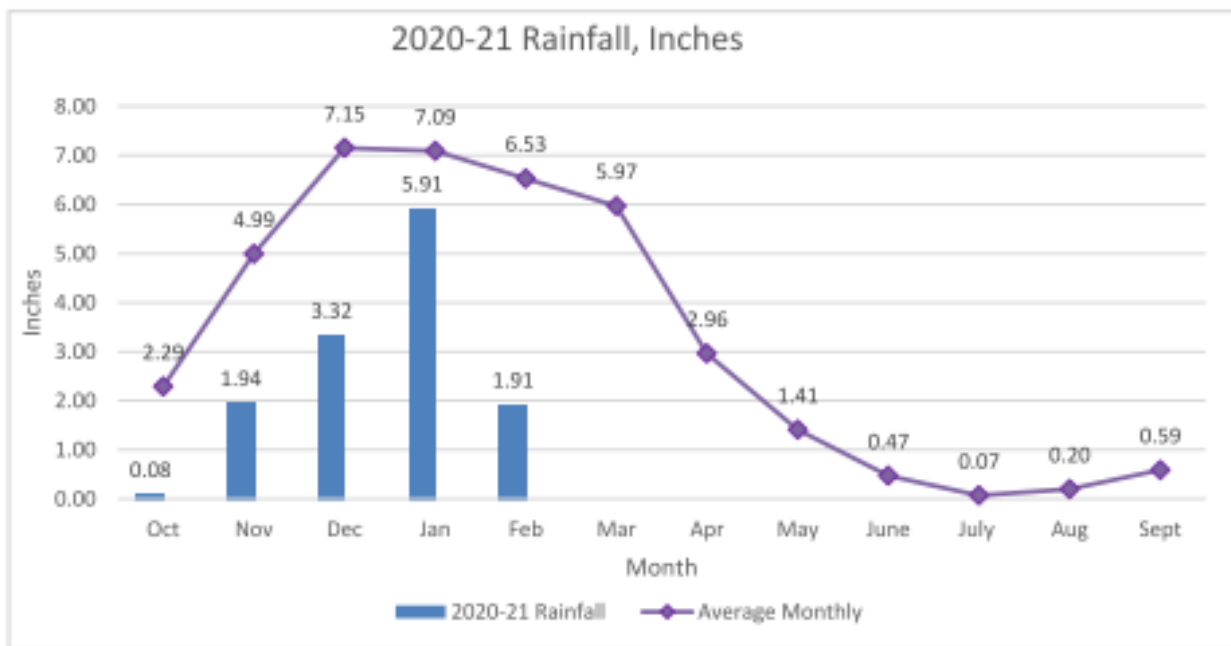


Memo

To: MCCSD Board of Directors
From: District Superintendent
cc: Jim Jackson
Date: February 17, 2020
Re: Groundwater Management Report

The 2020-21 Rain Year

October 1, 2020 was the beginning of the 2020-21 rain year. Average annual precipitation in Mendocino is 39.72 inches, and average rainfall in February is 6.53 inches. 1.91” inches of rainfall has been measured in the District for the month as of February 17, 2021, (Figure 1, Table 1).



	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept
2020-21 Rainfall	0.08	1.94	3.32	5.91	1.91							
2020-21 Cumulative	0.08	2.02	5.34	11.25	13.16							
Average Monthly	2.29	4.99	7.15	7.09	6.53	5.97	2.96	1.41	0.47	0.07	0.20	0.59
Av. Cumulative	2.29	7.28	14.43	21.52	28.05	34.02	36.98	38.39	38.86	38.93	39.13	39.72

2020-21 Rainfall to Date: 13.16
43 yr Annual Average Rain: 39.72
 Percent of Annual Rainfall: 33.1%

Figure 1, Table 1

According to the Water Shortage Contingency Plan Adopted May 11, 2020. The criteria presented in **Table 3** should be used each year to determine water shortage onset stage and modified appropriately if there is a pre-existing water shortage (drought from the previous year or earlier), according to the following criteria:

- If there is a pre-existing **Stage 1 Water Shortage**, follow the Water Shortage Condition Criteria without modification.
- If there is a pre-existing **Stage 2 or 3 Water Shortage**, modify the Water Shortage Condition Criteria recommendation for the appropriate date to the next most severe water shortage condition.

According to TABLE 3, current rain fall totals would place the District in a Stage 2 Water Shortage as of January 31, 2021. A stage 2 Shortage is the current District position. Current rainfall totals combined with the 2019-20 rain year ending in a pre-existing Stage 2 Water Shortage would suggest the District could move to a Stage 3 Water Shortage after January 31, 2021.

Table 3: Water Shortage Stage Criteria (Previous Year with Normal Rainfall)*

Water Shortage Stage	Severity	Rainfall	Expected Recurrence	Evaluation Date/ Cumulative Rainfall Total		
				Jan. 31	March 31	May 31
1 Alert	mild	75% to 82.5% of normal	±5 years	14-19"	29-32" and <7" since Feb 1	32-35" and <12" since Feb 1
					26-29" and 7-18" since Feb 1	29-32" and 10-20" since Feb 1
					22-26" and >18" since Feb 1	24-29" and >20" since Feb 1
2 Warning	moderate	60% to 75% of normal	±8 years	10-14"	26-29" and <7" since Feb 1	29-32" and <10" since Feb 1
					22-26" and 7-18" since February 1	24-29" and 10-20" since February 1
					16-22" and >18" since Feb 1	20-24" and >20" since Feb 1
3 Emergency	severe	50% to 60% of normal	±15 years	8-10"	22-26" and <7" since Feb 1	24-29" and <10" since Feb 1
					16-22" and 7-18" since Feb 1	20-24" and 10-20" since Feb 1
4 Crisis	historic	less than 50% of normal	±50 years	<8"	16-22" and <7" since Feb 1	20-24" and <10" since Feb 1
					<16"	<20"

*Rainfall measured from October 1.

February 2021 Depth-to-Water (DTW)

The average DTW measurements District-wide in the 23 monitoring wells on February 16, 2021 was 19.61 ft. (Figure 2). About a 6" inch improvement from 1/20/21 measurements.

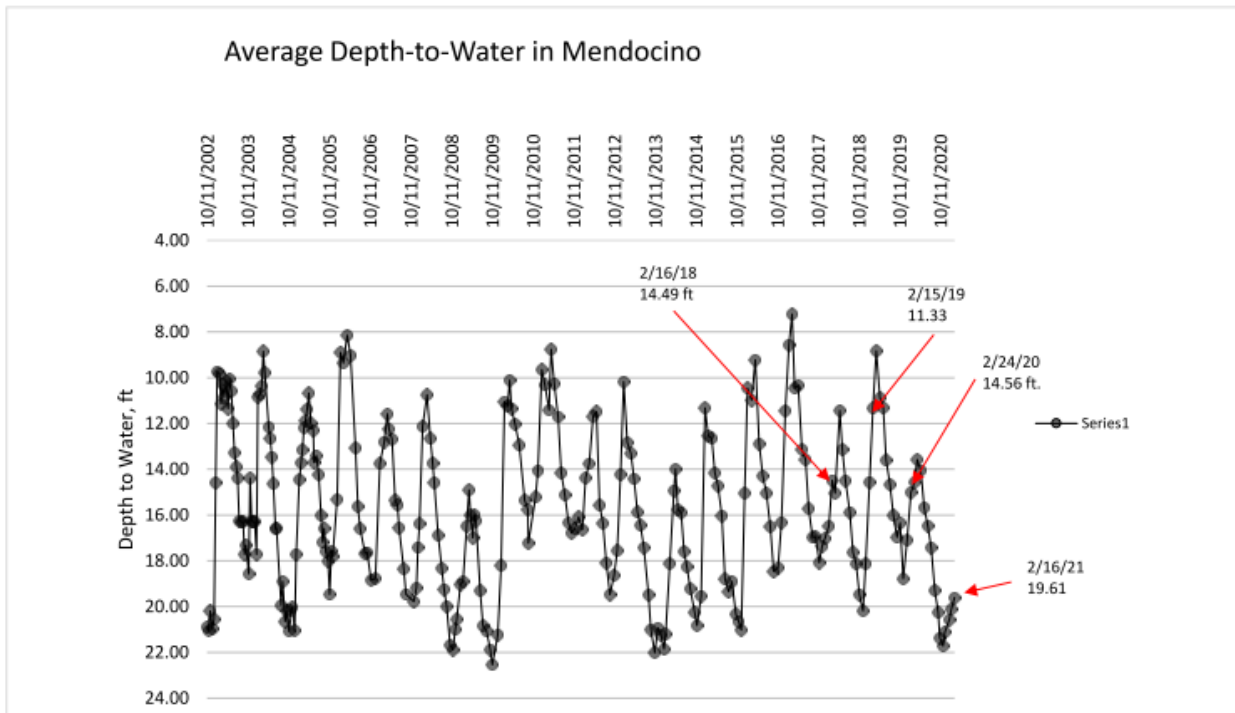


Figure 2 February, 2021, Depth-To-Water Chart

August 31, 2020 the MCCSD Board voted to rescind the rain based Stage 4 Water Shortage Emergency and Declare a Stage 2 Water Shortage based on the Water Shortage Contingency Plan and depth-to-water measurements reported from the five (5) Drought Monitoring Wells. The average depth-to-water reported from the five drought monitoring wells on 8-31-20 was 23.2 ft. On February 16, 2021 those same five drought monitoring wells averaged 23.9' ft. About 5 ft. below where they should be at this time of year.

2020 was a very dry and unusual year. Following the Water Shortage Contingency Plan, rainfall totals on January 31, 2021 indicated a Stage 2 water shortage condition currently exists. The lack of rainfall last year would indicate a Stage 3 water shortage condition currently exists.

March 31, 2021 is the next evaluation date. There is still potential for late winter and early spring rains. The Superintendent recommends maintaining the current Stage 2 Water Shortage through the March 31 evaluation date.