

# Memo

**To:** MCCSD Board of Directors  
**From:** District Superintendent  
**cc:** Jim Jackson  
**Date:** September 22, 2022  
**Re:** Groundwater Management Report

## The 2021-22 Rain Year

October 1, 2021 was the beginning of the 2021-22 rain year. Average annual precipitation in Mendocino is 39.72 inches, and average rainfall in September is 0.59 inches. 3.43 inches of rainfall has been measured in the District for the month as of September 22, 2022 (Figure 1, Table 1).

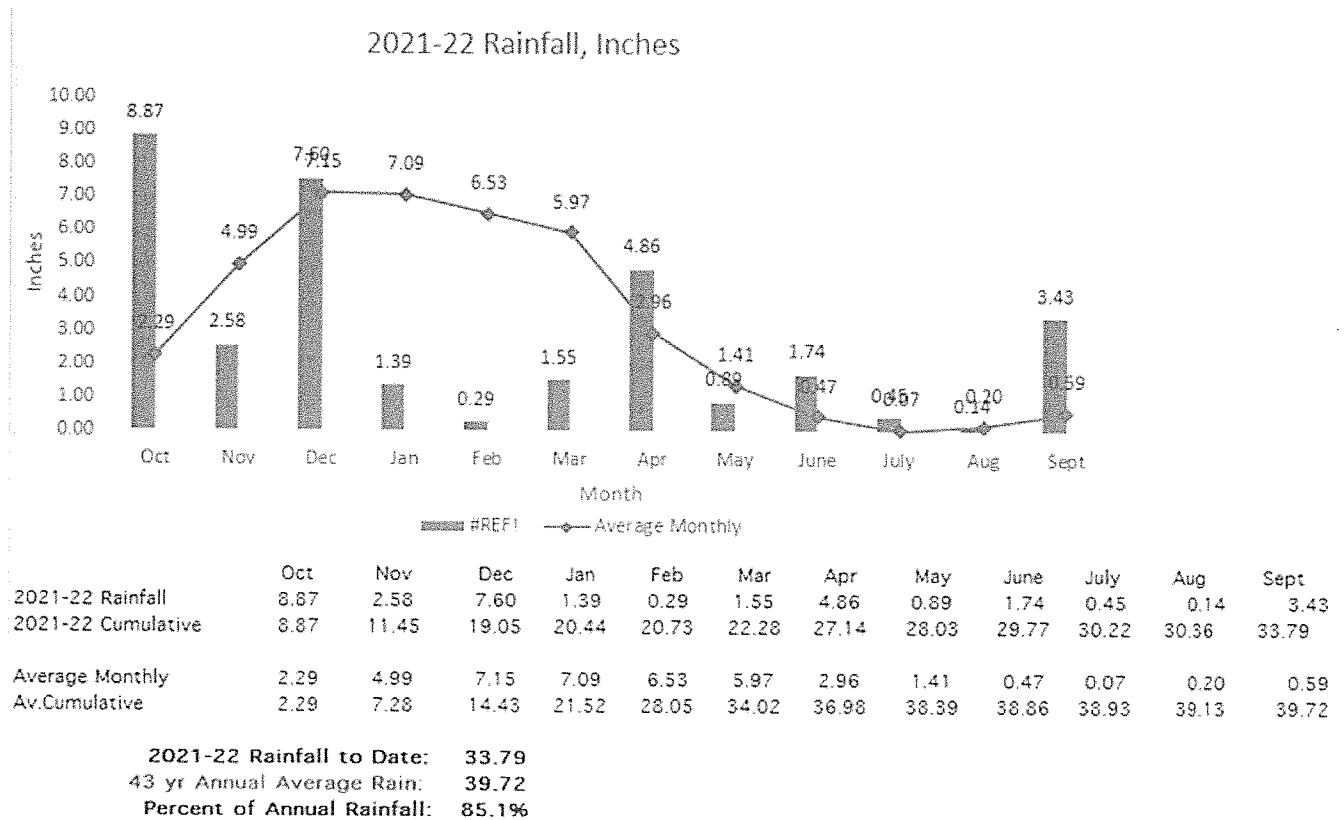


Figure 1, Table 1

Table 1 2021-22 Rainfall Record

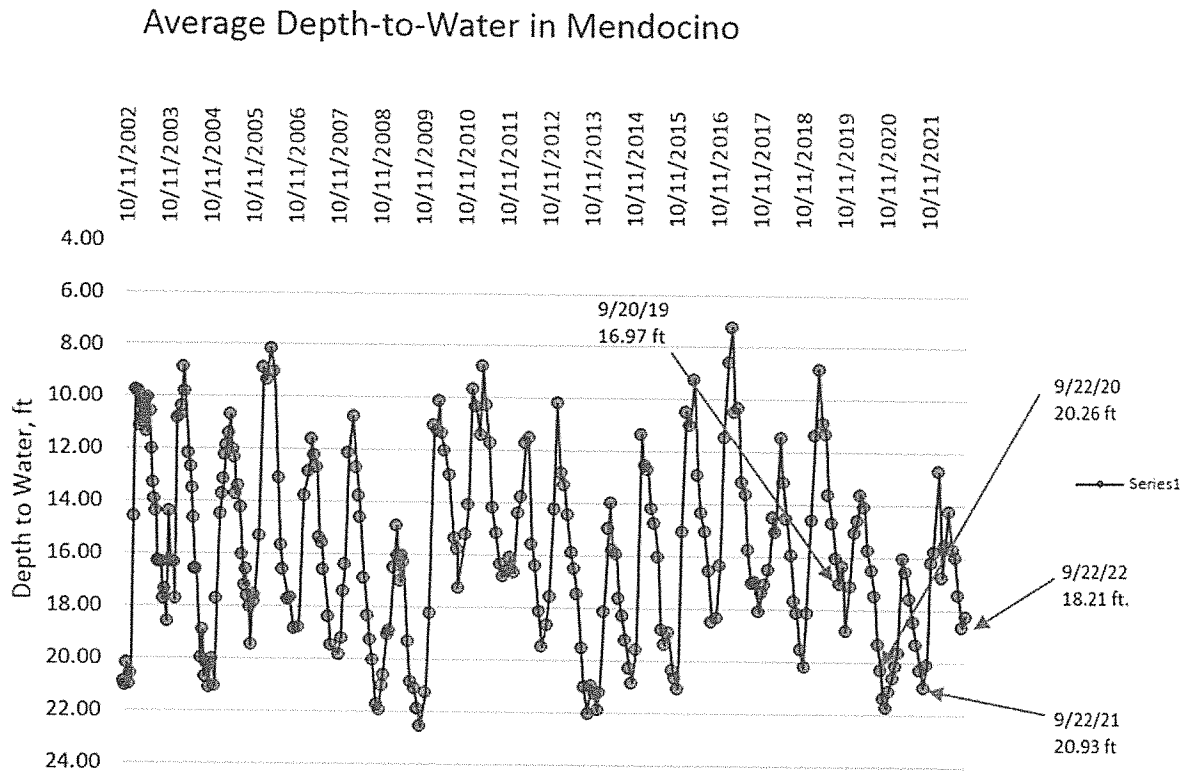
Total Rainfall for Rain Year 2020-21 was 19.6" inches. Mendocino received just 49.3% of normal annual rainfall during the last water year. By September 22, 2022, total rainfall since October 1, 2021 was 33.79" inches, 85% of average annual rainfall.

| DAILY TOTAL RAINFALL                  |      |      |      |      |      |      |      |      |      |      |      |                     |
|---------------------------------------|------|------|------|------|------|------|------|------|------|------|------|---------------------|
| 2021-22                               |      |      |      |      |      |      |      |      |      |      |      | Elevation 32 Feet   |
| Data From: Community Service District |      |      |      |      |      |      |      |      |      |      |      | Latitude 38.306°    |
|                                       |      |      |      |      |      |      |      |      |      |      |      | Longitude -123.600° |
| Day                                   | Oct  | Nov  | Dec  | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug  | Sep                 |
| 1                                     |      | 0.49 |      |      |      |      |      |      |      |      | 0.05 |                     |
| 2                                     |      |      |      | 0.24 |      |      |      |      |      |      | 0.01 |                     |
| 3                                     |      | 0.40 |      | 0.38 |      |      |      |      |      | 0.03 |      |                     |
| 4                                     |      |      |      | 0.24 |      |      | 0.1  |      | 1.34 | 0.09 |      |                     |
| 5                                     | 0.06 | 0.13 |      | 0.02 |      | 0.12 |      | 0.13 |      | 0.08 |      |                     |
| 6                                     |      |      | 0.17 | 0.45 |      |      |      | 0.02 |      | 0.02 |      |                     |
| 7                                     |      |      | 0.03 |      |      |      |      | 0.23 |      | 0.05 | 0.01 |                     |
| 8                                     |      | 1.21 |      | 0.06 |      |      |      | 0.3  |      | 0.03 |      |                     |
| 9                                     |      |      |      |      |      |      |      |      |      |      |      |                     |
| 10                                    |      |      |      |      |      |      | 0.75 |      |      |      |      |                     |
| 11                                    |      |      | 0.97 |      |      |      | 0.04 |      |      |      |      |                     |
| 12                                    |      |      | 0.52 |      |      | 0.02 | 0.01 |      | 0.4  |      |      |                     |
| 13                                    |      |      | 0.65 |      |      |      | 1.63 |      |      |      |      |                     |
| 14                                    |      |      | 0.08 |      |      | 0.59 | 0.02 | 0.02 |      |      |      |                     |
| 15                                    |      | 0.10 | 1.30 |      |      |      | 0.84 |      |      |      |      |                     |
| 16                                    |      |      | 0.24 |      |      |      |      |      |      |      |      |                     |
| 17                                    | 0.57 |      |      |      |      |      |      |      |      |      |      |                     |
| 18                                    |      | 0.25 |      |      |      | 0.35 | 0.27 |      |      | 0.02 | 0.03 |                     |
| 19                                    | 0.60 |      |      |      |      | 0.03 | 0.14 |      |      |      |      |                     |
| 20                                    | 0.03 |      |      |      |      |      | 0.71 |      |      | 0.04 |      |                     |
| 21                                    | 1.94 |      | 0.62 |      | 0.29 |      | 0.32 |      |      | 0.03 |      |                     |
| 22                                    | 0.31 |      | 1.51 |      |      |      |      |      |      |      | 0.04 |                     |
| 23                                    | 4.05 |      | 0.09 |      |      |      |      |      |      |      |      |                     |
| 24                                    | 0.48 |      | 0.44 |      |      | 0.05 |      |      |      |      |      |                     |
| 25                                    |      |      | 0.06 |      |      |      |      |      |      |      |      |                     |
| 26                                    | 0.26 |      | 0.63 |      |      |      |      | 0.05 |      |      |      |                     |
| 27                                    |      |      |      |      |      | 0.39 |      |      |      |      |      |                     |
| 28                                    |      |      | 0.27 |      |      |      |      | 0.14 |      |      |      |                     |
| 29                                    | 0.09 |      | 0.02 |      |      |      |      |      |      |      |      |                     |
| 30                                    | 0.24 |      |      |      |      |      | 0.03 |      |      |      |      |                     |
| 31                                    | 0.24 |      |      |      |      |      |      |      |      |      |      |                     |
| Sum                                   | 8.87 | 2.58 | 7.60 | 1.39 | 0.29 | 1.55 | 4.86 | 0.89 | 1.74 | 0.39 | 0.14 | 0.00                |
| Count                                 | 12   | 6    | 16   | 6    | 1    | 7    | 12   | 7    | 2    | 9    | 5    | 0                   |
| Max                                   | 4.05 | 1.21 | 1.51 | 0.45 | 0.29 | 0.59 | 1.63 | 0.30 | 1.34 | 0.09 | 0.05 | 0.00                |
| Rainy Days                            |      | 83   |      |      |      |      |      |      |      |      |      | 30.30               |
| Maximum Daily Rainfall                |      |      |      | 4.05 |      |      |      |      |      |      |      |                     |

September 2022 Depth-to-Water (DTW)

The average DTW measurements District-wide in the 24 monitoring wells on September 20, 2022 was 18.21' ft. about 0.40 ft. better than last month, about 2.7 ft. better than September of 2021, and about 2.0 ft. better than September of 2020. Compared to a good rain year like 2019, which received 45.64" inches, the average depth to water is currently about 1.25 ft. below normal for the month.

Figure 2 September 2022, Depth-To-Water Chart



The average depth-to-water reported from the five drought monitoring wells on August 31, 2022 was 21.94 ft. about 0.50 ft. lower than August 23, 2022, and on September 20, 2022 it was recorded at 22.08 ft.

The MCCSD Board declared a Stage 4 Water Shortage Crisis exists within its boundaries on March 28, 2022, based on total rainfall as of that time. August 31, represents the latest Water Shortage evaluation date.

According to The Water Shortage Contingency Plan, depth to water measurements are the primary tool used this time of year for groundwater supply evaluations. Current depth to water measurements in the five drought monitoring wells as of August 31, and September 20, 2022 indicates a Stage 1 water shortage exists within the District Boundaries. Given the ongoing drought conditions over the past three years it is advised to move to the next most severe water shortage condition.

Late Spring rains, combined with strong conservation habits have likely lead to the higher than expected depth to water levels. Following the WSCP the Superintendent recommends caution and continued conservation but moving to a Stage 2 Water Shortage at this time. According to the WSCP November 30, 2022 represent the next water shortage evaluation date where both depth to water and total rainfall will be taken into consideration.

# September 2022 Superintendent's Report

## **Wastewater Treatment Plant:**

Operators performed routine repair and maintenance to the WWTP in September of 2022. Operators have completed ½ the annual sewer main cleaning in September. We had a potentially serious failure of the clarifier drive and had to use the overflow pond for two days. Thanks to quick and hard work of operator Keith we got new motors shipped over night, Fort Bragg electric came down for emergency wiring replacement, and Woody's Weld-all repaired the mounting brackets. The team really stepped up and we were back in service within two days.

**Outfall Update:** Alpha Diving came down the week of 9/12/22 to conduct the scheduled maintenance dive and install five new hold down brackets. They also agreed to conduct the annual outfall survey as required by our new State lease. Unfortunately due to boat mechanical issue they will have to reschedule.

## **Recycled Water:**

MCCSD has successfully been transferring recycled water to MUSD all month, however due to new permit requirements the District will likely have to stop October 1, until we complete upgrades to the recycled water system.

## **Biosolids Trailer and Transport:**

MCCSD did not transport any biosolids in September 2022.

## **Drought Update:**

The District continues to focus on water conservation and we are seeing higher than expected groundwater levels. We have seen very few water trucks in town this year, and we have not received any official reports of dry wells. The 3.4" of recorded rainfall on 9/18/22 came at a much appreciated time.

The California SAFER program (Safer and Affordable Funding for Equity and Resilience) remains ready to assist the District with community outreach and discussions on water resilience. I understand they are hosting a community meeting on October 18, 2022.

## **Grant and Construction Updates:**

GHD continues to move forward with the planning and design work for the Emergency Water Storage Tank Project, the Draft MOU has been approved by both Districts and has been signed. MCCSD recently submitted another grant application to the DWR Small Communities Drought Relief Program, to fund the Phase II upgrades to the Recycled Water System. The application was put together by GHD at no cost to the District. The other MCCSD grant application submitted in June to the Bureau of Reclamation is still under review and we should know more by next month. U.S. Senator Feinstein, State Senator McGuire, and County Supervisor Ted Williams have all drafted letters of support for the MCCSD grant applications and stand behind District efforts to improve water resiliency.

## **Safety Meeting and Plant Safety Inspection:**

The District is still following County, State, Federal, and CDC guidelines regarding COVID-19 safety precautions. The 30-minute monthly safety meeting was held September 22, 2022. The topic was *PPE*.

## **Sanitary Sewer Collection System:**

There were no MCCSD collection system sanitary sewer overflows to report during January 1, 2020 to September 22, 2022. Operators have been cleaning sewer mains this month, areas

## September's Secretary's Report

This month's violation letters went out Tuesday, September 20. The results are listed below:

No Readings Violation #1: 8

No Readings Violation #2: 4

No Readings Violation #3: 1

Overage Violation #1: 10

Overage Violation #2: 2

Overage Violation #3: 1

We located a document from years ago titled "per capita water use table". It is a resource Mike Maley has used to help come up with the Groundwater Management Report. I am taking the time to update it to reflect 2020 to present. So far it is very interesting. I will share it with the Board once I am done, but it is a large project so may take some time.