

Memo

To: MCCSD Board of Directors
From: District Superintendent
cc: Jim Jackson
Date: December 7, 2022
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 December is 7.15” inches. 0.83” inches of rainfall has been measured in the District for the month as of December 7, 2022 (Figure 1, Table 1).

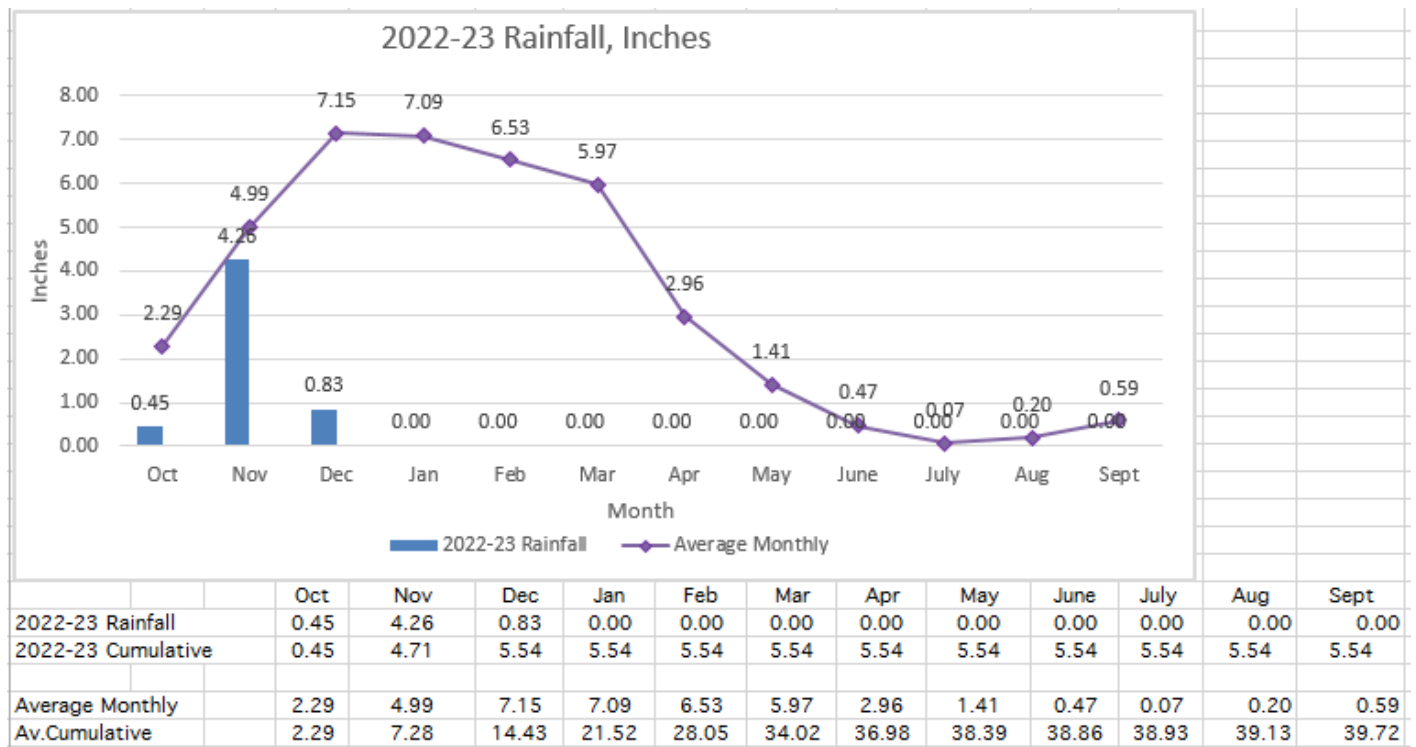


Figure 1, Table 1

Table 1 2022-23 Rainfall Record

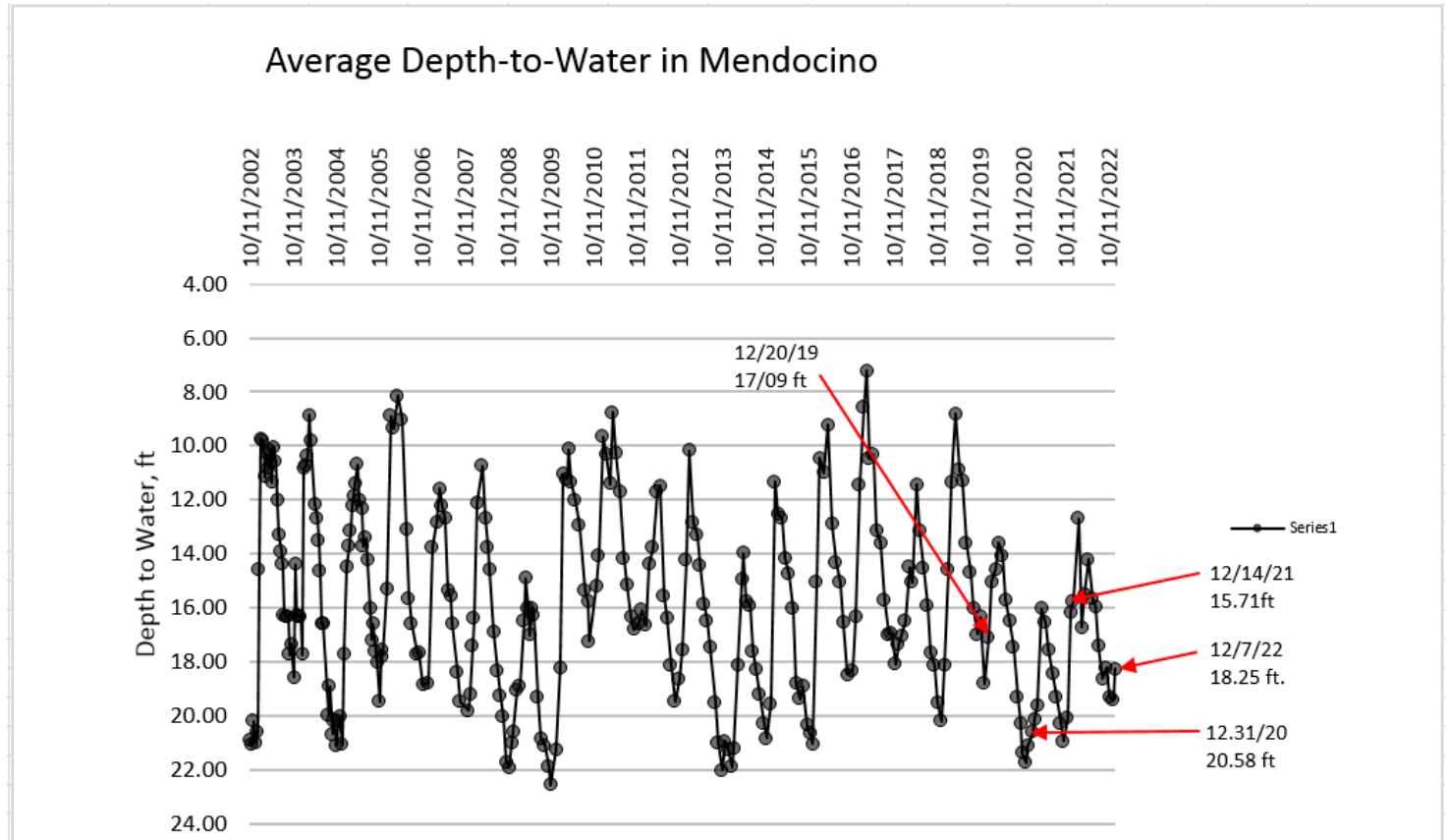
Total Rainfall for Rain Year 2021-22 was 33.82” inches. Mendocino received 85% of normal annual rainfall during the last water year. By December 7, 2022, total rainfall since October 1, 2022 was 5.54” inches, 13.9% of average annual rainfall.

DAILY TOTAL RAINFALL												
2022-23											<i>Elevation 72 Feet</i>	
											<i>Latitude 39.306°</i>	
Data From : Community Service District							10AM		<i>Longitude -123.000°</i>			
Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1		0.05	0.03									
2												
3		0.02	0.19									
4	0.02	0.68	0.30									
5	0.01	0.07	0.31									
6	0.01	0.53										
7		0.83										
8		0.13										
9												
10	0.03	0.01										
11	0.02	0.11										
12	0.02	0.03										
13	0.02	0.04										
14												
15		0.02										
16	0.01											
17	0.01											
18	0.02											
19												
20												
21	0.05											
22												
23												
24	0.02											
25												
26												
27		0.04										
28												
29												
30		1.70										
31	0.21											
Sum	0.45	4.26	0.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Count	13	14	4	0	0	0	0	0	0	0	0	0
Max	0.21	1.70	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rainy Days		31										5.54
Maximum Daily Rainfall				1.70								

December 2022 Depth-to-Water (DTW)

The average DTW measurements District-wide in the 24 monitoring wells on December 6, 2022 was 18.25 ft; about 1.2 ft better than November 2022, about 2.5 ft worse than December of 2021, and about 2.25 ft. better than December of 2020. Compared to a good rain year like 2019, which received 45.64” inches, the average depth to water is currently about 1.14 ft. below normal for the month.

Figure 2 December 2022, Depth-To-Water Chart



The average depth-to-water reported from the five drought monitoring wells on November 30, as an interim evaluation date in WSCP was reported at 22.97 ft.

The MCCSD Board declared that a State 2 water shortage existed within its boundaries on September 26, 2022, based the Water Shortage Contingency Plan and average depth to water recorded in the five drought monitoring wells as of August 31, 2022. November 30 represents the next Water Shortage evaluation date. At that time depth to water measurements showed an average of 22.97ft. and rainfall totals were 3.01” inches. Based on these measurements, the water shortage contingency plan recommends maintaining the Stage 2 Water Shortage at this time. December 31, 2022 represents the next evaluation date.