

# BOLINAS COMMUNITY PUBLIC UTILITY DISTRICT

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

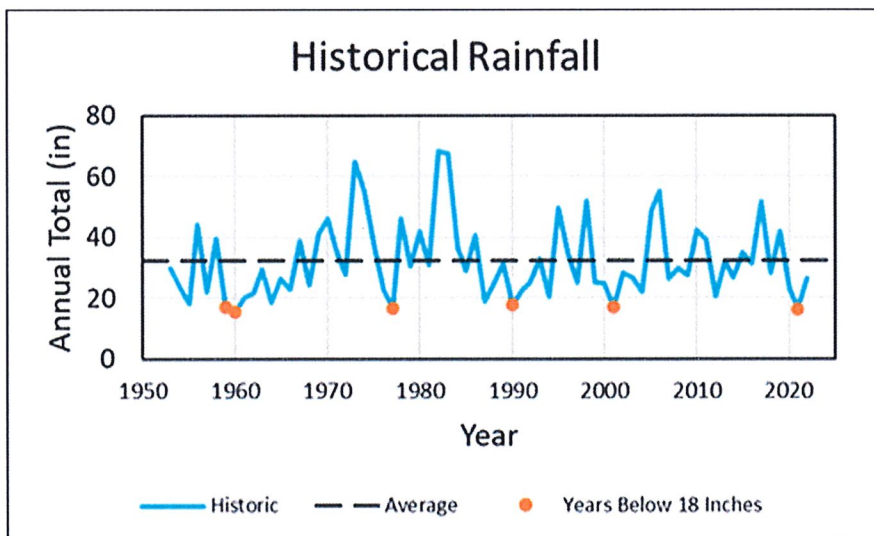


## MEMORANDUM

TO:            Board of Directors  
FROM:        Jennifer Blackman *JLB*  
RE:            Update on Water Supply  
DATE:        July 19, 2022

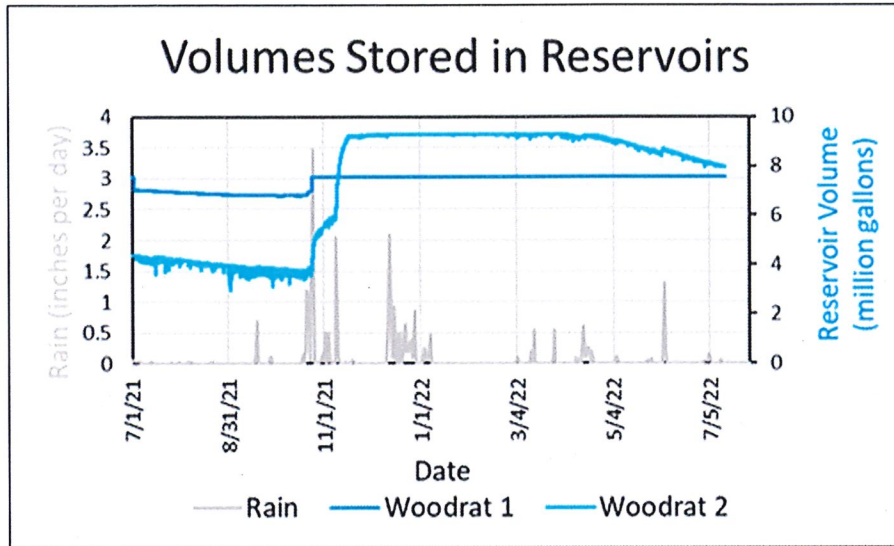
This memorandum provides a summary of the status of the District's water supply and related data and projections since the last memorandum to the Board dated June 14, 2022.

1. Rainfall: The 2021-22 rain year culminated with a total of 27.57 inches of rain received in the district. This was 11.15 inches *more* than the 16.42 inches of rain received during the 2020-21 rain year (one of six years below 18 inches of annual rainfall in the district's 70 year record), but it was the third year in a row of below-average rainfall. Thus far in July, we have recorded 0.37 inches of rain.



2. Water Production and Consumption: From June 14, 2022 – July 18, 2022, water *production* averaged 83,650 gallons per day (GPD), which is an increase of approximately 4% as compared to the last reporting period, when production averaged 80,578 GPD. Water *consumption* during this same timeframe averaged 84,707 GPD (approximately 144 GPD per connection), and is an increase of approximately 6% as compared to the last reporting period, when consumption averaged 79,471 GPD, or approximately 135 GPD per connection

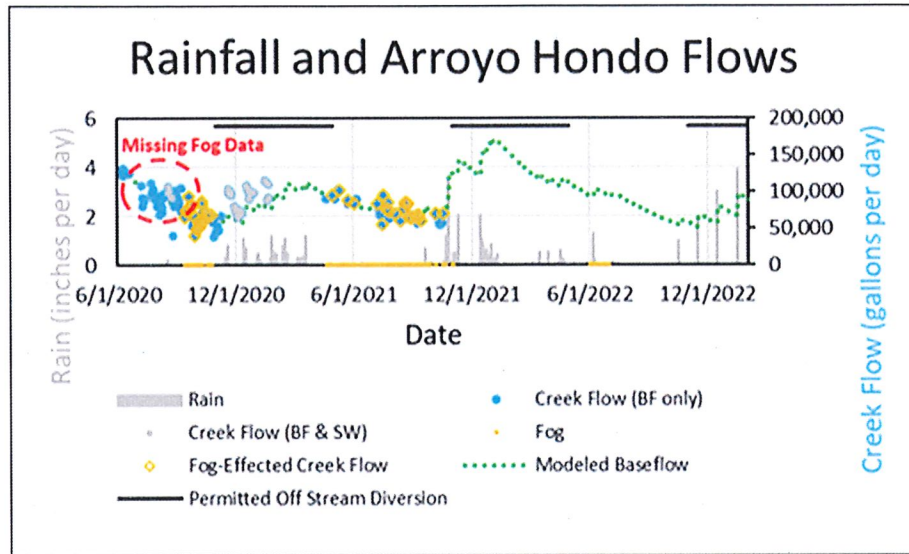
3. Water in Storage:



The updated graph above depicts the volumes of water stored in each of the district's reservoirs (Woodrat 1 and Woodrat 2) from July 1, 2021 through mid-July 2022, with the rain events also shown. Our stored usable water supply in the two reservoirs as of July 14, 2022 (combined), plus the amount of treated water in storage, is estimated to be approximately 15 million gallons. The Woodrat 1 Reservoir is essentially full and the Woodrat 2 Reservoir is approximately 86% full. Losses from evaporation and seepage are evident in the Woodrat 2 Reservoir, which is more exposed to wind and has a larger surface area than the Woodrat 1 Reservoir; the loss rate is approximately 400,000 gallons per month during the summer/longest days of the year. Some loss also occurs at the Woodrat 1 Reservoir, but more favorable conditions (this reservoir is more protected from the wind) result in smaller losses which are not evident as a result of ongoing operations (i.e., water from filter backwashing is returned to reservoir).

4. Updated Base Flow Recession Model:

The graph on the next page is the district's base flow (BF) recession model for the Arroyo Hondo Creek, updated to depict predictions about creek flows for the remainder of the calendar year. The model estimates that mid-July flows in the creek are approximately 92,500 GPD.



5. Scenario Summaries:

The graph below is a Scenario Summary similar to the approach used at this time last year, reflecting the actual data recorded as of July 18, 2022 (the single brown dot in the upper left) and the “fork” of projections as to how much stored water the district will have available through 2022 and beyond based on differing rates of overall community water consumption and based on an assumed (but hypothetical) receipt of 9.9 inches of rain during October 2022 through January 2023. The most recent seven-day running average community consumption is just under 80,000 GPD placing the district closest to (but not on) the darker blue line right now, although water consumption has been much higher than 80,000 GPD during some of the warmer days earlier this summer (and, as noted above, averaged nearly 85,000 GPD during the reporting period). This graph indicates that if consumption stays close to current levels and the 9.9 inches of hypothetical rainfall occurs by January 31, 2023 (a relatively conservative assumption), the district will have approximately 12.6 million gallons of water in storage through January 2023. Results would be less favorable if less/no rain occurs since creek flows would continue to drop and no reservoir inflows from runoff would occur.

