BOLINAS COMMUNITY PUBLIC UTILITY DISTRICT

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M E M O R A N D U M

TO: Board of Directors

FROM: Jennifer Blackman

RE: Update on District Water Supply and Recent Consumption Data

DATE: December 16, 2020

This memorandum briefly summarizes the status of the District's water supply and consumption as of today's date.

1. Water Supply: From November 1 – 30, our diversions from the Arroyo Hondo Creek and from the Woodrat 1 Reservoir averaged of about 50,674 gallons per day (Arroyo Hondo) and about 30,120 gallons per day (Woodrat 1). Interestingly, our diversions from Arroyo Hondo averaged 33,289 gallons per day from November 1 – 17, and 70,301 gallons per day from November 18 – 30, likely demonstrating the beneficial impact of the rain received that month.

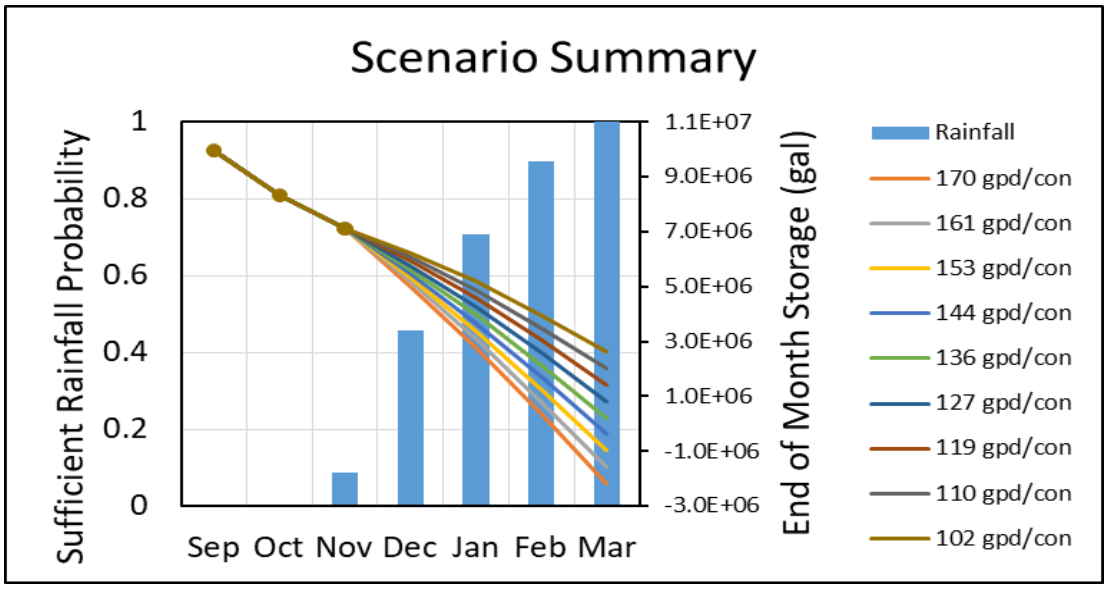
2. Woodrat 1 and Woodrat 2 : Our stored usable water supply in the Woodrat reservoirs as of November 30, 2020 (combined) is approximately 6,479,600 gallons.

3. Water Consumption. In November, water consumption averaged 69,691 GPD or 119 GPD per connection; thus far in December (December 1 – 15), water consumption in the district averaged 65,384 gallons per day, or 111gallons per day per connection.

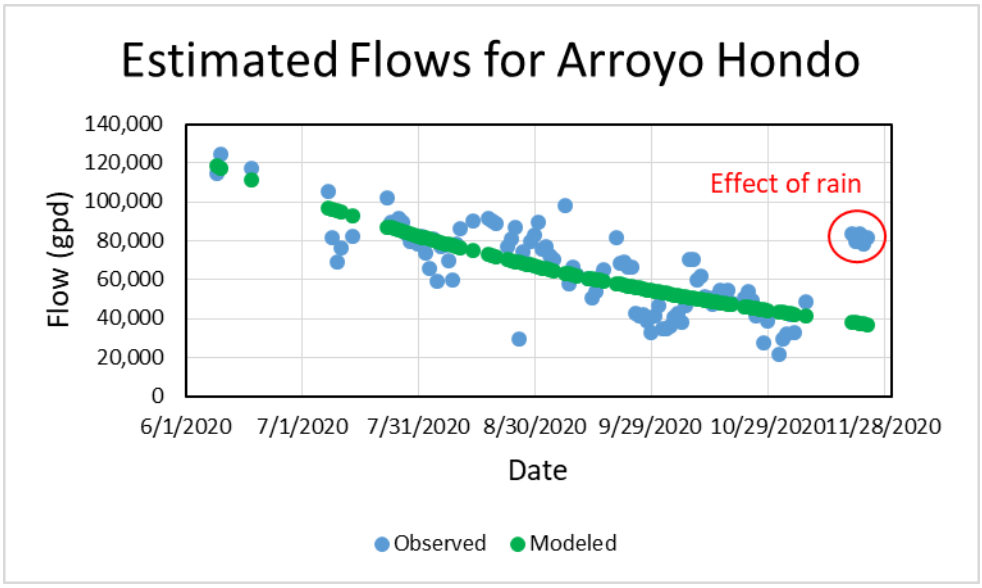
   Individual water consumption remains uneven. We continue to measure wide divergences in individual water consumption. For example, in November, the highest 15 water users consumed between 300 and 1,515 gallons of water per day, and 45 customers (including the 15 just referenced) used more than 200 gallons of water per day. Overall, in November, 99 customers used more than the requested 150 gallons of water per day at their properties (as compared to 149 233 customers using more than 150 gallons of water per day in October, and more than 233 customers using more than 150 gallons per day in September).

4. Updated Models:

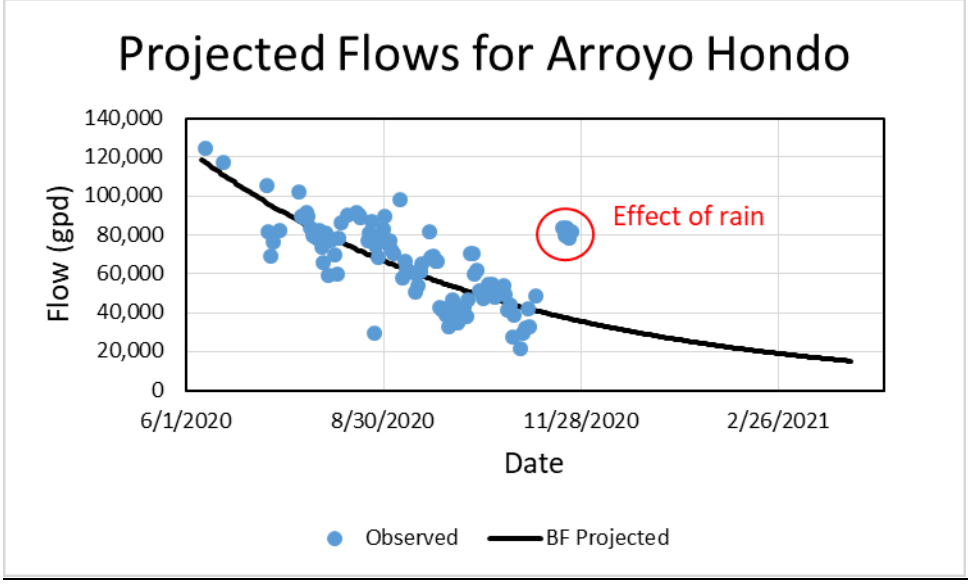
   The first graph is an updated Scenario Summary reflecting the actual data recorded (brown line in upper left corner) and the "fork" of projections as to how much stored water we will have available as of the end of March 2021 based on differing rates of consumption. Current consumption places us along the grey line, which is the second from the top, which corresponds to a projection of approximately 2 million gallons remaining in storage if there is no rain as of March 31, 2021. The angle of the brown line is slightly less steep than it was last month, which reflects the impact of the significant drop in water consumption in recent weeks on projections for our stored water supply.



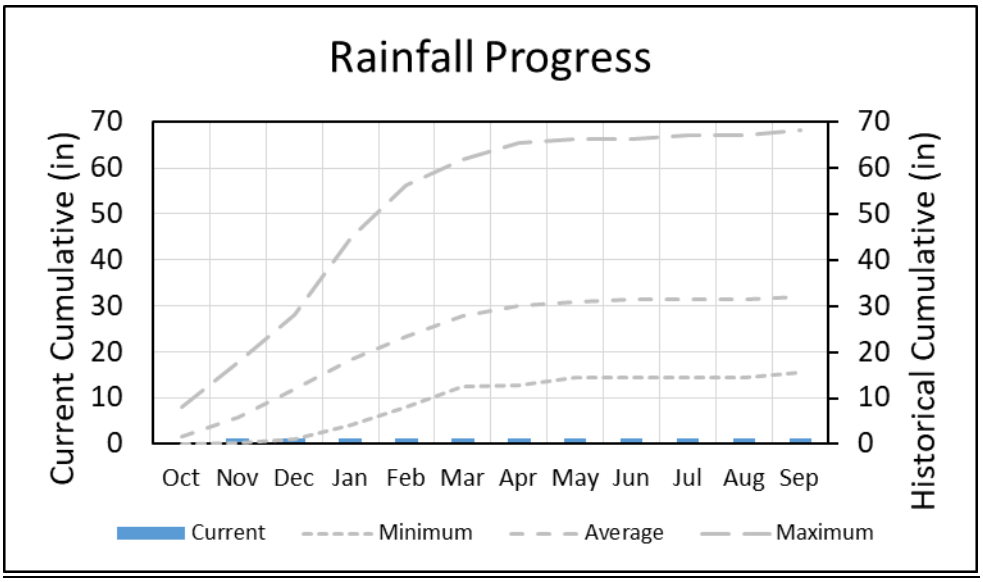
The second graph updates the district's estimated flow model for the Arroyo Hondo with data through November 30th and reflects the effect of rain on creek flows.



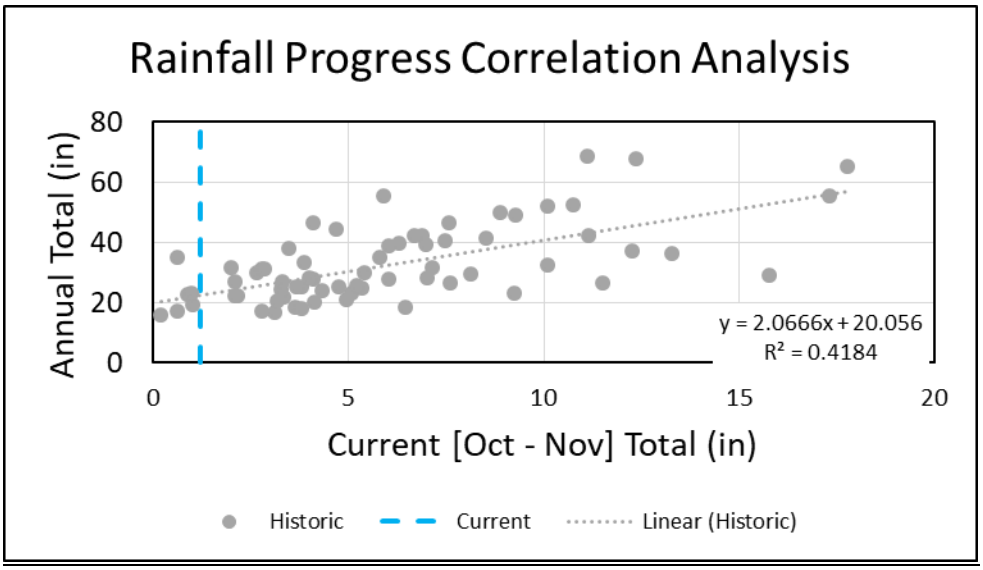
The third graph is update of Rob Gailey's "base flow recession model" projecton of flows for the Arroyo Hondo.



The fourth graph depicts where the district was on November 30, 2020 in terms of rainfall received (1.2 inches) relative to historic minimum, average and maximum rainfall (68 years of BCPUD rainfall data).



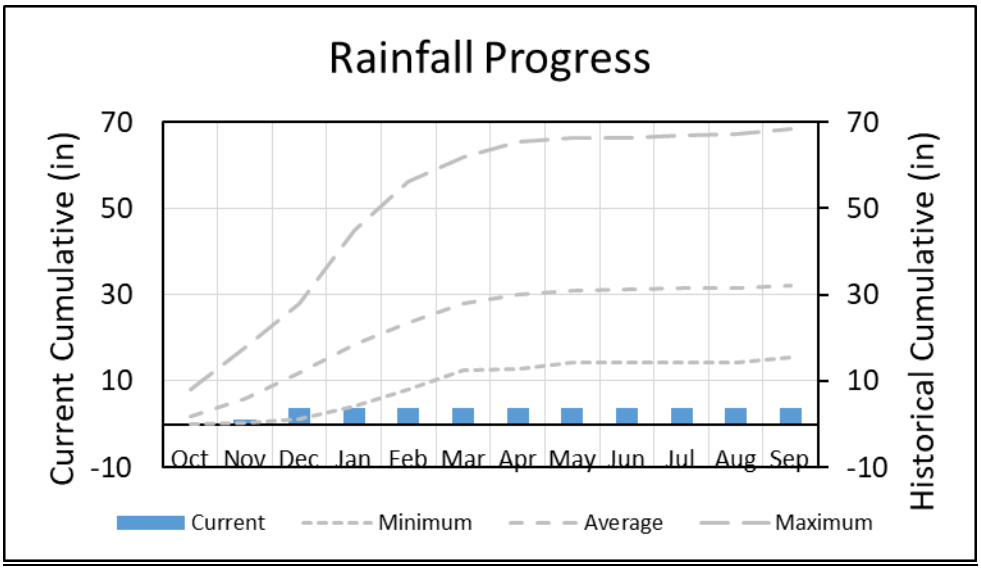
The fifth graph correlates the rainfall progress as of November 30th with the preceding 68 years; during that time, the district has experienced only 6 other years where the rainfall received was 1.2 inches or less as of the end of November. Those rain years generally turned out to be drier than normal years: the minimum rainfall received was 15.6 inches the maximum rainfall received was 34.8 inches for an average of 21.9 inches. This data suggests there is a reasonably high potential for the 2020-21 year to be another below average rainfall year.

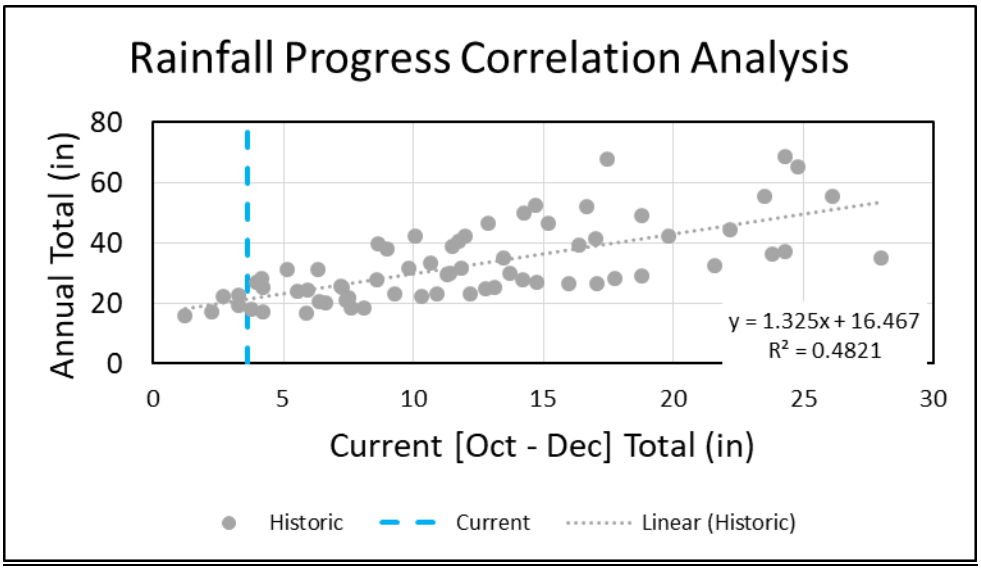


Current	1.20	0
	1.20	80

# Records	6
Min	15.6
Max	34.8
Avg	21.9

The final two graphs are updated version of the two prior graphs, with the 2.4 additional inches of rain received thus far in December 2020 included. The updated data did not alter the projection that the 2020-21 rain year is more likely than not to be another dry year.





Current	3.60	0
	3.60	80

# Records	5
Min	15.6
Max	22.5
Avg	19.2