

Memo

To: MCCSD Board of Directors
From: District Superintendent
cc: Jim Jackson
Date: April 13, 2023
Re: Groundwater Management Report

The 2022-23 Rain Year

October 1, 2022 was the beginning of the 2022-23 rain year. Average annual precipitation in Mendocino is 39.72 inches, and average rainfall in April is 2.96 inches. 1.14 inches of rainfall has been measured in the District for the month, as of April 13, 2023 (Figure 1, Table 1).

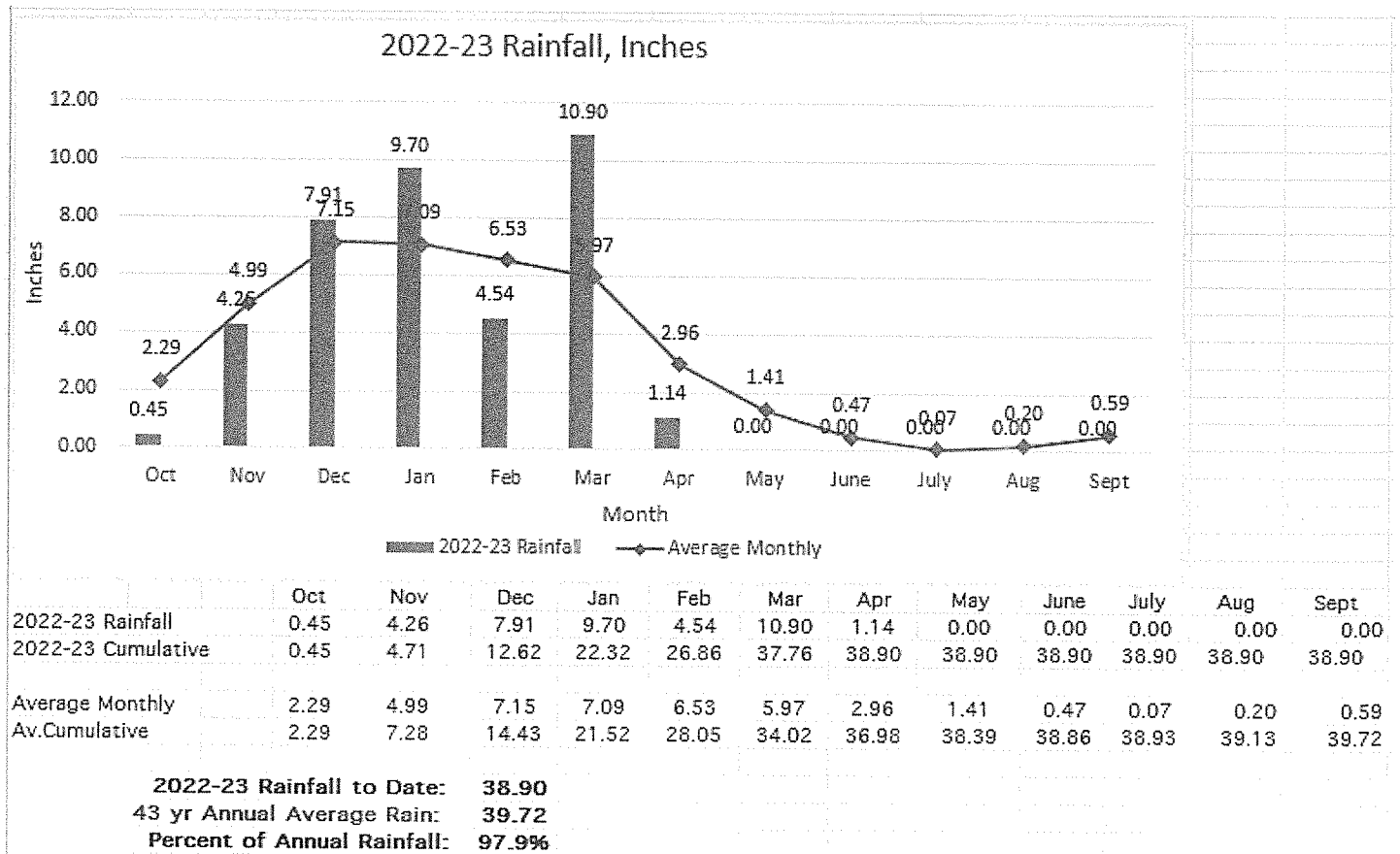


Figure 1, Table 1

Total Rainfall for Rain Year 2021-22 was 33.82" inches. Mendocino received 85% of normal annual rainfall during the last water year. By April 13, 2023, total rainfall since October 1, 2022 was 38.90" inches, 98% of average annual rainfall.

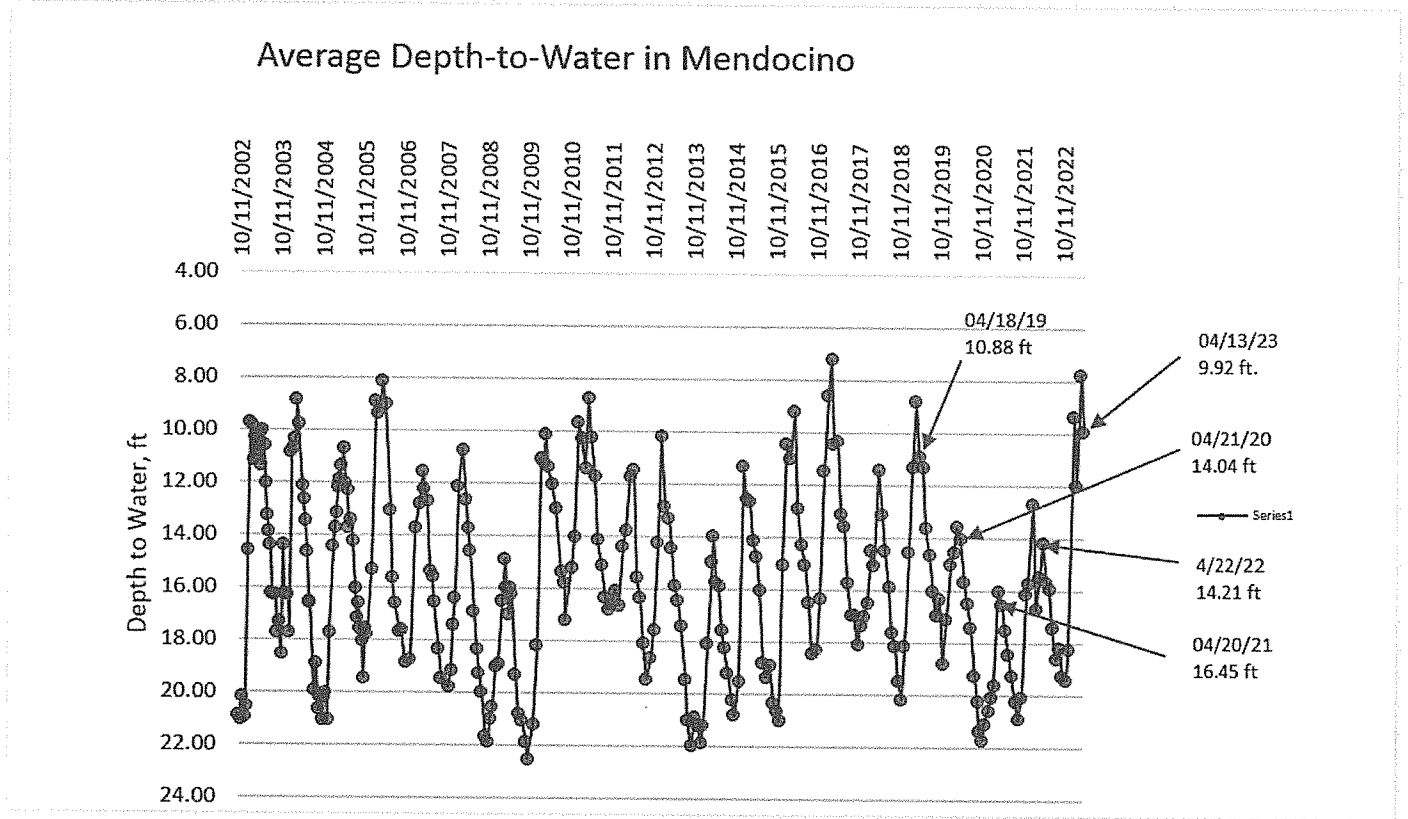
DAILY TOTAL RAINFALL												
2022-23											<i>Elevation 72 Feet</i>	
											<i>Latitude 39.306°</i>	
Data From: Community Service District							10AM		<i>Longitude -123.800°</i>			
Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1		0.05	0.03	0.04		0.01	0.04					
2				0.32	0.86	0.03	0.06					
3		0.02	0.19	0.32		0.47						
4	0.02	0.68	0.30	1.54	0.81	0.41						
5	0.01	0.07	0.31	0.24	0.02	0.5						
6	0.01	0.53	0.10	1.04	.01	0.2	0.79					
7		0.83	0.02	1.90		0.79	0.04					
8		0.13	0.19	0.45	0.01	0.07						
9			1.49	0.38	0.03	1.18	0.01					
10	0.03	0.01	0.71	0.14	0.35	0.05	0.2					
11	0.02	0.11	0.24	0.71		0.35						
12	0.02	0.03	0.02	1.28		0.46						
13	0.02	0.04	0.02	0.66		1.97						
14			0.01	0.17	0.15	1.18						
15		0.02	0.01	0.02		0.02						
16	0.01					0.01						
17	0.01					0.01						
18	0.02		0.03	0.47		0.37						
19			0.01	0.01		0.15						
20			0.01			0.35						
21	0.05		0.24		0.30	0.22						
22			0.09		0.24							
23			0.02		0.47							
24	0.02											
25					0.03							
26			1.53	0.01	0.68							
27		0.04	0.15		0.34	1.22						
28			0.16		0.25	0.52						
29			1.73			0.09						
30		1.70	0.30			0.03						
31	0.21					0.24						
Sum	0.45	4.26	7.91	9.70	4.54	10.90	1.14	0.00	0.00	0.00	0.00	0.00
Count	13	14	25	18	14	26	6	0	0	0	0	0
Max	0.21	1.70	1.73	1.90	0.86	1.97	0.79	0.00	0.00	0.00	0.00	0.00
Rainy Days		116					Water year Total Rainfall					38.90
Maximum Daily Rainfall				1.97								

Table 1 2022-23 Rainfall Record

April 2023 Depth-to-Water (DTW)

The average DTW measurements District-wide in the 24 monitoring wells on April 13, 2023 was 9.92' ft., about 2.2 ft. lower than March 2023, about 4.3 ft. better than April of 2022, and about 6.5 ft. better than April of 2021. Compared to a good rain year like 2019, which received 45.64" inches, the average depth to water is currently about 1 ft. better than average for the month.

Figure 2 April 2023, Depth-To-Water Chart



March 31, 2022 represents the most recent Water Shortage evaluation date. At that time depth to water measurements in the five drought monitoring wells recorded an average of 11.67 ft. and rainfall totals were 37.76" inches.

The water shortage contingency plan indicates no water shortage currently exists within the District. The Superintendent recommends following the plan and rescinding the Stage 1 Water Shortage Alert.

The next evaluation date is May 31, 2023.