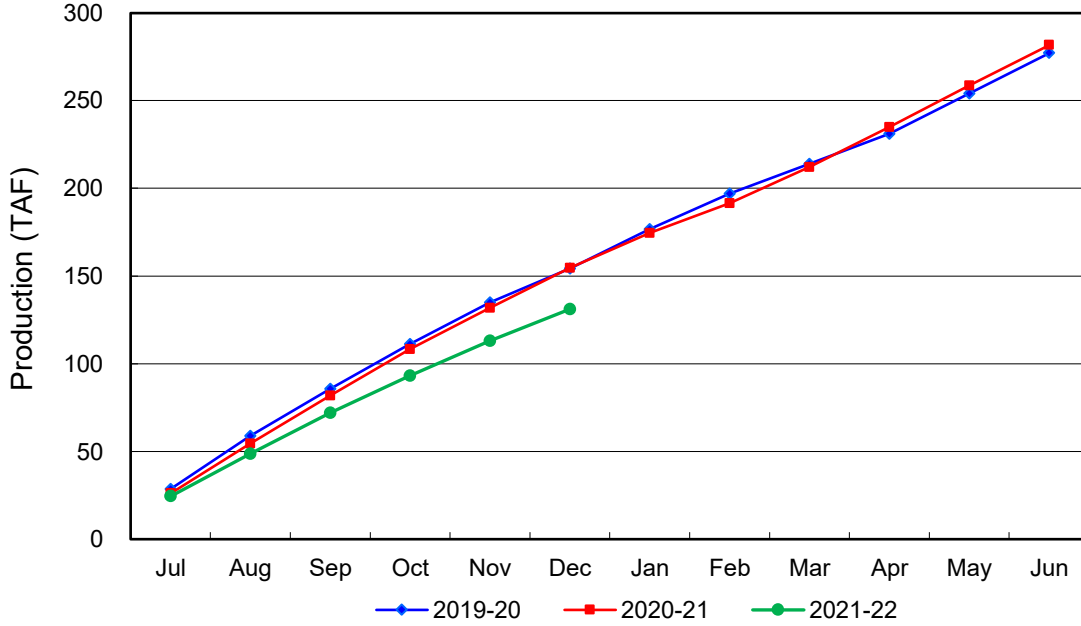
Estimated

(1) Excludes MWD CUP Withdrawals

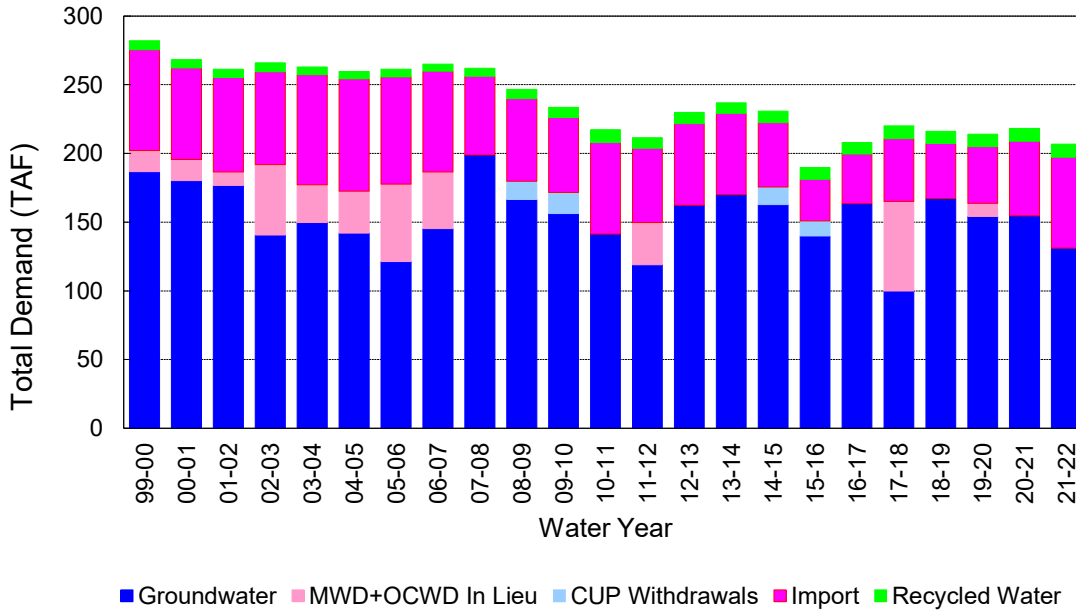
(2) Includes MWD CUP Withdrawals & In Lieu Water

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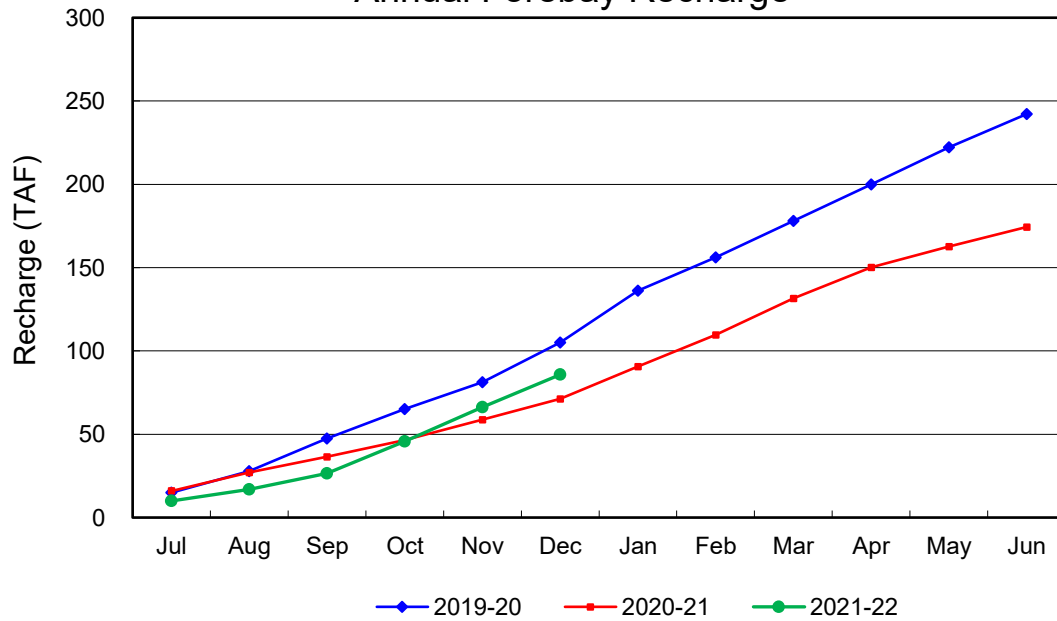
### Annual Groundwater Production



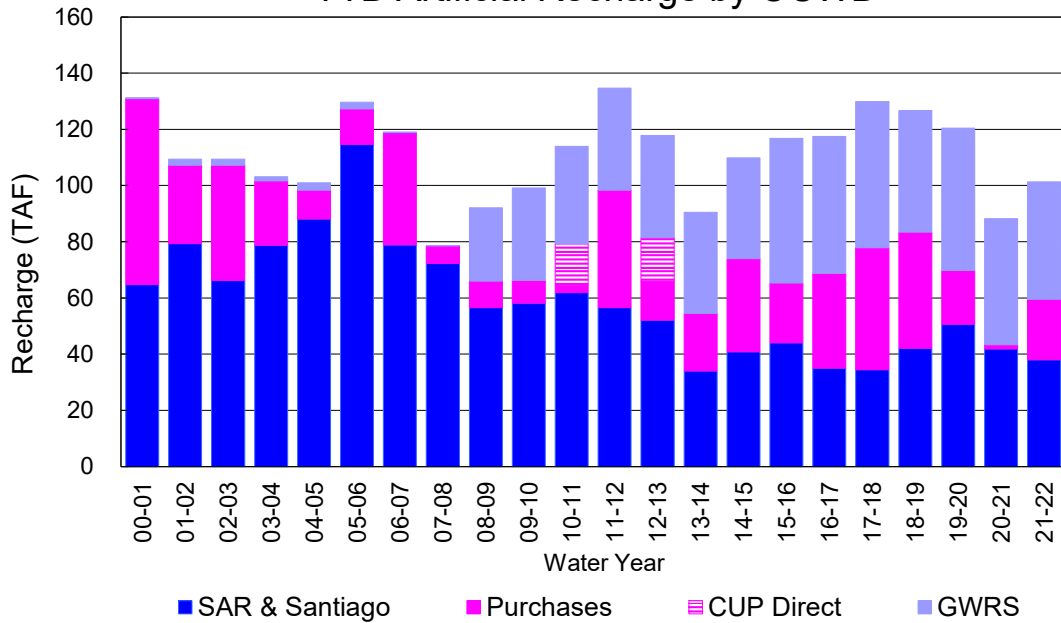
### YTD Total Demand in OCWD



### Annual Forebay Recharge



### YTD Artificial Recharge by OCWD



## RECHARGE AREAS REPORT

December 2021

	Percolation (AF)	Remarks
RIVER SYSTEM	5,086	83 cfs per day average perc
DESILTING SYSTEM	na	SAR
OFF-RIVER SYSTEM	1,914	SAR
WARNER SYSTEM	477	SAR
OLIVE BASIN	na	Passive System
ANAHEIM LAKE	1,972	SAR, Imported
MINI-ANA LAKE	106	SAR
MILLER BASIN	584	SAR, Imported
KRAEMER BASIN	1,736	SAR, Imported
LA PALMA BASIN	4,313	GWRS
MIRA LOMA	1,100	GWRS
LA JOLLA BASIN	202	Imported
PLACENTIA BASIN	na	
RAYMOND BASIN	0	
FIVE COVES BASIN	na	SAR
BURRIS BASIN	657	SAR
RIVER VIEW BASIN	0	
FLETCHER BASIN	61	
SANTIAGO BASINS	1,422	SAR, Burris Pumping
SANTIAGO CREEK	0	
<b>TOTALS</b>	<b>19,630</b>	
<b>5-YR AVERAGE</b>	<b>19,190</b>	

FLOWS TO RECHARGE AREAS (AF)	
Imperial Headgates (estimated)	35,921
GWRS	5,443
OC-28 (MWD)	1,504
OC-28a (MWD)	0
OC-59	0
Est'd local Forebay inflow below Imperial	500
Est'd local Santiago inflow (estimated)	1,760
Irvine lake releases (OC-13 MWD)	0
Villa Park Dam releases (estimated)	0
Precip at Warner Basin (inches)	4.81
Precip direct to open water surfaces	238
<b>TOTAL INFLOW</b>	<b>45,367</b>

LOSSES FROM RECHARGE AREAS (AF)	
Est'd SAR flow past Chapman Ave.	15,864
Est'd Santiago Cr. flow to SAR	405
Est'd flows past Raymond Basin	0
Calc'd evap (inches) Estimated	3.29
Est'd evaporative losses	163
<b>TOTAL LOSSES</b>	<b>16,432</b>

STORAGE CHANGES (AF)			
Facility	Begin	End	Net
Deep basins	6,475	8,297	1,822
Santiago Pits	1,696	9,179	7,483
River			
Off-river			
Irvine Lake			
<b>TOTAL</b>	<b>8,171</b>	<b>17,476</b>	<b>9,305</b>

SUMMARY (AF)	
TOTAL INFLOW	45,367
TOTAL LOSSES	16,432
STORAGE CHANGE	9,305
CALC'D PERCOLATION	19,630

## DEEP BASINS MONTHLY STATUS

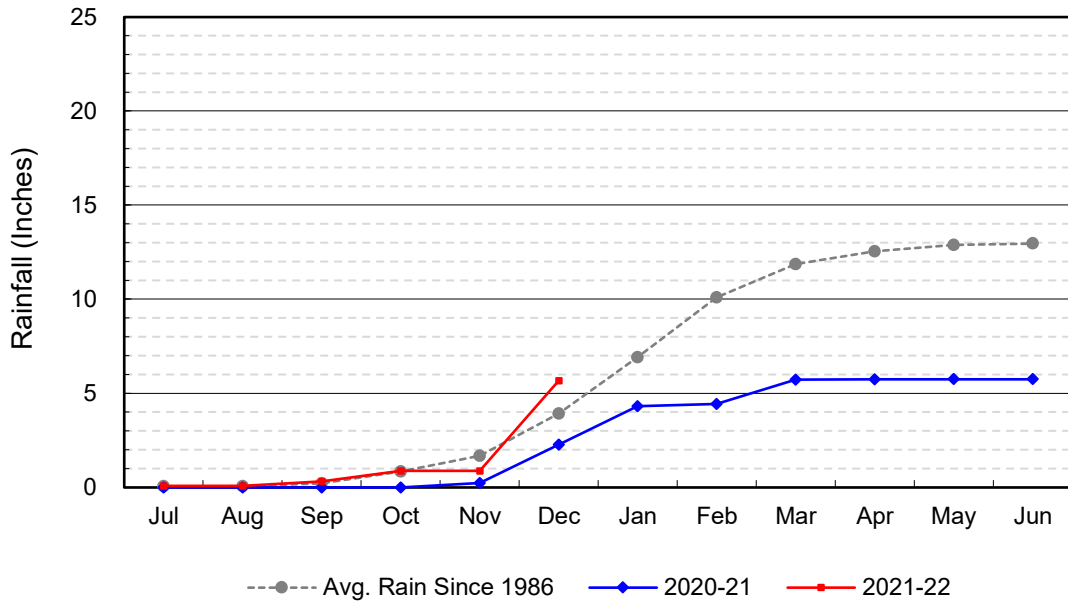
**December 2021**

(values in acre-feet)

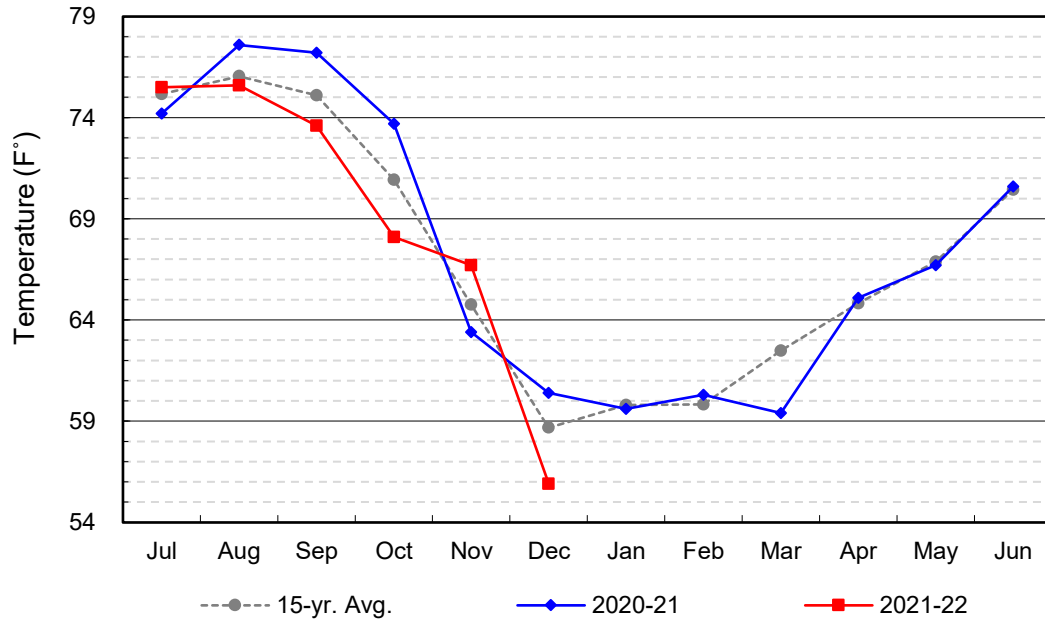
<i>Facility</i>	<i>Storage Start</i>	<i>Storage End</i>	<i>Maximum Storage</i>	<i>Total Perc</i>	<i>Max Perc</i>	<i>Avg Perc</i>	<i>Avg W.S. Elev</i>
Desilting Ponds	220	230	252	na	na	na	na
Fos-Huckleberry	525	577	628	na	na	na	na
Conrock Basin	552	612	661	na	na	na	na
Warner Basins	2,861	2,864	2,900	477	na	na	238
Olive Pit	7	68	95	na	na	na	205
Anaheim Lake	732	1,195	2,300	1,972	114	64	197
Mini-Anaheim Lk	0	7	10	106	16	3	221
Miller Basin	90	0	350	584	71	19	204
Kraemer Basin	524	402	1,055	1,736	175	56	182
La Palma Basin	12	48	101	4,313	152	139	213
Mira Loma	6	14	53	1,100	38	35	215
La Jolla Basin	17	0	20	202	54	7	200
Placentia Basin	0	0	200	na	na	na	na
Raymond Basin	0	0	200	0	na	na	na
Five Coves Basins	156	306	329	na	na	na	na
Burriss Pit	773	1,961	2,500	657	na	na	158
River View Basin	0	0	8	0	0	0	187
Fletcher Basin	0	13	15	61	8	2	187
Santiago (Bond)	1,014	6,094	8,312	1,422	124	46	213
Santiago (Blu Dia)	682	3,085	5,259	-	-	-	-
<b>Totals</b>	<b>8,171</b>	<b>17,476</b>	<b>25,247</b>	<b>12,630</b>			
Prado Dam	2	14,861	25,000				



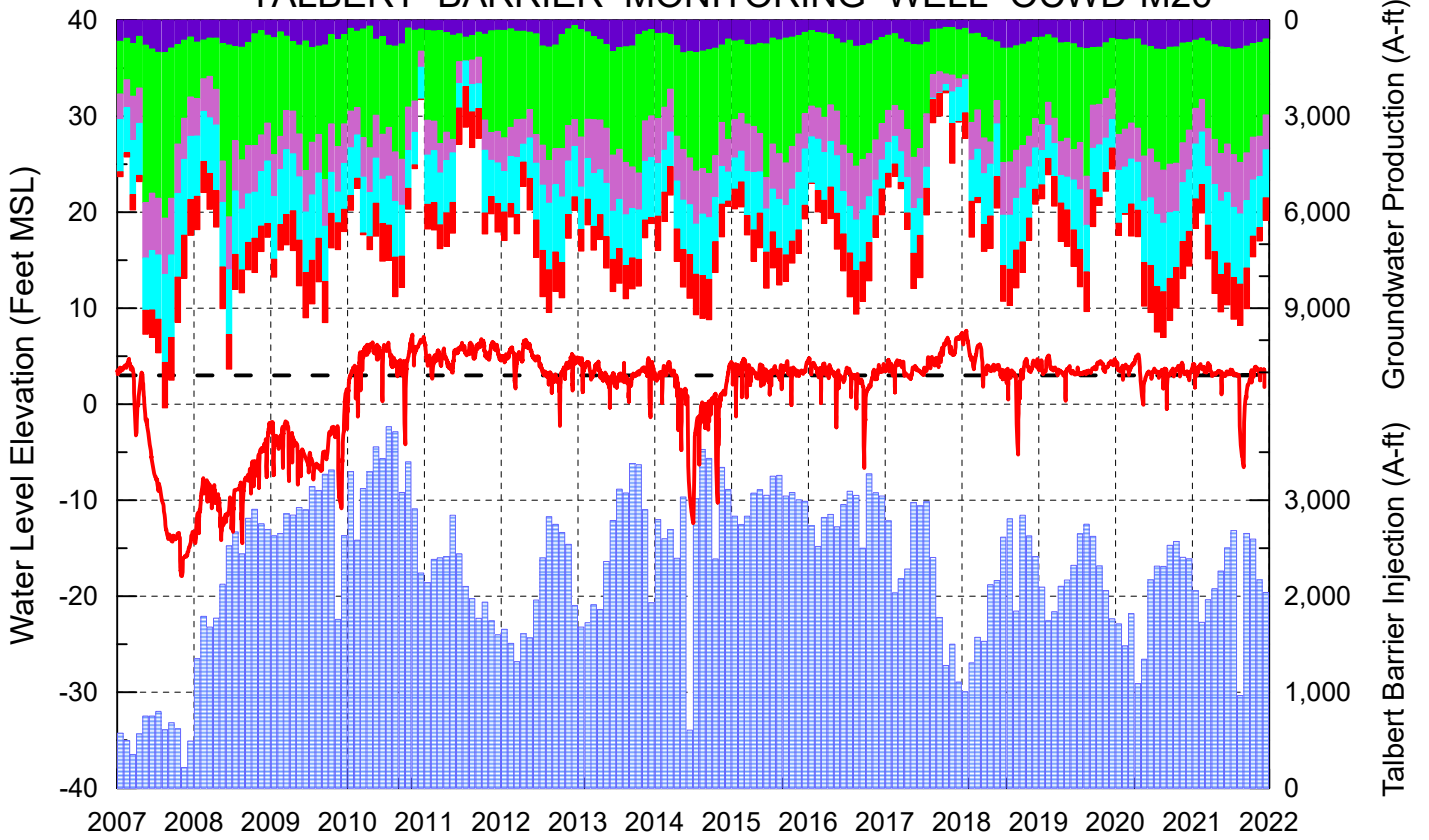
### Cumulative Anaheim Field HQ Rainfall



### 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

