

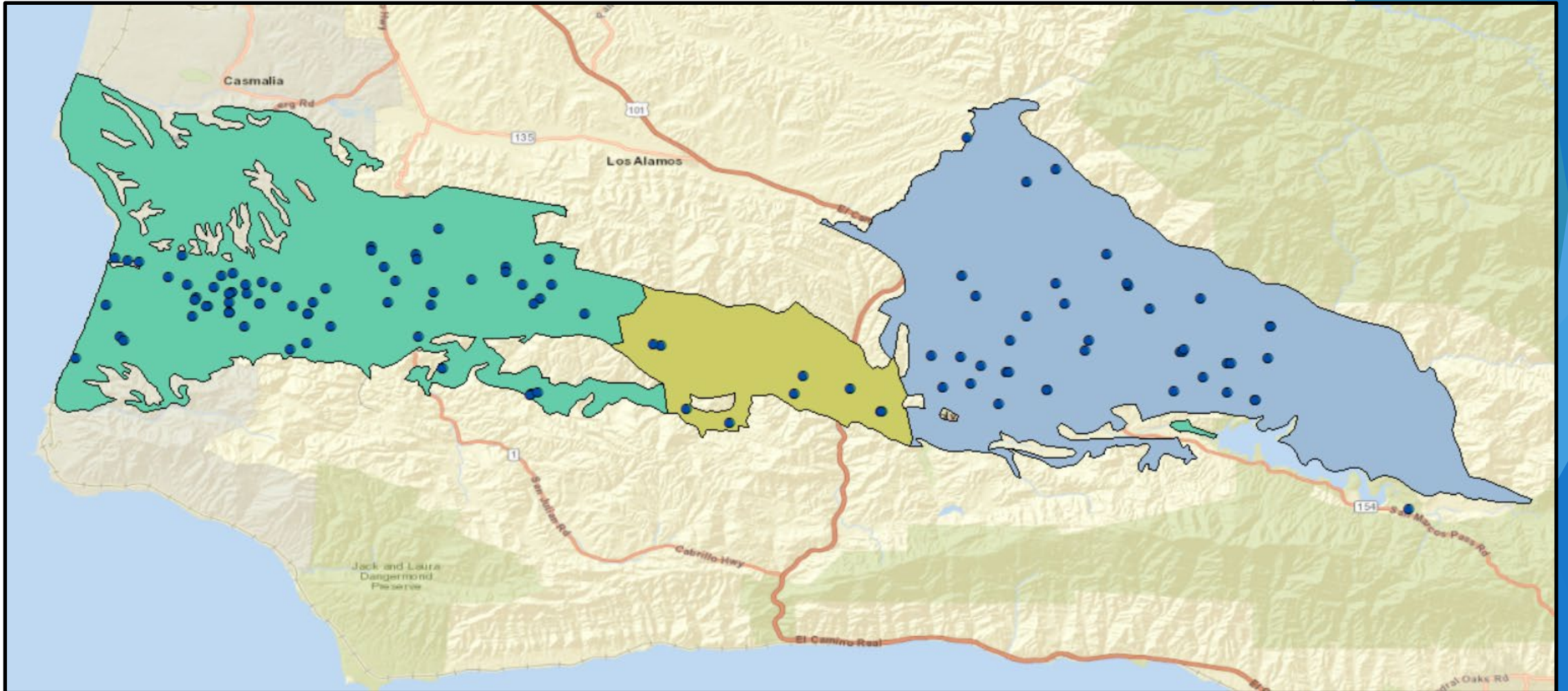


SANTA YNEZ RIVER VALLEY GROUNDWATER BASIN

EASTERN MANAGEMENT AREA

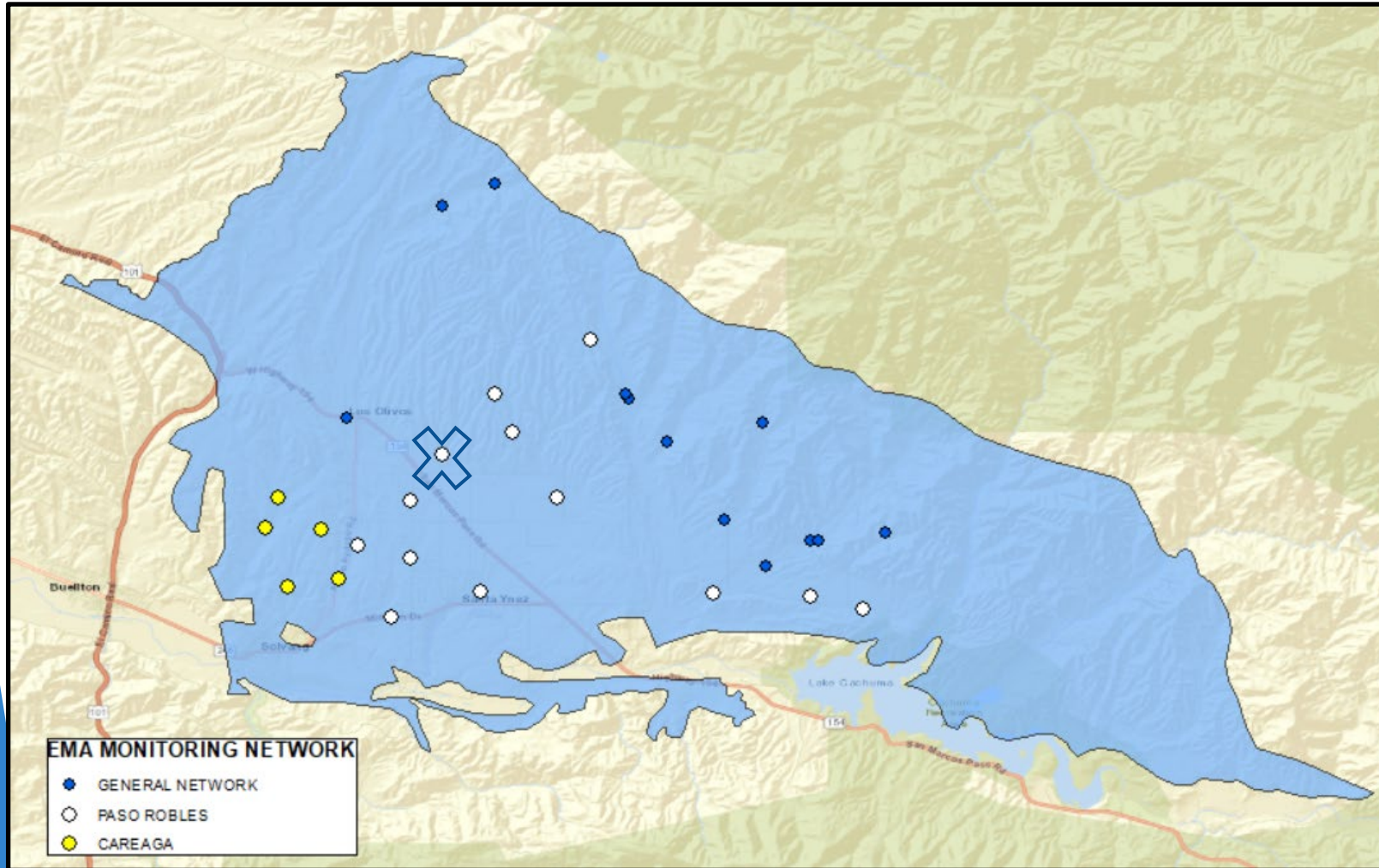
OVERVIEW OF HISTORICAL WATER LEVEL TRENDS AND
RECENT MARCH 2023 MEASUREMENTS

NETWORK OF 111 WELLS THROUGHOUT THE ENTIRE SANTA YNEZ GROUNDWATER BASIN



NETWORK OF 33 WELLS WITHIN THE EMA

(20 19 ARE REPRESENTATIVE WELLS IN GSP)



- Water level measurements are completed biannually in March and October.
- Depth below land surface elevation is adjusted to mean sea level.
- 31 of the 33 wells measured in March 2023.
- 19 of 19 representative wells measured. Removed 1 from program.

MARCH 6-7, 2023 EMA WATER LEVEL MEASUREMENTS SHOWING 1-YEAR CHANGE

WELL ID (BOLD ARE REP)	DEPTH TO WATER (FT)	SPRING 2022 (FT)	1-YEAR CHANGE (FT)
6N/29W-5A1	11.80	dry	increase
6N/29W-6F1	17.43	19.17	1.74
6N/29W-6G1	52.45	53.47	1.02
6N/29W-7L1	243.93	258.44	14.51
6N/29W-8P1	dry	dry	
6N/29W-8P2	257.47	255.58	(1.89)
6N/30W-11G1	105.70	dry	increase
6N/30W-11G4	176.55	187.47	10.92
6N/30W-1R3	160.58	160.96	0.38
6N/30W-7G5	94.14	90.17	(3.97)
6N/30W-7G6	92.87	89.67	(3.20)
6N/31W-13D1	118.18	120.73	2.55
6N/31W-1P3	122.52	117.96	(4.56)
7N/30W-16B1	35.32	31.43	(3.89)
7N/30W-19H1	179.82	179.21	(0.61)
7N/30W-22E1	8.54	9.47	0.93

WELL ID (BOLD ARE REP)	DEPTH TO WATER (FT)	SPRING 2022 (FT)	1-YEAR CHANGE (FT)
7N/30W-24Q1	54.68	54.07	(0.61)
7N/30W-27H1	no access	10.73	
7N/30W-29D1	25.29	59.61	34.32
7N/30W-32R1	dry	dry	
7N/30W-33M1	254.94	251.14	(3.80)
7N/30W-35R(?) (R)	360.89	362.89	2.00
6N/31W-10F1	81.37	87.51	6.14
6N/31W-11D4	54.83	66.93	12.10
6N/31W-2K1	47.38	55.66	8.28
6N/31W-3A1	160.59	163.43	2.84
6N/31W-4A1	113.96	113.09	(0.87)
7N/31W-23P(?) (R)	90.42	87.14	(3.28)
7N/31W-34M2	183.10	182.21	(0.89)
7N/31W-36L2	119.39	118.44	(0.95)
8N/30W-30R1	5.36	23.49	18.13
8N/30W-30R2	pumping	pumping	
8N/31W-36H1	9.84	32.44	22.60

BOLD wells are representative

EMA SUSTAINABLE MANAGEMENT CRITERIA

EMA MINIMUM THRESHOLDS

▶ PASO ROBLES FORMATION

- Measured in 14 wells (one recently removed from program)
- MT is 15 feet below Spring 2018 water levels

▶ CAREAGA SAND FORMATION

- Measured in 9 wells (5 measured by SBCWA)
- MT is 12 feet below Spring 2018 water levels

Undesirable results: Groundwater levels remain below Minimum Thresholds after two consecutive years of average or above-average precipitation in 50 percent of representative wells.

EMA REPRESENTATIVE EMA WELL MEASUREMENTS

PASO ROBLES FORMATION				
WELL IDENTIFICATION	MINIMUM THRESHOLD (FT,rel.GSE)	SPRING 2022 (FT)	FALL 2022 (FT)	SPRING 2023 (FT)
6N/29W-7L1	637	610	599	625
6N/29W-8P1	676	DRY	DRY	DRY
DRY, WELL DEPTH 237 (678.2 ft above LSD)				
6N/29W-8P2	653	640	630	639
6N/30W-7G5	513	514	504	510
6N/30W-7G6	511	513	500	509
6N/30W-11G4	510	494	459	505
6N/31W-1P3	514	515	505	511
6N/31W-2K1	556	564	562	572
6N/31W-13D1	494	504	503	507
7N/30W-16B1	1018	1035	1032	1031
7N/30W-19H1	896	911	910	910
7N/30W-29D1	849	858	856	893
7N/30W-33M1	514	513	495	509
7N/31W-36L2	615	604	592	603

CAREAGA SAND FORMATION				
WELL IDENTIFICATION	MINIMUM THRESHOLD (FT,rel.GSE)	SPRING 2022 (FT)	FALL 2022 (FT)	SPRING 2023 (FT)
7N/31W-34M2	482	489	486	488
6N/31W-3A1	572	575	568	578
6N/31W-4A1	481	488	485	487
6N/31W-10F1	463	468	466	474
6N/31W-11D4	502	498	496	510
Solvang HCA	320	341	325	343
6N/31W-16N7	377	392	391	389
6N/31W-9Q2	446	469	463	469
6N/31W-XXX	467	468	462	471

Spring 2022

- 6 of 14 wells below MT in Paso Robles
- 3 of 9 wells below MT in Careaga

Fall 2022

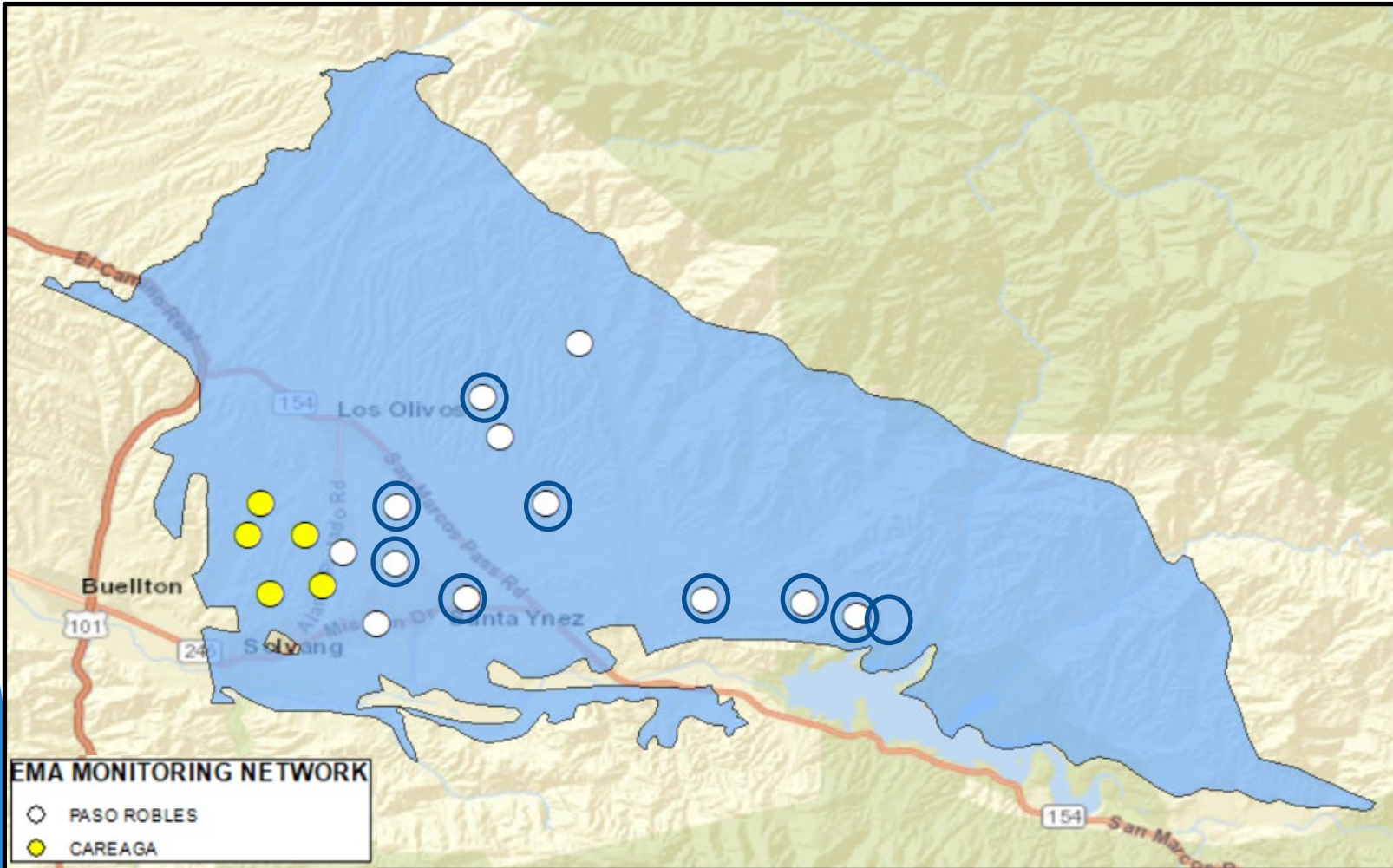
- 9 of 14 wells below MT in Paso Robles
- 4 of 9 wells below MT in Careaga

Spring 2023

- 9 of 14 wells below MT in Paso Robles
- 0 of 9 measured wells below MT in Careaga

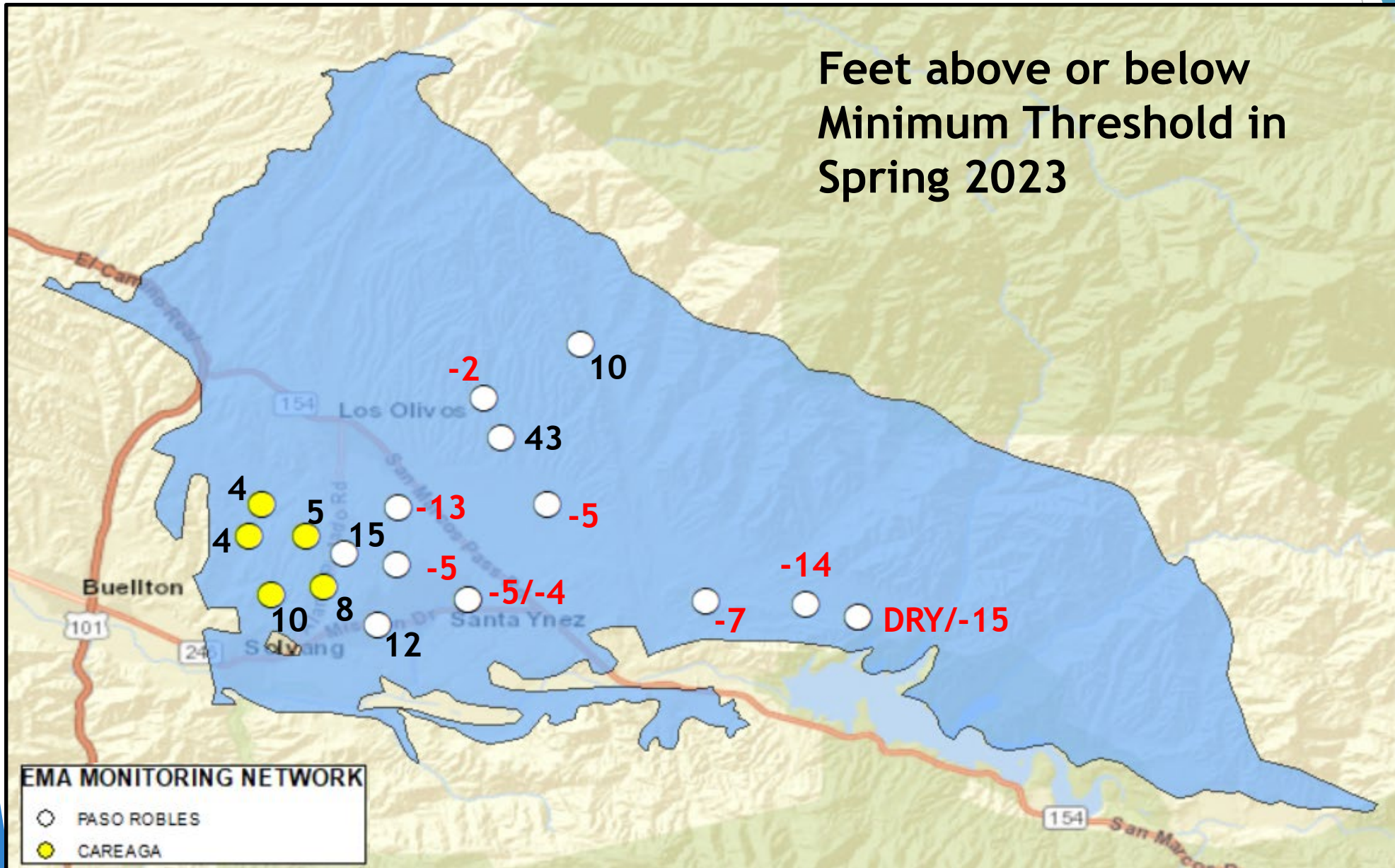
Wells highlighted **YELLOW** are below Minimum Threshold elevation
All measurements are in NAVD88 elevation

EMA REPRESENTATIVE WELLS BELOW MT MARCH 2023



- Circled wells were below Minimum Threshold in Spring 2023
- Total of 9 wells

EMA REPRESENTATIVE WATER LEVELS VS. MT



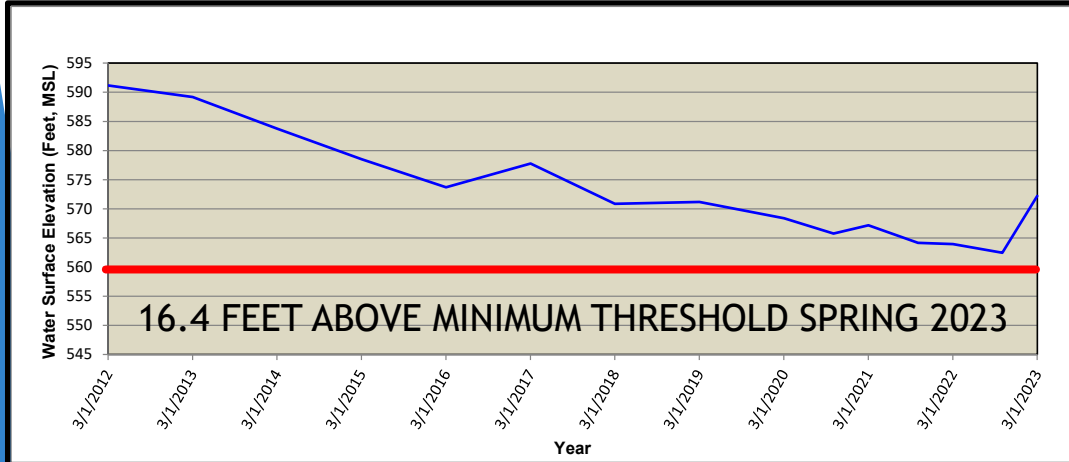
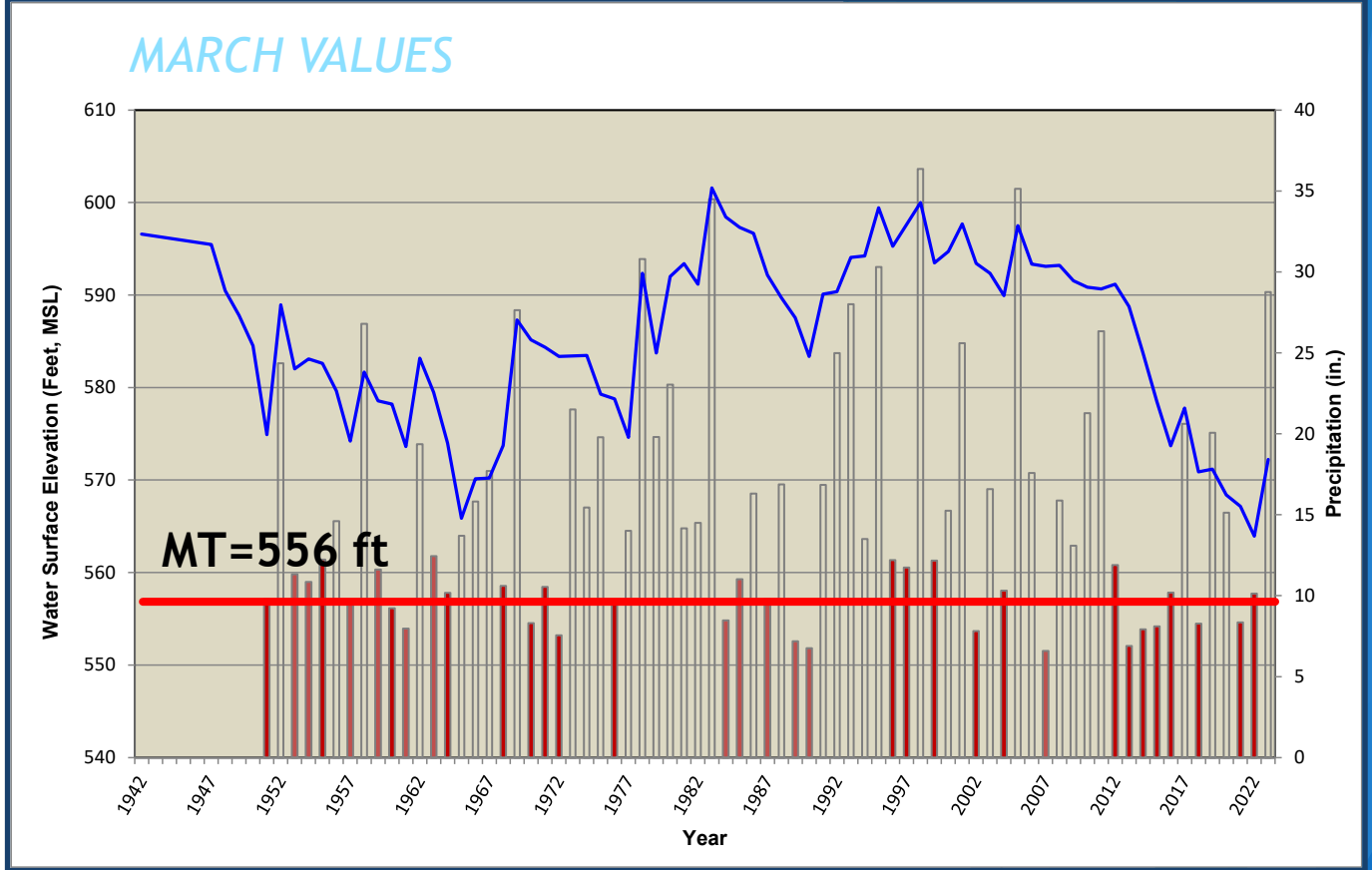
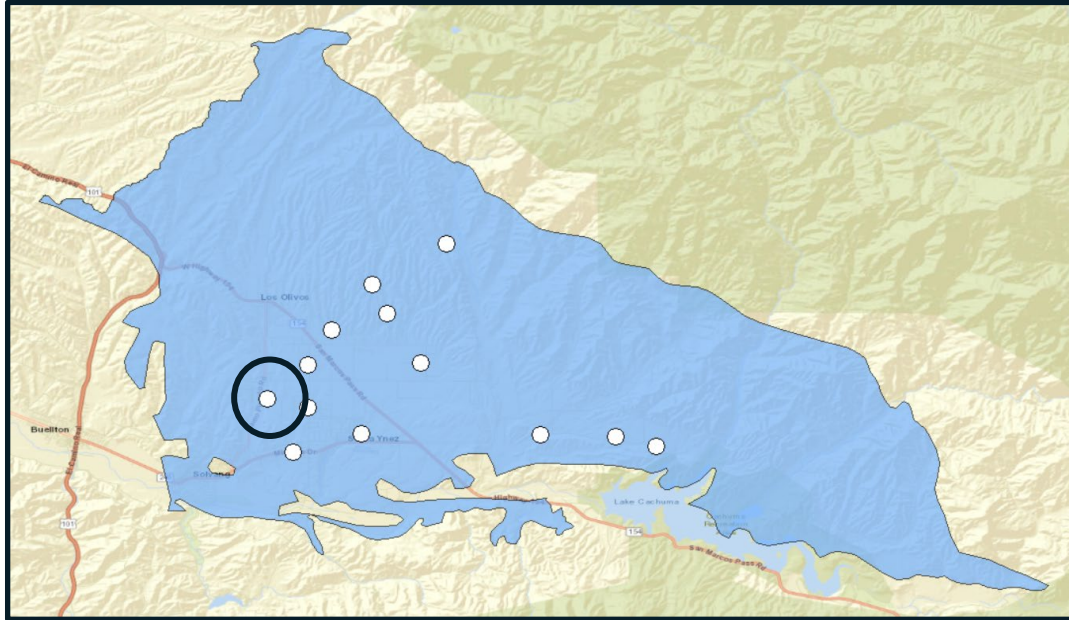
EMA PASO ROBLES FORMATION WELLS

15 wells measured by Water Agency


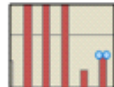

Representative Well ID	Well Use	Well Depth (ft)	Screen Interval(s) (ft bgs)	Ground Elevation (ft NAVD 88)	Reference Point Elevation (ft NAVD 88)	First Date Measured
6N/29W-07L01	Agricultural	—	—	868.9	870.7	1960
6N/29W-08P01	Domestic	—	210 to ?	915.2	915.4	1934
6N/29W-08P02	Domestic	—	—	896.0	897.0	1966
6N/30W-07G05	Municipal	166	—	604.3	606.7	1962
6N/30W-07G06	Municipal	566	305 to 410	602.3	604.3	1962
6N/30W-11G04	Agricultural	400	130 to 390	681.1	683.1	2010
6N/31W-01P03	Municipal	505	195 to 490	633.1	634.7	1967
6N/31W-02K01	Domestic	—	—	619.6	620.8	1942
6N/31W-13D01	Domestic	152	—	625.1	626.6	1941
7N/30W-16B01	Agricultural	—	—	1,066.4	1,069.3	1950
7N/30W-19H01	Agricultural	—	—	1,090.1	1,105.9	1954
7N/30W-29D01	Agricultural	—	—	917.8	919.3	1905
7N/30W-30M01	Agricultural	—	—	806.5	807.5	1905
7N/30W-33M01	Agricultural	349	150 to 340	764.3	764.7	1954
7N/31W-36L02	Domestic	—	—	722.6	723.6	1942

6N/31W-2K1 (Paso)

Well Hole Depth=71.0 feet

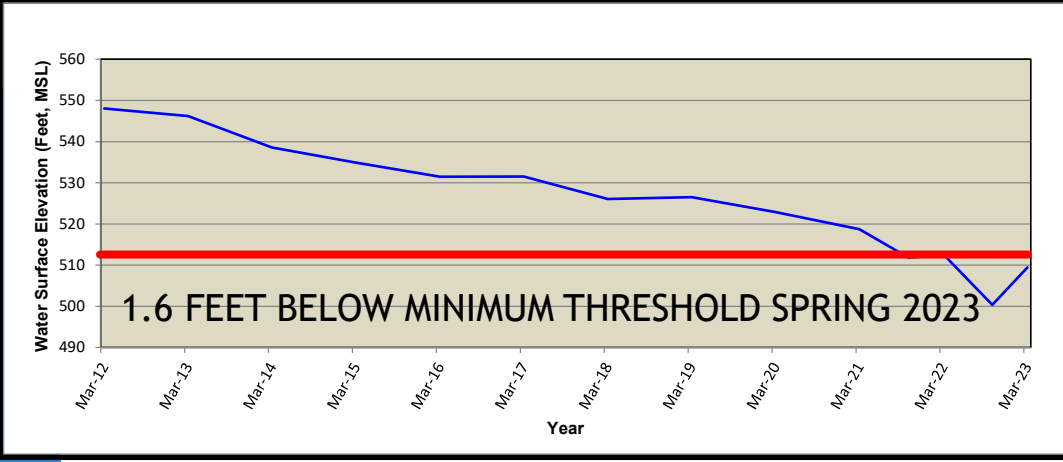
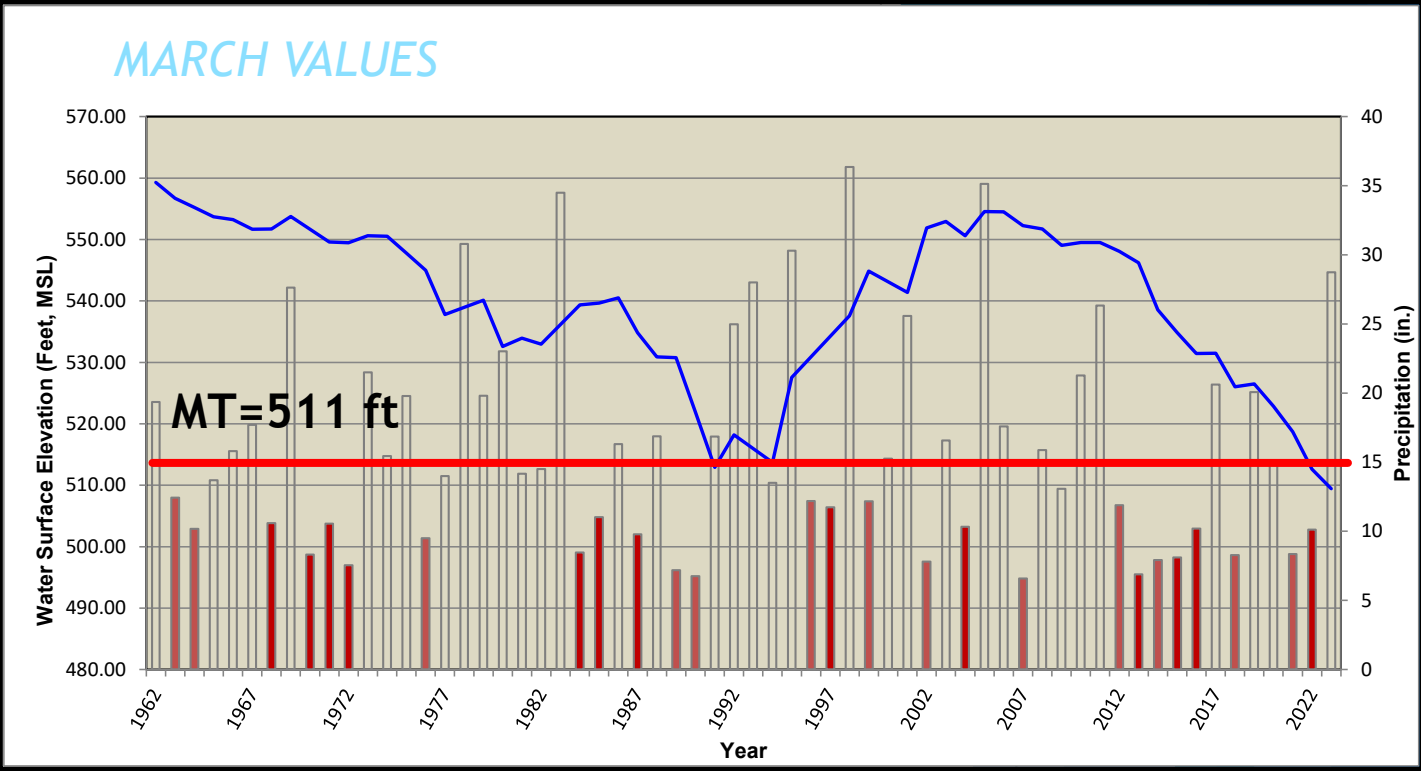
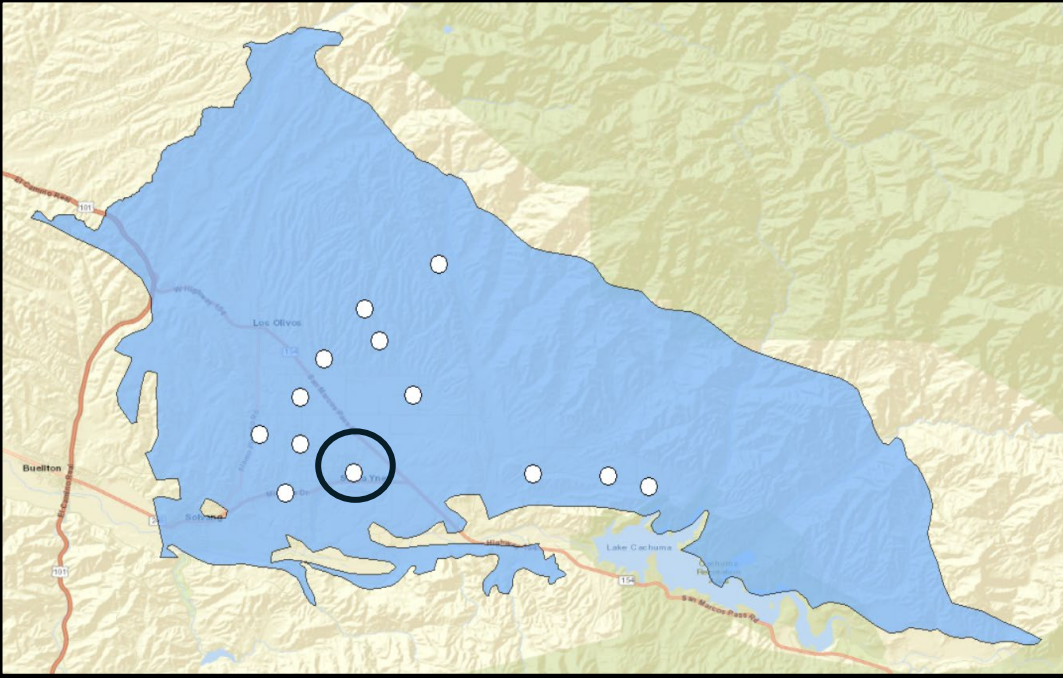


March 2022 to 2023 comparison
+8.3 feet

-  Spring water surface elevation
-  Yearly total precipitation <80% average
-  Yearly total precipitation >80% average

6N/30W-7G6 (Paso)

Well Depth=566 feet

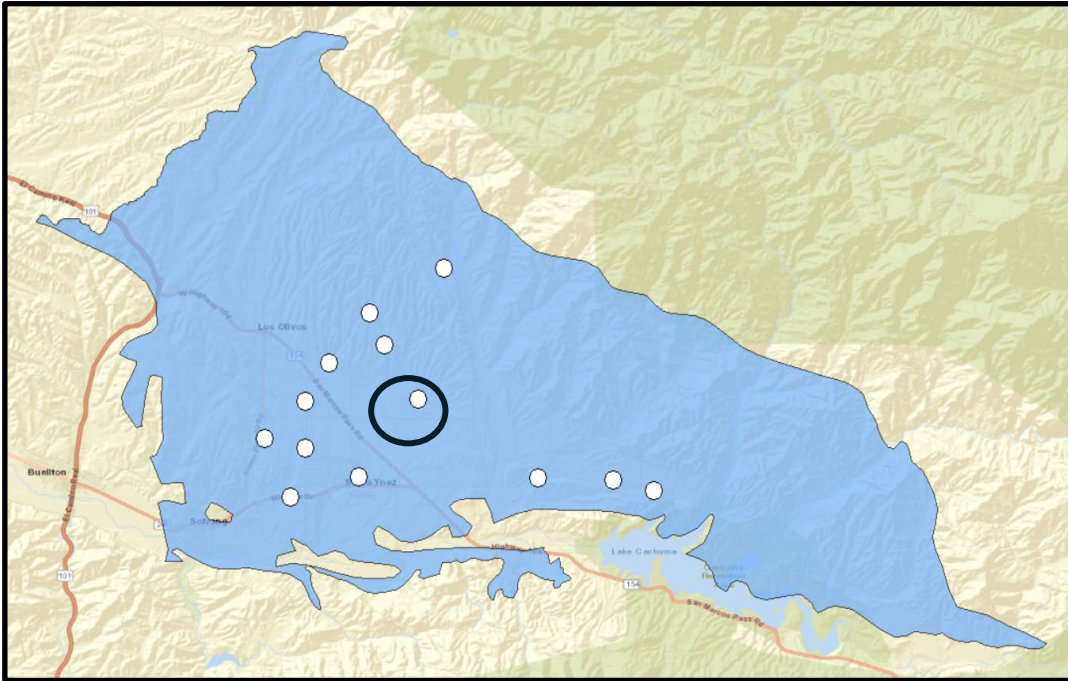


March 2022 to 2023 comparison
-3.2 feet

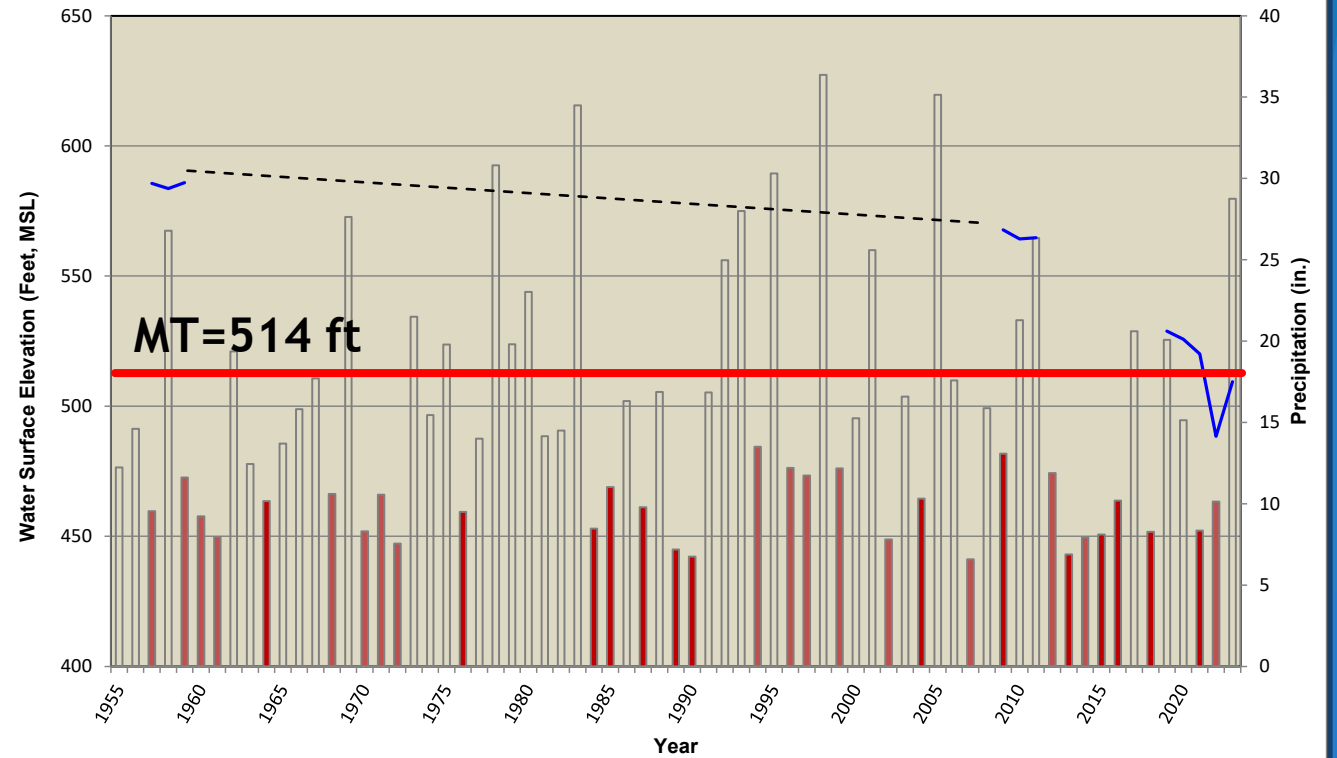
- Spring water surface elevation
- Yearly total precipitation <80% average
- Yearly total precipitation >80% average

7N/30W-33M1 (Paso)

Well Depth=349 feet

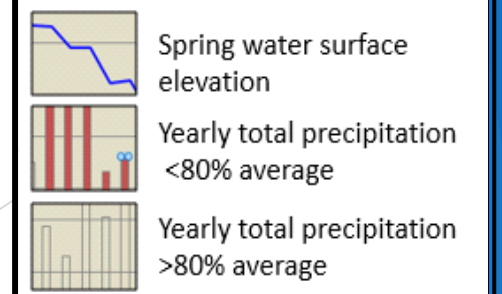
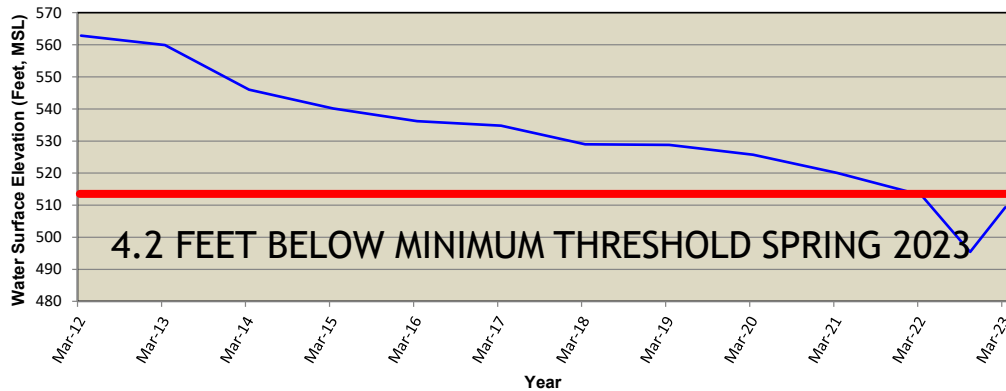


MARCH VALUES



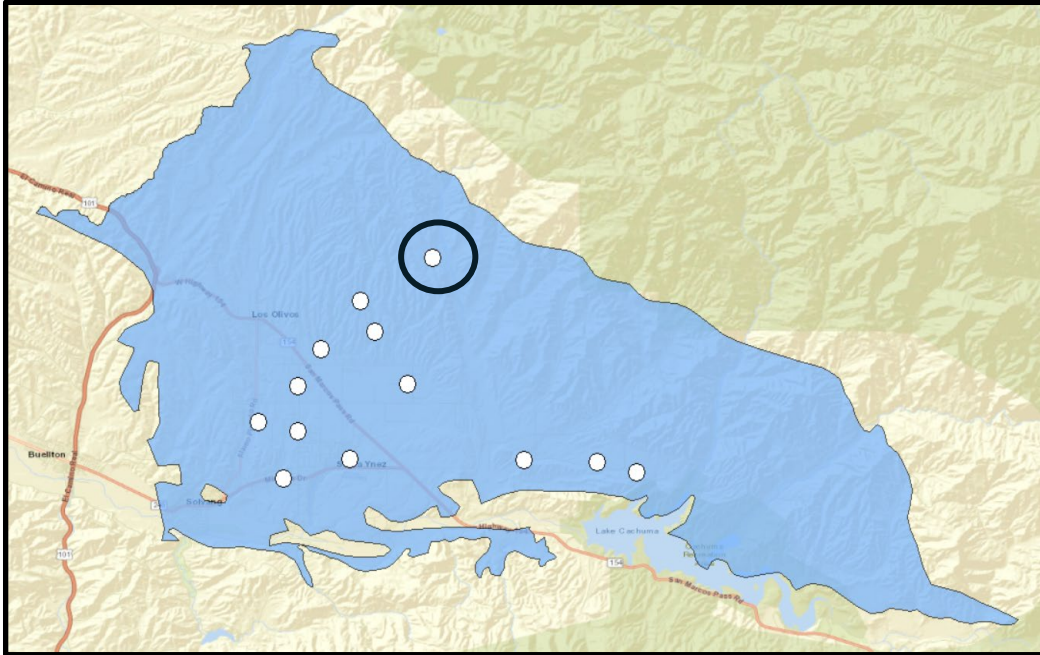
March 2022 to 2023 comparison

-3.8 feet

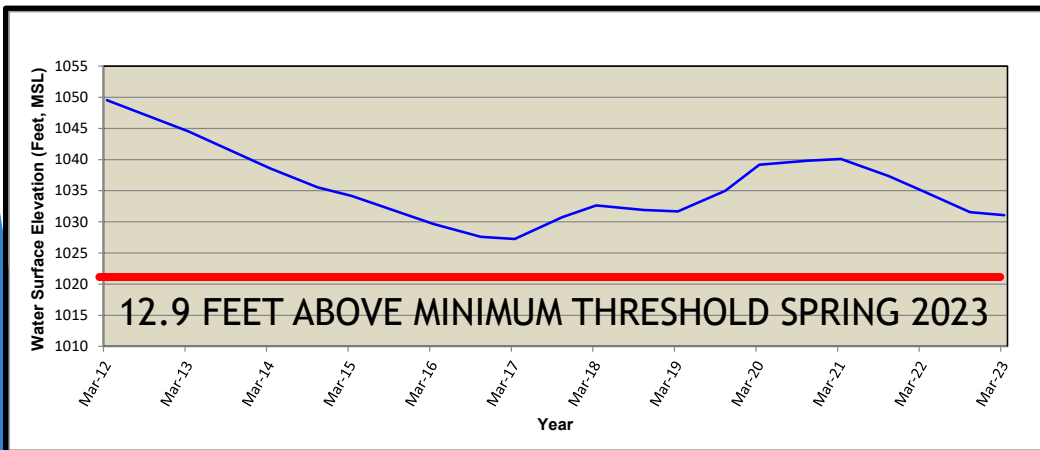
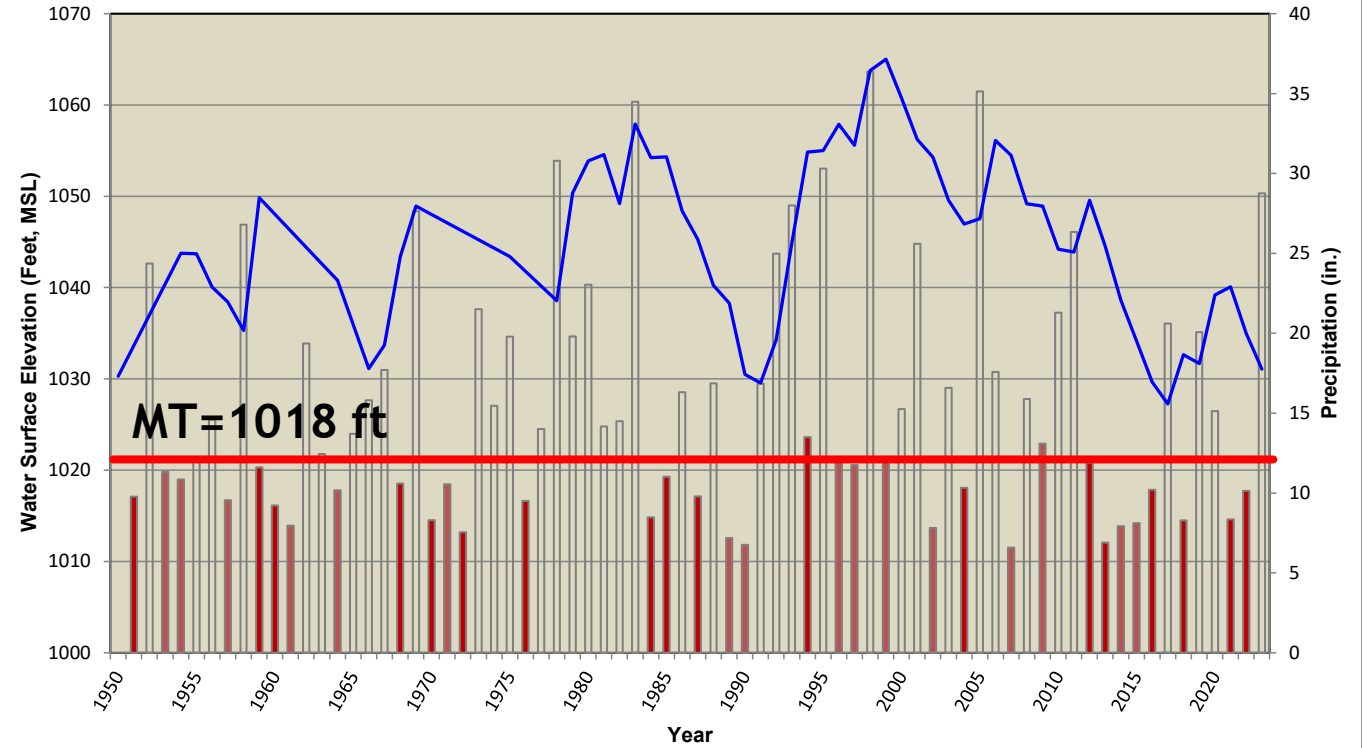


7N/30W-16B1

Well Hole Depth=150 feet

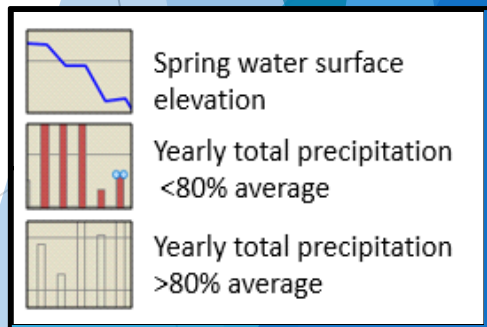


MARCH VALUES



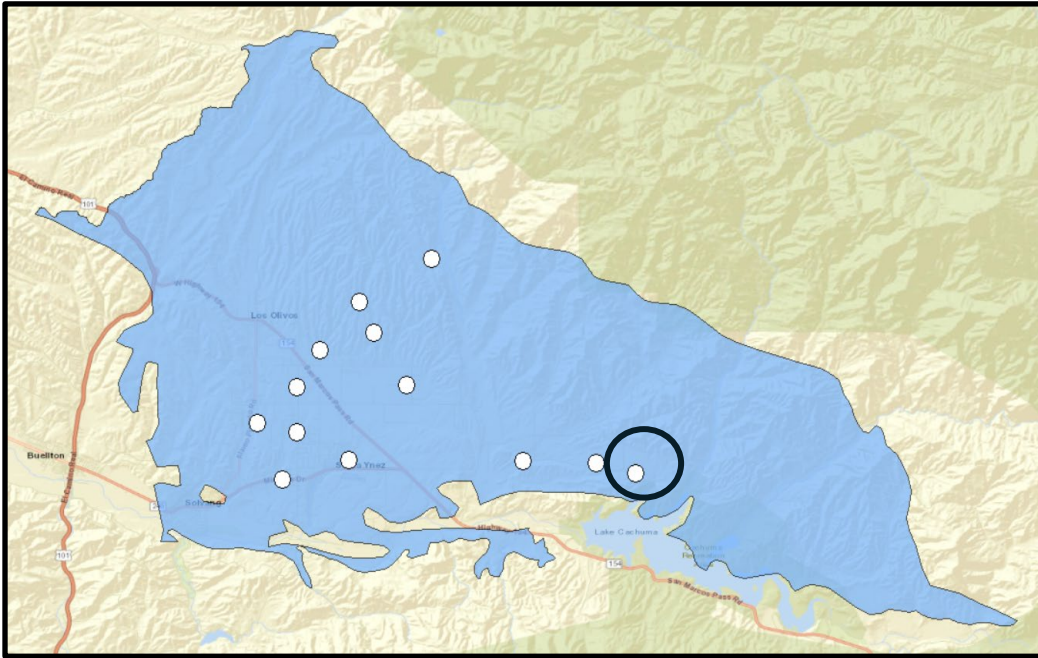
March 2022 to 2023 comparison

-3.9 feet

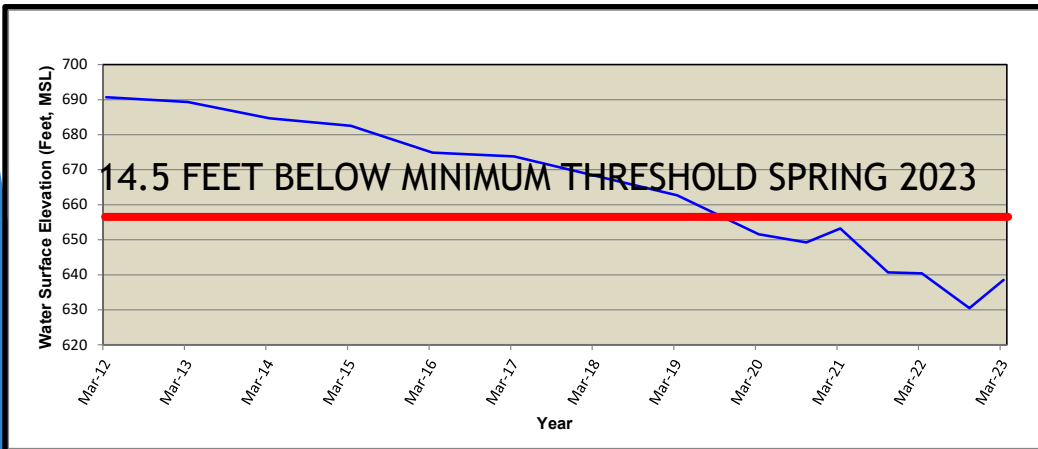
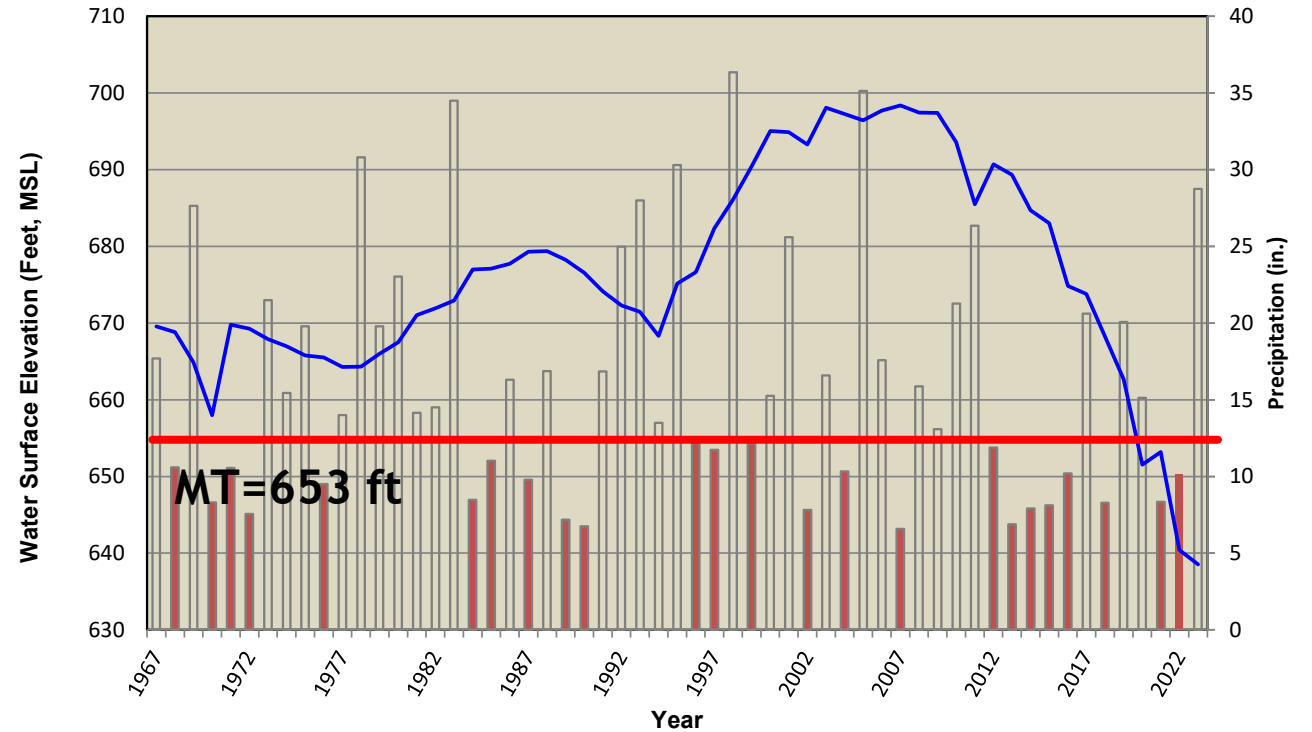


6N/29W-8P2 (Paso)

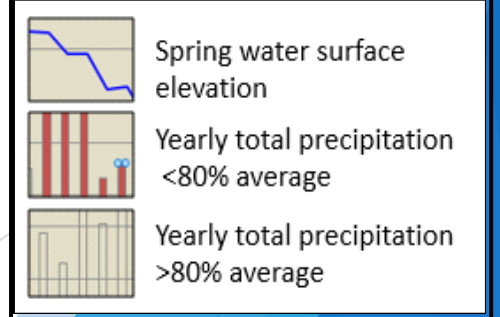
Well Depth=NA



MARCH VALUES



March 2022 to 2023 comparison
-1.9 feet



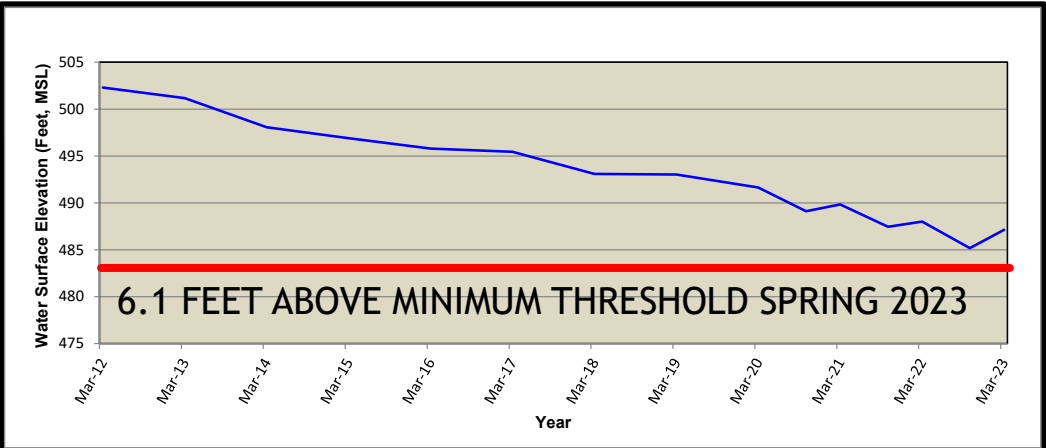
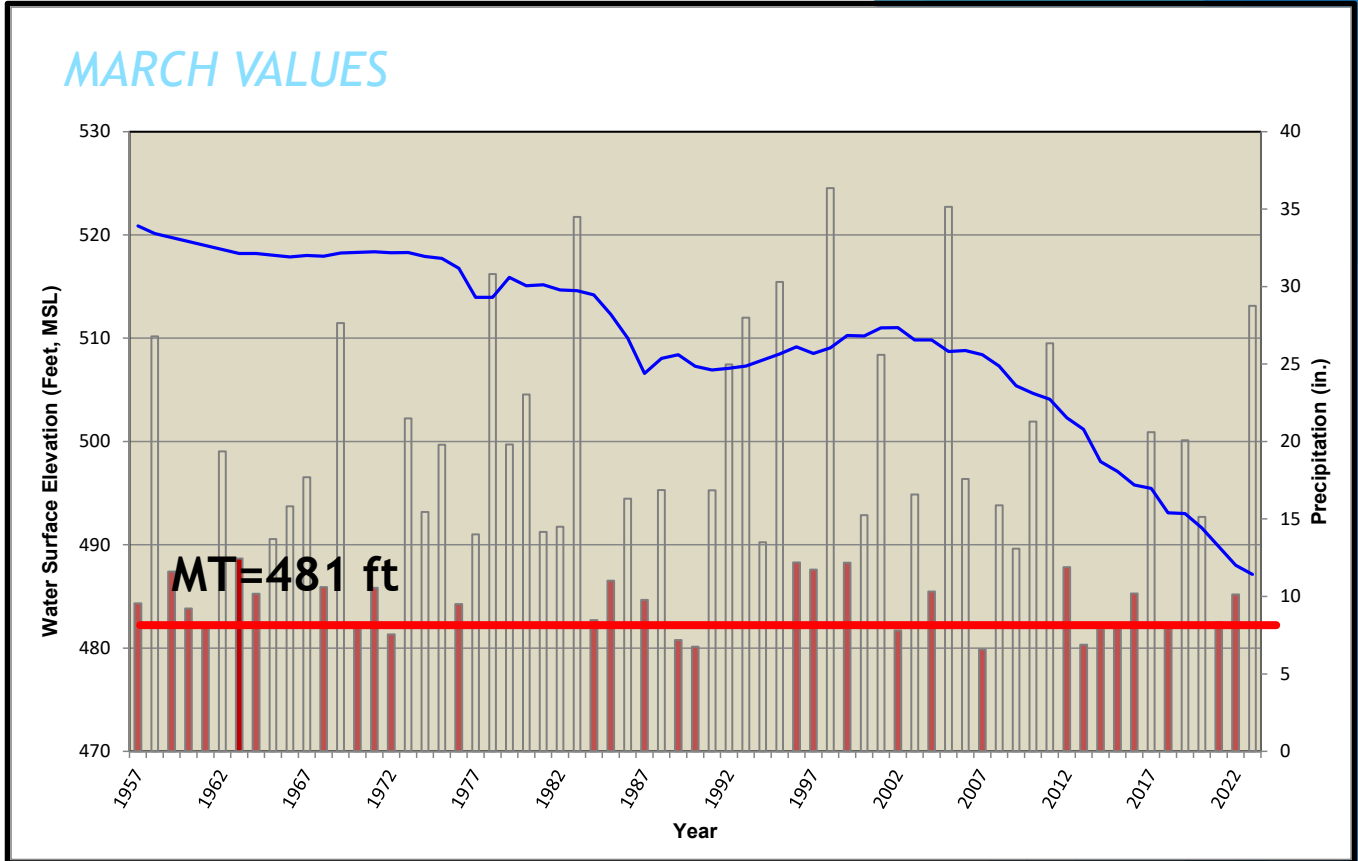
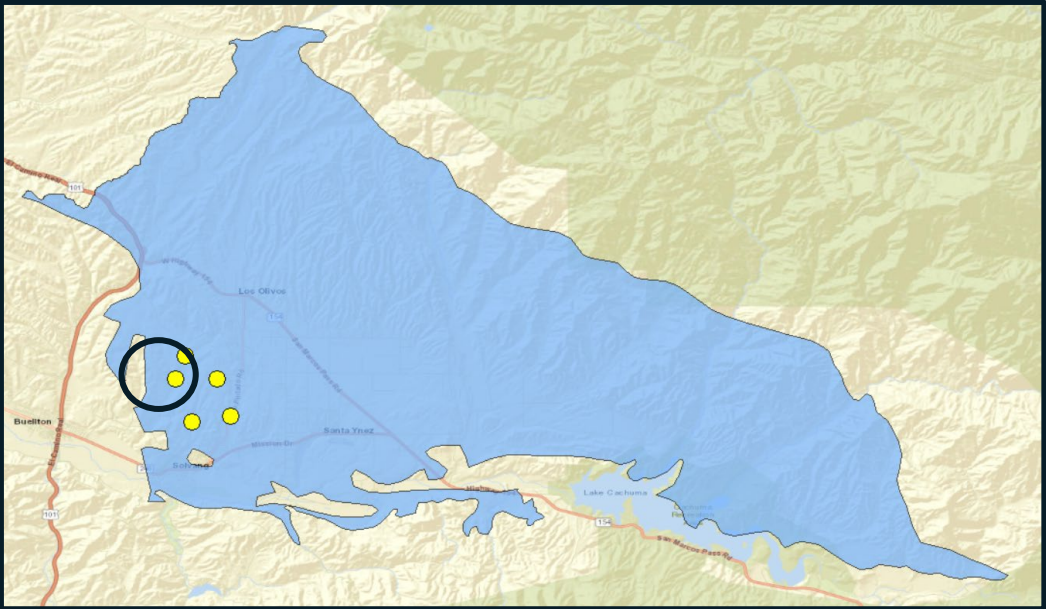
CAREAGA SAND FORMATION WELLS

9 wells, 5 measured by Water Agency


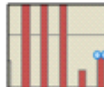

Representative Well ID	Well Use	Well Depth (ft)	Screen Interval(s) (ft bgs)	Ground Elevation (ft NAVD 88)	Reference Point Elevation (ft NAVD 88)	First Date Measured
7N/31W-34M02	Agricultural	—	—	671.1	673.1	2014
6N/31W-03A01	Domestic	—	—	738.5	740.0	1963
6N/31W-04A01	Domestic	259	—	601.1	603.1	1956
6N/31W-09Q02	Municipal	550	250 to 540	756.9	754.0	2011
6N/31W-10F01	Agricultural	265	—	555.6	556.7	1966
6N/31W-11D04	Agricultural	447	93 to ?	565.3	560.6	1955
6N/31W-16N07	Municipal	145	99 to 127	479.3	478.2	2011
6N/31W-xxxx ¹	Municipal	329	190 to 325	503.2	500.9	2011
Solvang HCA ¹	Municipal	490	180 to 470	398.0	402.8	2011

6N/31W-4A1 (Careaga)

Well Depth=259

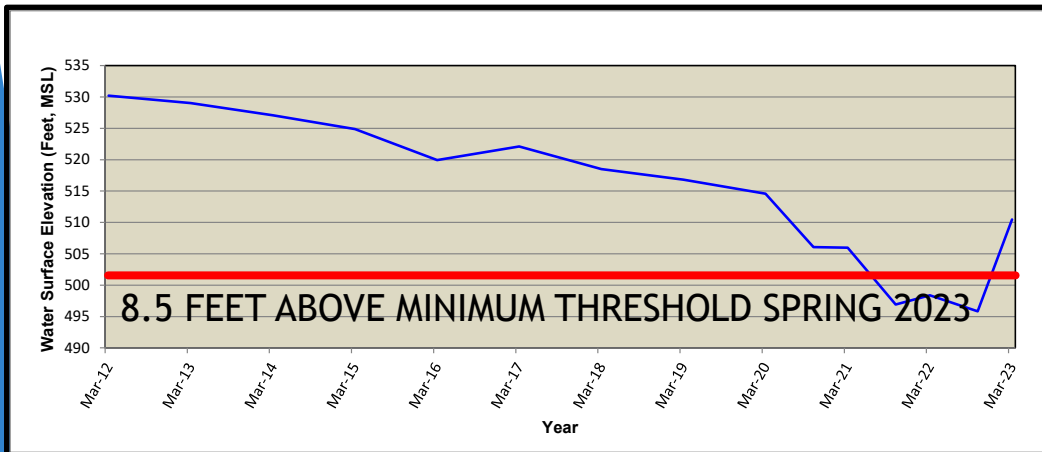
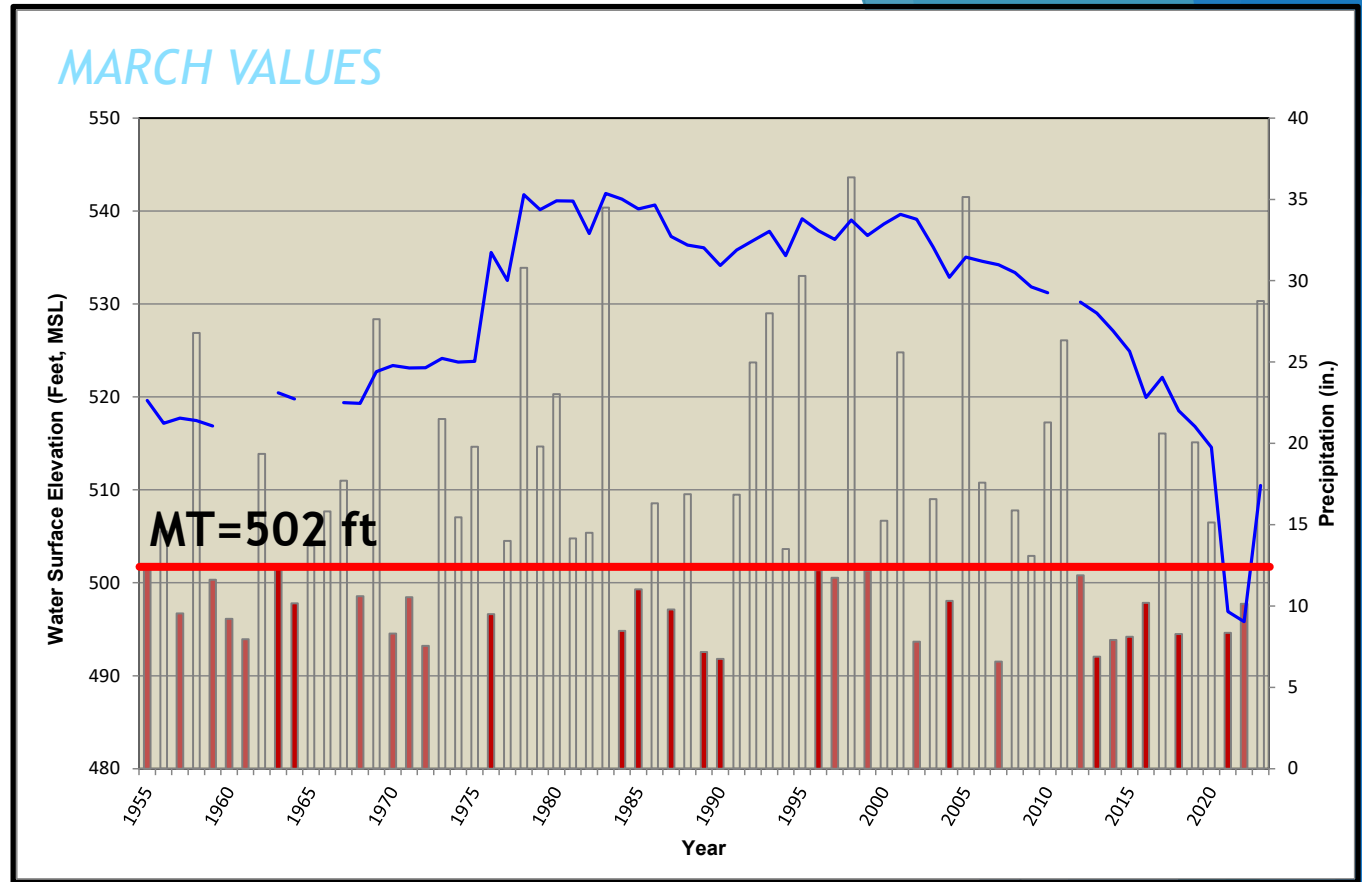
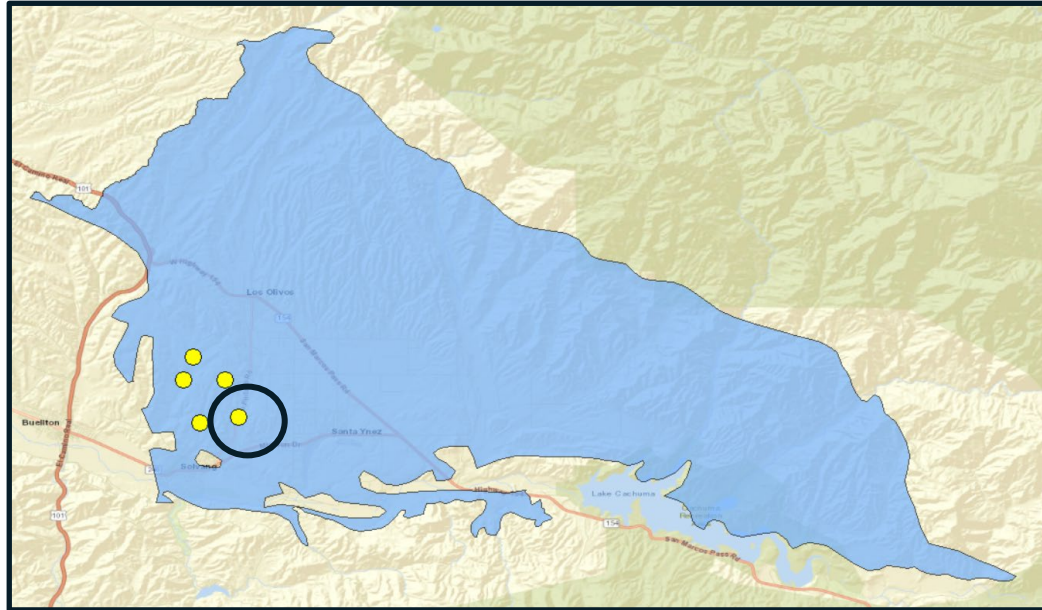


March 2022 to 2023 comparison
-0.9 feet

-  Spring water surface elevation
-  Yearly total precipitation <80% average
-  Yearly total precipitation >80% average

6N/31W-11D4 (Careaga)

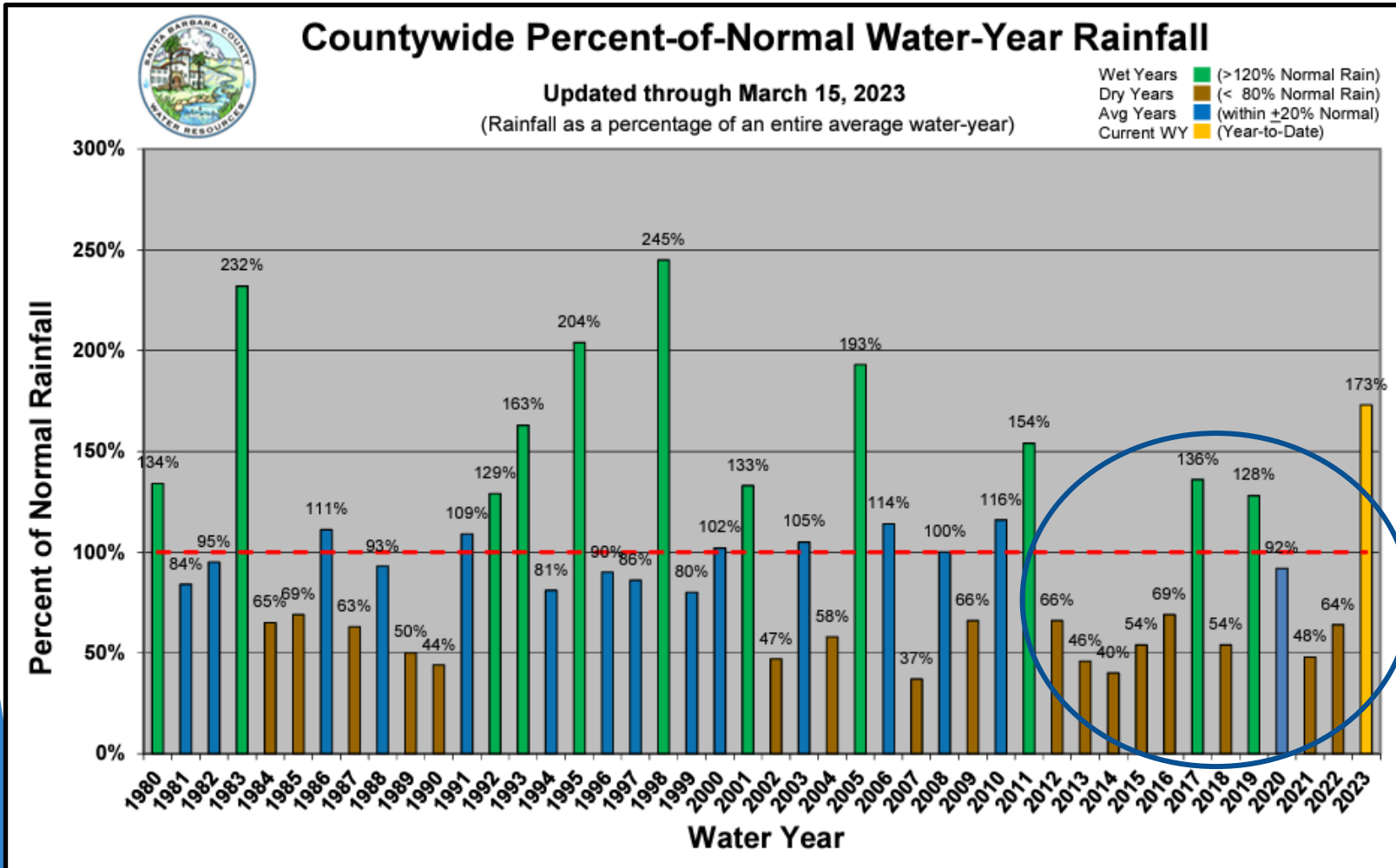
Well Depth=447 feet



October 2021 to 2022 comparison
+12 feet

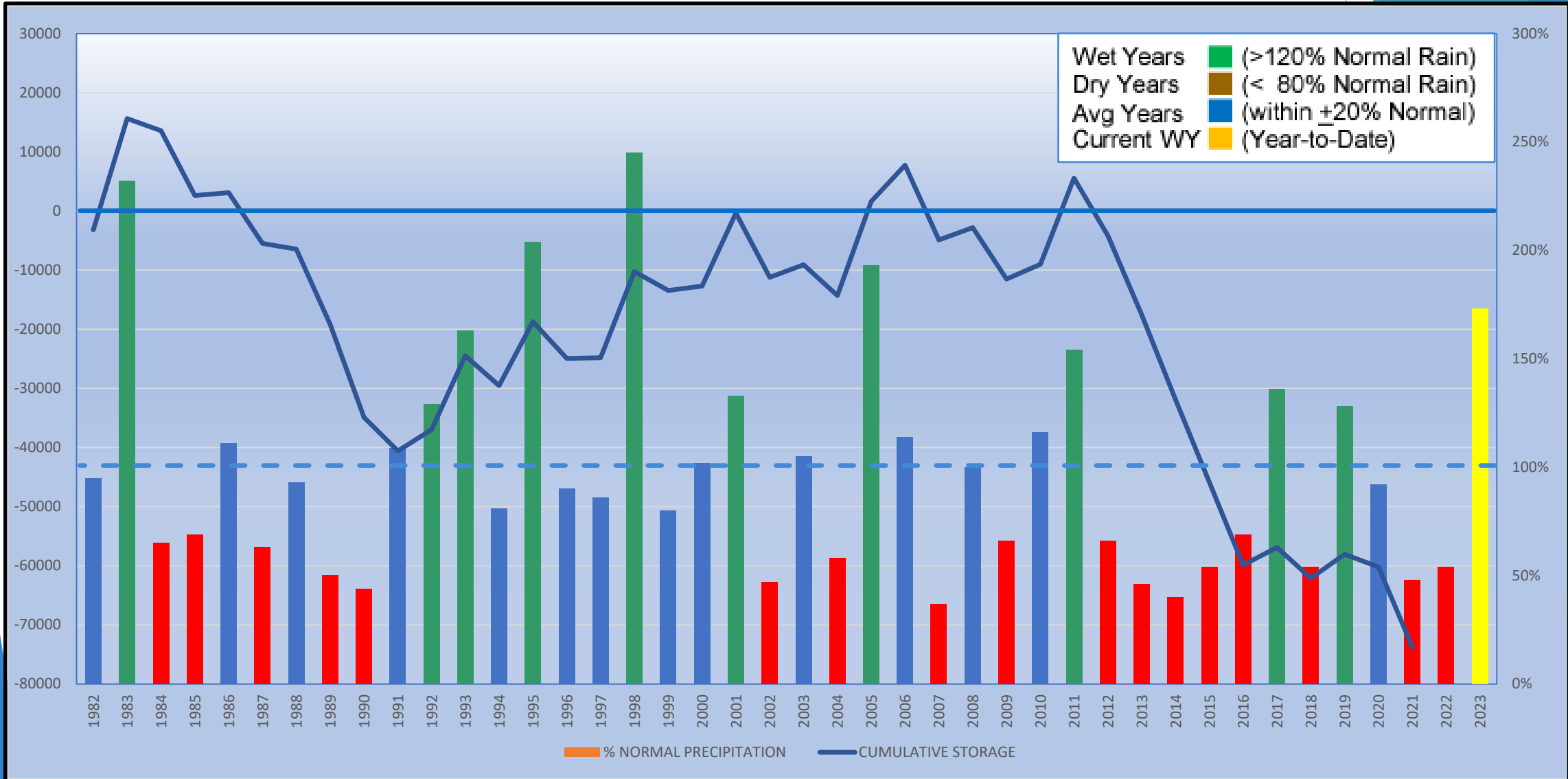
- Spring water surface elevation
- Yearly total precipitation <80% average
- Yearly total precipitation >80% average

PRECIPITATION TREND

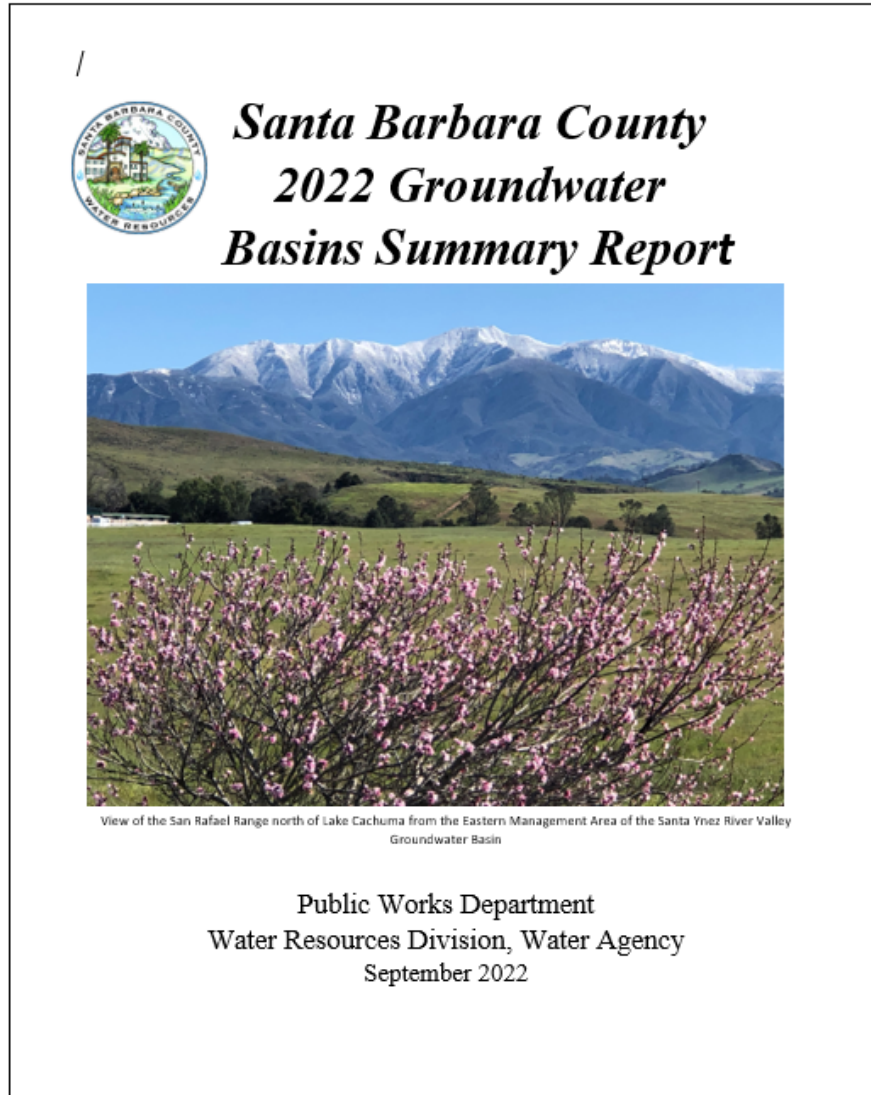


- 2021 Climate Normal Report from NOAA indicates warmer than average temperatures, and a 10% decrease in average annual precipitation in the Southwest.
- 9 of the last 12 years had below average precipitation.
- 5 of the last 12 years were near 50% or less of normal

CUMULATIVE CHANGE IN STORAGE WITH COUNTY % NORMAL PRECIPITATION



AVAILABLE BASIN INFORMATION



GROUNDWATER IN SANTA BARBARA COUNTY

<https://www.countyofsb.org/2523/Groundwater-in-Santa-Barbara-County>

SANTA YNEZ RIVER VALLEY GROUNDWATER

<https://www.countyofsb.org/2543/Santa-Ynez-River-Valley-Groundwater-Basin>

GEOLOGY & GROUNDWATER

<https://www.countyofsb.org/2543/Santa-Ynez-River-Valley-Groundwater-Basin>

A landscape photograph featuring a vast field of bright yellow flowers in the foreground. In the middle ground, a tall metal windmill stands on a grassy hill. The background consists of rolling green hills under a heavy, overcast sky. The word "QUESTIONS?" is overlaid in large white text across the center of the image.

QUESTIONS?