

BOLINAS COMMUNITY PUBLIC UTILITY DISTRICT

BCPUD BOX 390 270 ELM ROAD BOLINAS CALIFORNIA 94924 415 868 1224



MEMORANDUM

TO: Board of Directors

FROM: Jennifer Blackman *JNB*

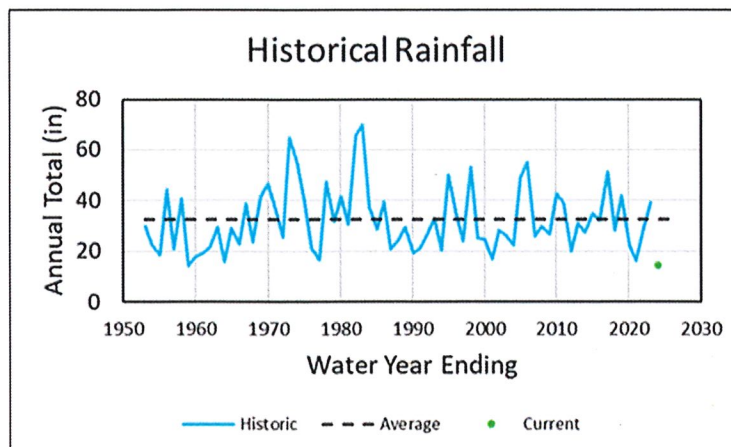
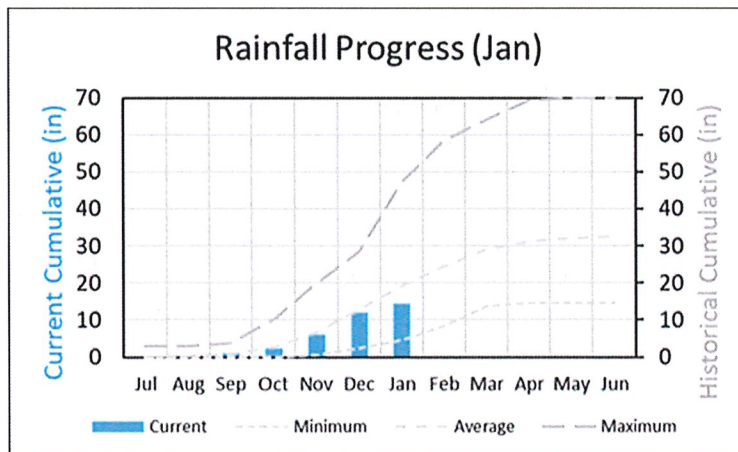
RE: Update on Water Supply

DATE: January 15, 2024

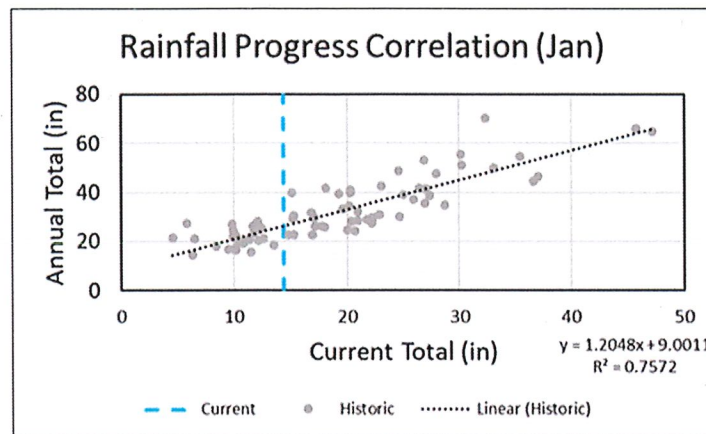
This memorandum provides a summary of the current status of the District's water supply as well as related data and projections.

1. Rainfall:

Thus far in the 2023-24 rain year, which began on July 1, 2023, the district has received 14.39 inches of rain (as of January 15, 2024), which is depicted in the chart below, followed by a chart depicting historical rainfall. At the present time, the district has received less than the average rainfall for this time of year (see Rainfall Progress graph). That said, the plotted data only reflect part of January and there is more rain predicted in the 10-day forecast, particularly at the end of this week and into the beginning of next week.



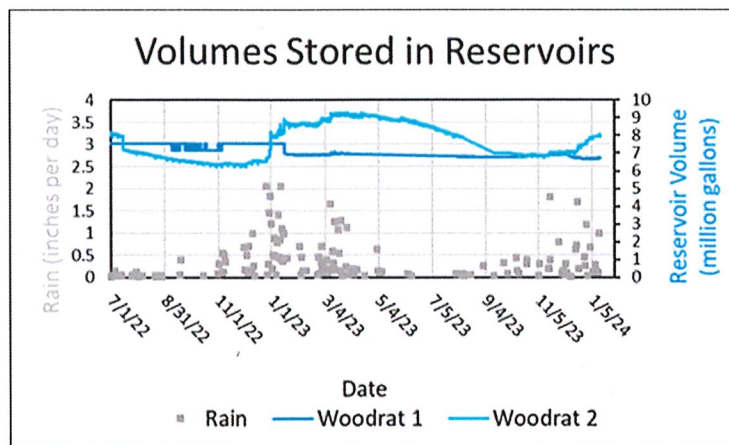
A rainfall progression analysis (see next graph) indicates there are 24 years in the BCPUD’s rain records when the district received 14.39 inches or less of rain through the end of January; during those 24 years, the district subsequently received a minimum annual rainfall of 14.49 inches, a maximum annual rainfall of 28.30 inches and an average annual rainfall of 21.18 inches, and a best fit of 24.34 inches. Note, however, there is a lot of “scatter” in the data (although the scatter has narrowed considerably since my November 2023 update), with a R² value of 0.7572 (an R² factor of 1.0 is considered perfectly correlative). There remains considerable potential for more annual rainfall this rain year, as some forecasts are suggesting.



2. Water Production and Consumption: Between December 22, 2023 and January 15, 2024, water *production* in the district averaged 62,156 gallons per day (GPD), which is a slight increase as compared to the last reporting period, when production averaged 55,026 GPD. Water *consumption* during this same timeframe averaged 64,004 GPD (approximately 109 GPD per connection), which also is an increase as compared to the last reporting period, when consumption averaged 58,476 GPD (approximately 100 GPD per connection); the increases likely are due to increased occupancy of homes and associated water use during the holiday season.

3. Water in Storage:

Woodrat 1 Reservoir and Woodrat 2 Reservoir are both full and spilling – the graph below depicts conditions before the most recent rains when Woodrat 2 was approximately 86 full.



4. Updated Base Flow Recession Model:

The graph below is the district's base flow (BF) recession model for the Arroyo Hondo Creek, updated to depict predictions of the base flow portion of creek flows through early February 2024. Creek flows continue to be much higher than in recent prior (drought) years as a result of the above-average annual rainfall received last year, and are estimated to be approaching 200,000 GPD. The creek has been flowing over the impoundment structure all year and the district continues to meet demand with the Arroyo Hondo Creek water source and has not diverted from either of the Woodrat Reservoir sources.

