

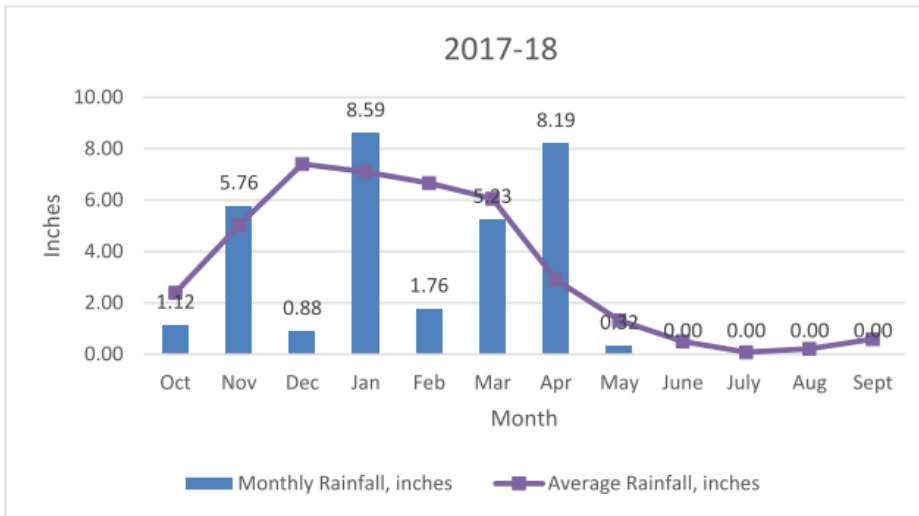
## Memo

**To:** MCCSD Board of Directors  
**From:** District Superintendent  
**cc:** Jim Jackson  
**Date:** June 15, 2018  
**Re:** June 2018 Groundwater Management Report

---

### The 2017-18 Rain Year

October 1, 2017 was the beginning of the 2017-18 rain year. The cumulative average rainfall at the end of June is 39.35 inches. On June 21, 2018, the District has measured 31.85 of total precipitation (Tab1-2), which is 79.2% of total annual rainfall.



	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept
2017-18 Rainfall	1.12	5.76	0.88	8.59	1.76	5.23	8.19	0.32	0.00	0.00	0.00	0.00
2017-18 Cumulative	1.12	6.88	7.76	16.35	18.11	23.34	31.53	31.85	31.85			
Average Monthly	2.40	5.01	7.41	7.10	6.66	6.05	2.90	1.32	0.50	0.08	0.21	0.59
Av.Cumulative	2.40	7.41	14.82	21.91	28.57	34.63	37.52	38.84	39.35	39.42	39.63	40.23

**2017-18 Rainfall to Date: 31.85**  
**29 yr Annual Average Rain: 40.23**  
**Percent of Annual Rainfall: 79.2%**

Table 1

<b>DAILY TOTAL RAINFALL</b>													
2017-18										<i>Elevation 72 Feet</i>			
										<i>Latitude 39.306°</i>			
Data From : Commumnty Service District							10AM		<i>Longitude -123.800°</i>				
Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
1													
2		0.26	0.38			0.32							
3						0.51							
4				0.61		0.12							
5		0.35					3.83						
6							2.51						
7				0.57		0.18							
8		0.68		1.82		0.04							
9		0.54		0.03									
10													
11					0.12		0.62						
12		0.13				0.82							
13						0.23							
14		0.19				0.26							
15		0.62		0.62		0.97	0.56	0.11					
16							0.31						
17				0.59	0.06								
18				0.35	0.20								
19	1.06	0.72	0.47										
20		0.54				0.42							
21	0.06			2.04		0.38							
22					0.13	0.06							
23		0.13				0.63							
24				1.57		0.29		0.11					
25		0.97	0.03	0.39	0.21			0.1					
26		0.63											
27							0.11						
28					1.04								
29							0.25						
30													
31													
Sum	1.12	5.76	0.88	8.59	1.76	5.23	8.19	0.32	0.00	0.00	0.00	0.00	
Count	2	12	3	10	6	14	7	3	0	0	0	0	
Max	1.06	0.97	0.47	2.04	1.04	0.97	3.83	0.11	0.00	0.00	0.00	0.00	
Rainy Days	57											Water year Total Rainfall	31.85
Maximum Daily Rainfall	3.83												

Table 2 2017-18 Rainfall Record

2017-18 Rainfall Evaluations

A mild Stage 1 Water Shortage means that rainfall is 75-82.5% of normal (Table 3). At the end of June, 2018, District rainfall was 20.8% below normal. The District declared a Stage 1 Water Shortage Condition on May 29, 2018.

2017-18									
Water Shortage Evaluation January 31, May 31, & May 31 by Rainfall Records, inches									
Date	No Water shortage	Stage 1		Stage 2		Stage 3		Stage 4	
Jan 31	>19	14-19" 16.35	10-14"	8-10"	<8"				
Mar 31	>26, 29, or >32	29-32" and <7" since Feb 1 1 26-29" and 7-18" since Feb 1 1 22-26" and >18" since Feb 1 1	26-29" and <7" since Feb 1 1 22-26" and 7-18" since Feb 1 1 16-22" and >18" since Feb 1 1	22-26" and <7" since Feb 1 1 16-22" and 7-18" since Feb 1 1 24-29" and <10" since Feb 1 1 20-24" and 10-20" since Feb 1 1	23.34	16-22" and <7" since Feb 1 1 <16			
May 31	>29, >32 or >35	32-35" and <12" since Feb 1 1 29-32" and 10-20" since Feb 1 1 24-29" and >20" since Feb 1 1	29-32" and <10" since Feb 1 1 24-29" and 10-20" since Feb 1 1 20-24" and >20" since Feb 1 1	31.85		20-24" and <10" since Feb 1 1 <20			

Table 3

May 31 drought evaluation indicates Mendocino is in a Stage 1 Water Shortage

Stage 1 Water Use Restriction

District property owners are requested to voluntarily reduce groundwater extraction by 10%. Water use restrictions include voluntary water conservation and prohibition on hose washing driveways, sidewalks, and other paved surfaces. Restaurants are asked to put out water conservation information cards, which are available at the District office.

Water Shortage Stage/ Condition	Customer Responsibilities	Water District Activities	Penalties
<p><b>1. Conservation Alert:</b></p> <p>Mild shortage. (22.5-25% below normal rainfall) Frequent condition after March 1 due to lack of inter-annual (carryover) storage.</p>	<ul style="list-style-type: none"> <li>➢ Voluntary water conservation</li> <li>➢ Prohibition of water waste (hose washing driveways, parking area, walkways or other paved surface, except as is required for sanitary purposes)</li> <li>➢ Display of conservation information by hotels and restaurants</li> </ul>	<ul style="list-style-type: none"> <li>➢ Ongoing public information campaign, media outreach</li> <li>➢ Request voluntary water conservation with 10% use reduction</li> </ul>	<ul style="list-style-type: none"> <li>➢ Warning letter on need for water conservation</li> <li>➢ Possible penalties on blatant water wastage after first warning</li> </ul>

Table 4 Stage 1 Water Shortage Water Use Restrictions

Depth-To-Water (DTW)

The DTW measurements in the District’s 24 monitoring wells on June 15, 2018 was 13.54 ft. (Figure 1). DTW has dropped below the 2016 and 2017 levels due to below normal rainfall in rain year 2017-18 (Figure 2).

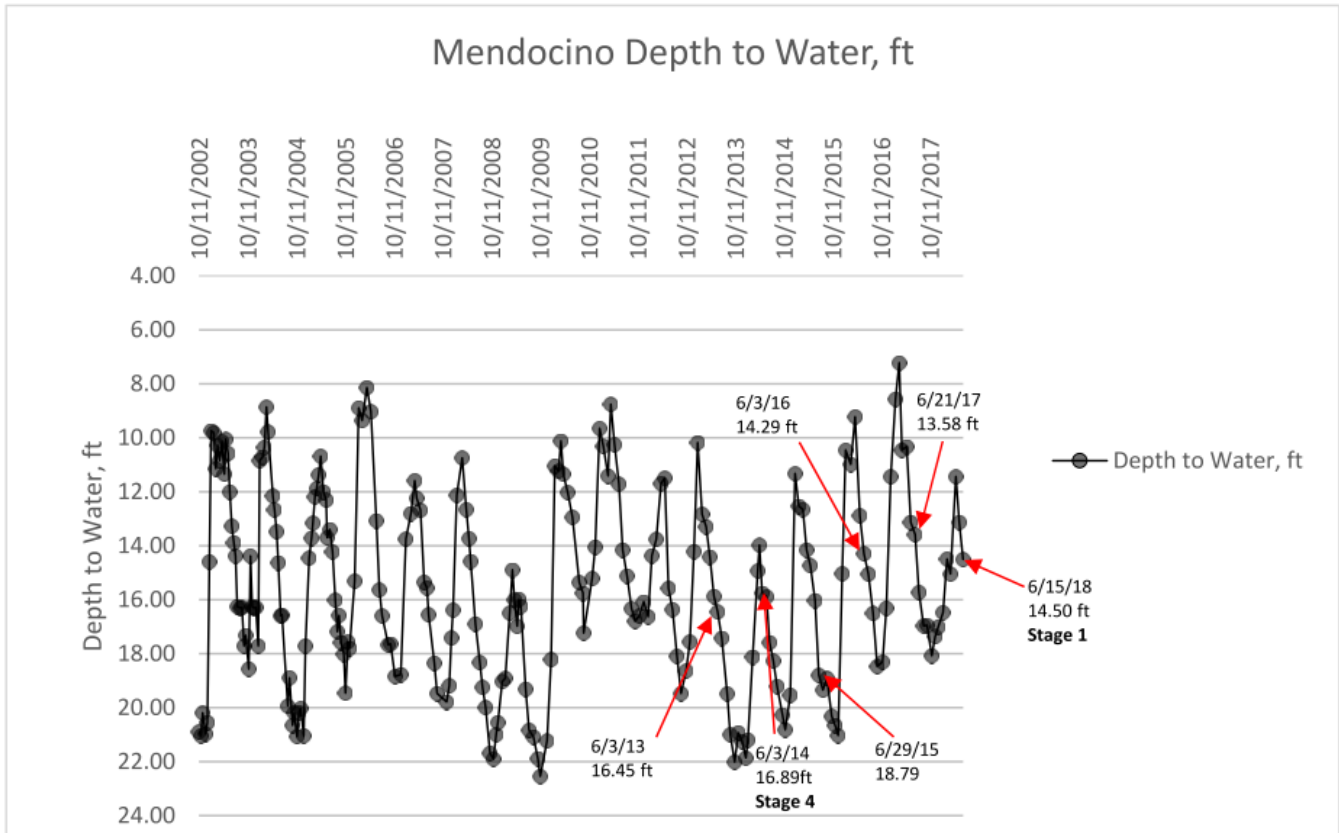


Figure 1 June 2018 DTW Chart

rainfall	inches
2002	34.71
2003	49.61
2004	36.39
2005	42.96
2006	53.48
2007	29.83
2008	31.75
2009	24.38
2010	47.24
2011	46.93
2012	32.56
2013	32.24
2014	24.15
2015	31.1
2016	44.53
2017	57.34
2018	31.85

Figure 2      Rainfall totals since 2002