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

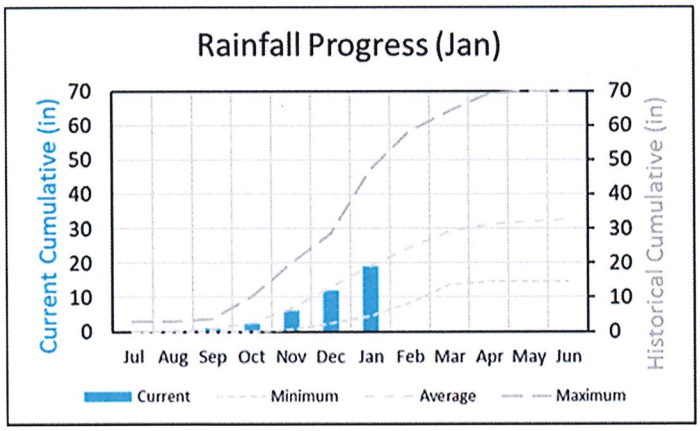
RE: Update on Water Supply

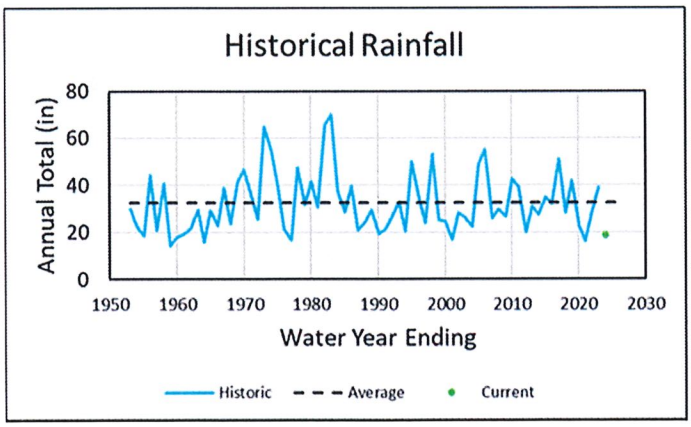
DATE: February 26, 2024

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

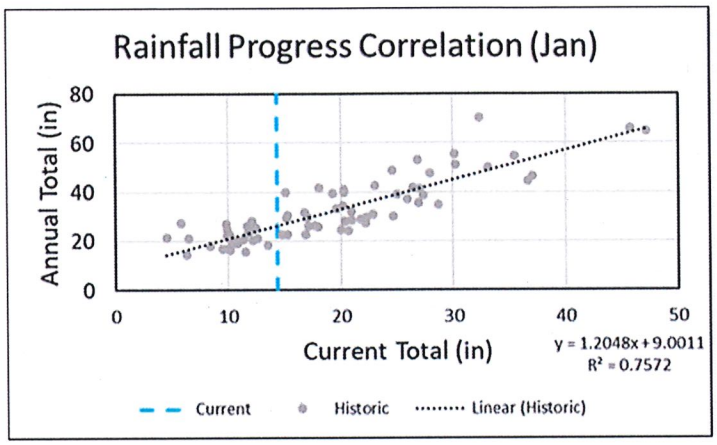
1. Rainfall:

As of the end of January 2024, the district had received 18.93 inches of rain since July 1, 2023 (the beginning of the rain year), which is slightly below the average of 19.27 inches for that time of year. (Please see the first two charts below.)

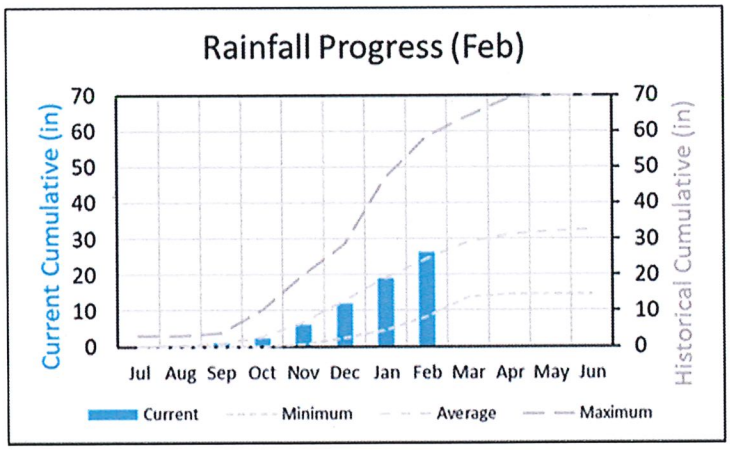


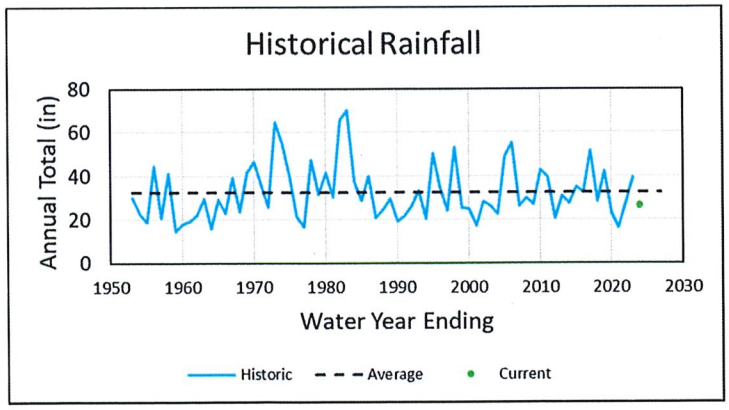


A rainfall progression analysis through the end of January (see next graph) indicates there are 36 years in the BCPUD's rain records when the district received 18.93 inches or less of rain through the end of January; during those 36 years, the district subsequently received a minimum annual rainfall of 14.49 inches, a maximum annual rainfall of 41.90 inches and an average annual rainfall of 23.82 inches, and a best fit of 31.81 inches, which is close to the district's average annual rainfall of 32.52 inches.

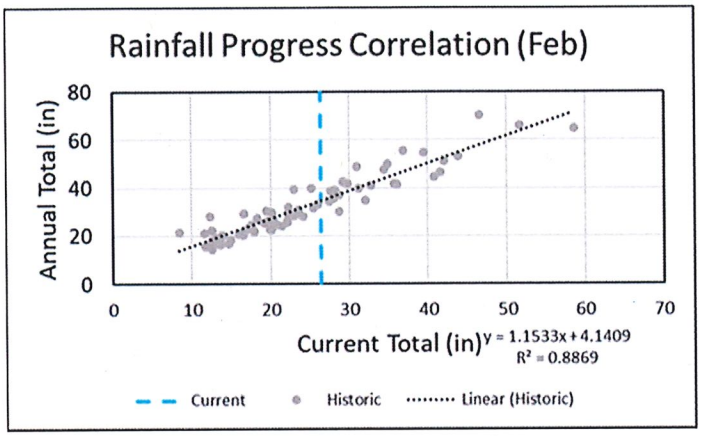


As of February 21, 2024, the district's rainfall totals have increased to 26.34 inches, which is slightly above the historic average of 24.56 inches of rain through the end of February; the district currently is about 6-inches below its average annual rainfall (32.52 inches).





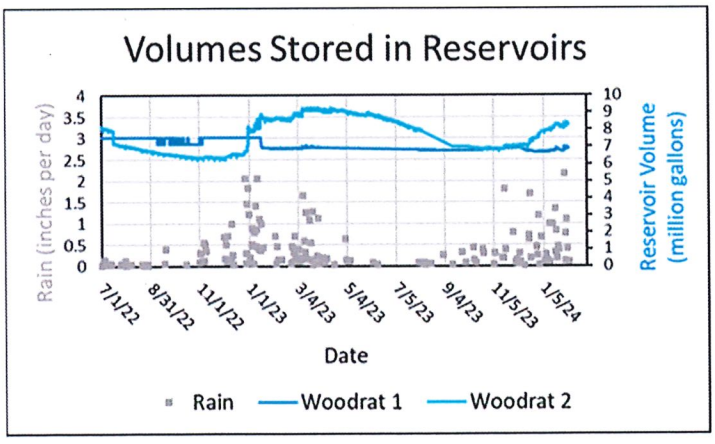
A rainfall progression analysis through the end of February (see next graph) indicates there are 46 years in the BCPUD's rain records when the district received 24.56 inches or less of rain through the end of February; during those 46 years, the district subsequently received a minimum annual rainfall of 14.49 inches, a maximum annual rainfall of 39.82 inches, an average annual rainfall of 24.85 inches, and a best fit of 34.52 inches, which is above the district's average annual rainfall of 32.52 inches.



2. Water Production and Consumption: Between January 16, 2024 and February 26, 2024, water *production* in the district averaged 53,655 gallons per day (GPD), which is a significant decrease as compared to the last reporting period, when production averaged 62,156 GPD. The reason for the drop in production is the fact that the water treatment plant was off for 18 days during this period due to storm events (which impact water quality). Water *consumption* during this same timeframe averaged 55,019 GPD (approximately 94 GPD per connection), which also is a significant decrease as compared to the last reporting period, when consumption averaged 64,004 GPD (approximately 109 GPD per connection). The district was able to meet demand by supplementing production via stored water in the district's treated water storage tanks.

3. Water in Storage:

Woodrat 1 Reservoir and Woodrat 2 Reservoir are both full and spilling.



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 March 2024. Creek flows continue to be much higher than in recent prior (drought) years, and are estimated to be approaching 250,000 GPD. The creek has been flowing over the impoundment structure all year and has continued to rise through the rainy season; flows are approaching last year's spring-time highs. Creek flows have been so high subsequent to the fall of 2022 that there have been no opportunities to compare model estimates to actual measurements. The district continues to meet demand with the Arroyo Hondo Creek water source and has not diverted from either of the Woodrat Reservoir sources.