

BCPUD PIPELINE



Winter 2020-21

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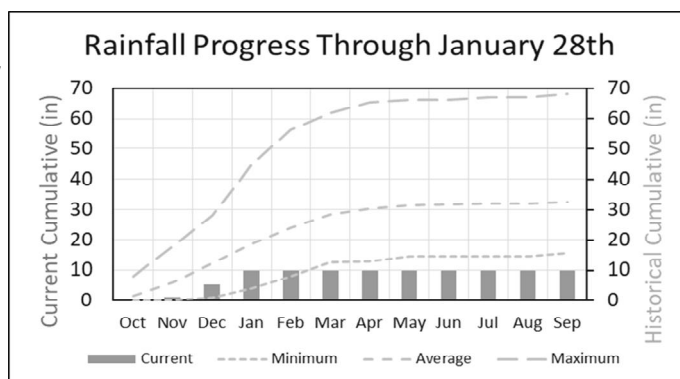
Update on the BCPUD's Irrigation Pump Station Replacement Project!

As this newsletter goes to print, the installation of the district's upgraded spray irrigation pump station at the treatment ponds is underway! The BCPUD is replacing the original pump station, which consisted of two 40-HP vertical turbine pumps (which were not enclosed or otherwise protected from the coastal marine environment), each of which extended 15-feet below the ground surface and drew effluent from near the bottom of the final treatment pond for disposal via spray irrigation. The replacement pump station is an above-ground integrated, fully-enclosed package pump station that draws from the surface of the final treatment pond for disposal via spray irrigation, or recirculation to the primary ponds. Flow meters also will be installed to more accurately measure spray irrigation discharges to the disposal fields. The new station is scheduled to be installed and operational by mid-March 2021.

Water or Sewer emergency? Please contact our office at 415-868-1224

Water Supply Status as of January 2021 Mandatory Rationing To Take Effect on March 1, 2021

The district's well-known limited water supply is very stressed at the present time. Why? Because this is a very, *very* dry rain year thus far. A rain year is measured from July 1st of each year through June 30th of the following year. Since July 1, 2020 through January 31, 2021, the district has received only 10.2 inches of rain, which is well-below average for this time of year. (See the graph to the right, indicating the January rainfall as compared to minimum, average and maximum years.) The last rain year also was very dry: Bolinas received only 22.7 inches of rain between July 1, 2019 and June 30, 2020. As a point of reference, average annual rainfall in Bolinas is 32.5 inches. Given our current dry status, and based on an analysis of historical rain records for the last 70 years, BCPUD projects that the total rainfall the district will receive this year is likely to be a total of no more than 21 inches — so, approximately 11 more inches — and perhaps less.



As a result of the low projected rainfall and following an assessment of the current/anticipated flows in the Arroyo Hondo Creek (the district's primary water supply source) and the amount of water in storage in our two reservoirs (the district's emergency back-up water supply sources), BCPUD staff has recommended to the Board of Directors that the district enact a **mandatory rationing program effective March 1, 2021 limiting water use to no more than 125 gallons per day per connection for residential properties** to ensure that overall water consumption does not increase as it normally would on a seasonal basis during the Spring, Summer and Fall months. In general, water use in the district increases during these months with longer days, as gardening and summer-related activities taking place. BCPUD staff projects that if water use were to increase in a similar manner this year and rainfall is less than currently projected, the district could face serious water quality problems and/or even run out of water by Fall 2021 — hence the recommendation to ration water to ensure the reliability of water to the community throughout 2021. The BCPUD Board is scheduled to take action on the staff's recommendation at its regular monthly meeting in February 2021 and the specific results will be posted on our website at www.bcpud.org and otherwise widely publicized.

It is important for the community to understand that the challenge facing the district at the present time is a *water supply* problem. It is NOT a *water use* problem. Water use in town is very low by historical standards and has declined commendably since June 2020 in response to BCPUD's heightened water conservation alert. Water use in town declined further following a special meeting of the BCPUD Board on September 30, 2020 at which time the community was asked to voluntarily limit usage to no more than 150 gallons per day per connection. As such, *there is no specific "type" of customer to "blame" for the community's current water supply shortage.* We are all in this together as a community living in a district with a chronically very limited water supply — that simple fact was the foundation for the moratorium on new connections established by the BCPUD Board in the 1970's. BCPUD staff emphasizes this point in an effort to ensure the factual record is clear and to eliminate a potential point of division in the community.

Conducting a Household Water Audit

The following household water audit information can assist homeowners in determining how much water is used throughout the day and help to identify ways that water use can be minimized to help conservation efforts.

The worksheet below can assist in figuring out how much water gets used at your property on a daily basis. *Note that the Gallons Per Minute listed on this worksheet are estimates based on standard appliances and fixtures.* Check your fixtures for flow rates to get an accurate number (for example, low-flow toilets use 1.6 gallons per flush and efficient laundry machines use 17-20 gallons per use).

Water Use Activity	Gallons per Minute or Use	Minutes or Uses per day	Total Water Use Per Day
1. Showers	5 gal*/minute	X _____ = _____	_____
2. Baths	36 gal/use	X _____ = _____	_____
3. Tooth Brushing	3 gal/minute	X _____ = _____	_____
4. Hand Washing	2.5 gal/minute	X _____ = _____	_____
5. Shaving	3 gal/minute	X _____ = _____	_____
6. Toilet Flushing	3.5 gal*/flush	X _____ = _____	_____
7. Dishwasher	30 gal*/use	X _____ = _____	_____
8. Laundry	48 gal*/use	X _____ = _____	_____
9. Garden	12 gal*/min	X _____ = _____	_____
Total			_____

*Note - Newer, water-efficient appliances will use much less water than older models. Irrigation systems may use more or less water based on how many zones you have. To find out how many gallons your appliance and/or watering system uses, follow the “How to read your water meter” instructions below.

Use this area (or create a separate sheet for yourself) to calculate your water use by reading your water meter:

Meter reading #1	Meter reading #2	Difference	Multiply by 7.48	Total Gallons
_____	_____	_____	7.48	_____
_____	_____	_____	7.48	_____
_____	_____	_____	7.48	_____
_____	_____	_____	7.48	_____

Making changes in your daily behaviors that are simple and inexpensive will go a long way towards conserving our most precious resource – water. For tips and information on how to reduce your water use, go to the Water Conservation page of our website at <https://bcpud.org/water/water-conservation/>.

How to read your water meter

There are 7.48 gallons of water per cubic foot. To calculate the average gallons per day used each quarterly billing cycle, multiply the total cubic feet used (found on your water bill) by 7.48 to find the total gallons used. Divide the total gallons by 90 to get the average gallons used per day. To determine how many gallons are used at any given time, do the following:



- Check your meter and write the current reading down under “Meter reading #1”, above.
- Run water specific appliance or system.
- Check you meter again and write the new reading down under “Meter reading #2”, above
- Calculate the difference by subtracting the 1st meter reading from the 2nd meter reading
- Multiply the difference by 7.48 to get the total gallons.

*For example: 1st read at 12:00pm – 4774 2nd read at 1:00pm – 4779
 Difference – 5 (total cubic feet used) 5 X 7.48 = 37.40
 Total gallons used between 12:00pm and 1:00pm = 37.40*