

Bolinas Community Public Utility District
A Special Meeting Of The Board Of Directors
February 3, 2021 270 Elm Road, Bolinas

In compliance with local and state shelter-in-place orders, and as allowed by the Brown Act as currently in effect under the State Emergency Services Act, the Governor’s Emergency Declaration related to COVID-19, and the Governor’s Executive Order N-29-20 (March 17, 2020), the BCPUD did not offer an in-person meeting location for the public to attend this meeting. The meeting was limited to essential district business items and was conducted by the BCPUD Board, staff and public via teleconference.

1. Call to Order.

7:31 p.m.

2. Roll.

Directors Comstock, Godino, Siedman, Smith and Walker present via teleconference; director Siedman presiding.

3. Community Expression.

Genie McNaughton inquired as to whether her proposed water conservation policy should be discussed at this meeting; director Siedman asked her to submit it as an agenda item for the February regular Board meeting. Jack McClellan asked if the district has an answer to his question about the confidentiality of individual customer water consumption records. Director Siedman responded that those records are confidential as a matter of state law. Ralph Camiccia commented that the concept of a town advisory forum will likely be discussed at the Board’s regular meeting later in the month and he encouraged everyone to attend and comment on the proposal. Steve Nicholson said he has tried to access the BCPUD website several times over the last two weeks and has not been able to do so; he inquired whether the website has been down for any reason. Staff said that it has not and provided the correct website address: www.bcpud.org. Barbara McDonald said that she does not understand what rationing means and how it would be implemented; director Siedman said that will be explained during the next agenda item.

4. BCPUD Resolution 680: Declaring a Prolonged Drought Condition in the Bolinas Community Public Utility District and Implementing Mandatory Conservation Measures Pursuant to a Previously Established Water Shortage Emergency.

Staff introduced Bill Pierce, BCPUD Chief Operator, and Rob Gailey, the district’s consulting hydrologist, and noted they both are present to answer questions that may arise during the meeting. Staff said the materials to be presented tonight are posted on the district’s website and encouraged the public to follow along. The topics to be covered include a background about the district’s water supply, an update on current water supply conditions, and the planned course of action to implement mandatory rationing of water effective March 1, 2021 to ensure that water use does not increase (as it typically would, during the Spring, Summer and Fall months) so that the district has sufficient water to reliably serve the community throughout 2021.

Staff acknowledged that while it has rained in recent days, the district is still far below average in terms of rainfall for this time of year; in fact, the district has only received 10.2 inches of rain thus far. Last year, the district received only 22.7 inches of rain as compared to the district’s average rainfall of 32.5 inches. As such, the district is at less than one-third of normal rainfall right now, following a dry year during which the district received only two-thirds of normal rainfall. Staff emphasized that the challenge confronting the district is a water *supply* problem (i.e., the lack thereof) not a water *use* problem (consumption is very low right now as the community has done a fabulous job of conserving). There is no specific type of customer, type of person, or entity to “blame” for the current water supply shortage; it is very important to underscore that point and unite the community in an understanding that Bolinas has and always has had a very limited water supply, which is why the water moratorium was enacted and remains in effect.

Staff said it is critical to keep water consumption as close as possible to the current level (or below) and not allow water use to increase, as it typically would as the days lengthen and warm up, due to the commencement of gardening and other water-intensive activities. In other words, staff believes that mandatory rationing is necessary to ensure that “seasonal demand” increases in water use do not occur. Staff will recommend that rationing be implemented by a *per connection per day* amount, with specific limited exceptions for the Board to consider for businesses, public-serving and multi-use entities. Staff cannot provide a specific number for the daily per connection ration amount until all exception requests are considered and determined by the Board (tentatively scheduled for a special meeting of the Board on February 24th), but staff believes the daily per connection ration limit will be no more than 100 gallons per day per connection. The ration amount may be adjusted over time, either upward or downward, depending on

weather conditions. Staff plans to distribute water audit guides and other information for people to better understand their current water use and opportunities for conservation. Finally, staff is actively exploring potential sources of emergency back-up water.

The district's primary water source is the Arroyo Hondo Creek, located in the southern portion of the Point Reyes National Seashore. This small perennial creek has supplied the district since the 1920's. The limited flow from this creek is one of the reasons for the Board's enactment of the moratorium resolution. The district also has two sources of emergency back-up water supply in the Woodrat 1 and 2 reservoirs, constructed in the 1980's. These three sources are all surface water sources fed by rainfall. The reservoirs are supplied by intermittent (seasonal) creeks that exist during the rainy season, whereas the Arroyo Hondo Creek is a perennial creek fed by rainfall and also by groundwater seepage, which decreases slowly over time during the dry season. To meet demand when the creek flows decline, the district supplements with stored water from the reservoirs.

At the present time the Arroyo Hondo Creek is providing approximately 78,610 gallons of water per day (during January 2021). The creek flows have come up nicely as a result of the recent rains and the district is able to meet demand with water solely from the creek; the district is not currently diverting any water out of the reservoirs, which is great news. In addition, the district has documented some increase in water storage in the reservoirs as a result of the recent rain. Community water consumption is approximately 62,000 gallons per day, or 102 gallons per day per connection. The district has approximately 9.1 million gallons of usable water in storage as of January 28, 2021 (8,346,470 in the reservoirs and 750,750 in the treated water storage tanks).

As previously noted, rainfall so far this rain year is only about one-third of normal. Staff has analyzed nearly 70 years of rainfall records for the district and discovered that in comparable years when the district received only 10 inches of rain as of February (there are 12 such examples in the past 70 years), the district ultimately received a *minimum* of 15.6 total inches of rain for the year, a *maximum* of 27.6 total inches of rain and an *average* of 20.7 inches of rain. As a result, the historic data indicates that the 2020-21 rain year will be another dry year. If the district receives the average amount of rain based on the historic data that then would be less than 21 inches for the entire year – this assumption therefore underlies the basis of staff's recommendations with regard to rationing to ensure to the extent possible that the district does not run out of water in 2021.

Staff previously developed a *dry season* "base flow recession model" of the Arroyo Hondo Creek flow and has now updated that model to include the rainfall received thus far; while the model reflects the beneficial impact of the rains, that benefit is projected to dissipate quickly without more rain. Staff has also updated its projections of the district's water storage in the Woodrat 1 and 2 reservoirs based on actual rain data and actual recent consumption data – the updated scenarios project that stored water supplies will run out by November if the district does not receive any more rain and if water use remains at current levels (and much earlier if water use increases). More concerning, if there is no more rain this year and water use increases on a seasonal basis beginning in April, staff projects that the town will be critically low on water (and experience very poor water quality) by the summer and will be out of water entirely by early September. If the district receives 15.6 inches of rain (the minimum predicted based on historical data) and water use increases on a seasonal basis, staff projects the date the town will run out of water would be pushed back to the end of November, but water quality will be very poor by mid-Summer. If the district receives 20.7 inches of rain (the average predicted based on historical data) and water use increases on a seasonal basis, staff projects that creek flows and storage will be critically low and water quality will be exceedingly poor by early Fall (fire season), which staff believes is not an appropriate position for the district.

It is therefore critical that overall community water use does not increase above current levels or the district will run critically low on water and experience very poor water quality by early Fall, or run out of water entirely if rainfall is less than projected; as such, mandatory rationing is necessary. Staff believes that community water use is about as low as possible on a voluntary conservation basis and that rationing will be needed to ensure water use does not increase consistent with past seasonal demand. For example, community water use at the present time (62,000 gallons per day) is approximately one-half of what it was in June 2020 (120,000 gallons per day). The current community water use is equivalent to 102 gallons per day per connection, but the actual water use is widely divergent across the customer base. This usage data is the basis of the staff's projection of a maximum of 100 gallons per day per connection as the ration amount.

Staff presented a series of slides to depict the projected beneficial impact of rationing on the district's available water supply for 2021. If, for example, the district receives no more rain but the community water use stays at the current level via mandatory rationing, staff projects that the date the town will run out of water would be deferred from early September to early November; however, creek flows and storage will be critically low and water quality will be very poor by Summer. If the district receives the historic low predicted amount of rain (15.6 inches) and mandatory rationing ensures that water use does not increase, staff projects that the date the town runs out of water will be deferred until early 2022, but creek flows and storage will be quite low in the summer and fall, with corresponding declines in water quality. If the district receives the historic average predicted amount of rain (20.7 inches) and mandatory rationing ensures that water use does not increase, staff predicts the date the town will run out of water will be deferred into 2022 and the district will be in a more resilient position in terms of stored water at the end of 2021 as creek flows drop if

rains do not resume before year-end. Staff is aiming to achieve this latter scenario via the imposition of mandatory rationing on March 1st and will continue to adaptively manage as necessary based on actual water supply conditions.

Staff noted the district previously rationed water in 2009 and staff has structured its rationing recommendation based on that model, which was well received by the community at that time. This model includes exceptions from the daily ration amount for less than 20 specific businesses, public-serving and multi-use entities. Staff proposes that the Board require any such customer, as well as other customer who believes they should be granted an exception, submit a written explanation of the amount of water requested (and why) by February 17th. In general, single family residences should not expect to receive an exception. Staff proposes the Board then consider all exception requests at a special meeting on February 24th. After all exceptions have been considered/decided by the Board, staff will then finalize the per connection per day ration amount for the Board to approve in connection with the implementation of mandatory rationing on March 1st.

Staff recommends that mandatory rationing be enforced on a *weekly* basis to provide customers with flexibility to plan their water use during any given week. Customers will receive written warnings initially if they are in violation and staff will work with customers to achieve compliance. As a last resort, the district will shut off water service to customers who continue to violate the mandatory ration limits after receiving written warnings. Staff noted that the mandatory ration amount will supersede the terms of any other separately approved water use permit for a property. Staff plans an extensive community outreach effort, including signage posted throughout town, to ensure everyone is aware of the implementation of rationing on March 1st. Finally, staff plans to offer tours of the district's water sources with the BCPUD's Chief Operator for those interested in personally viewing the status of the town's water supply. In the meantime, extensive information about rationing is available on the BCPUD's website, as well as information about how to read a water meter, how to conduct a water audit, how to reduce water use, and so forth.

Director Siedman asked those in attendance to state if they would like to speak or ask a question and he will call on people in order, and then provide Board members an opportunity to speak. Howard Dillon, Jack McClellan, Alan Sullivan, Janine Aroyan, Kevin McElroy, Elizabeth McFadden, and Ralph Camiccia all requested to speak.

Howard Dillon asked if any public facilities downtown will be closed to eliminate visitor use of water and whether short-term rental properties will be monitored; he further asked about the possibility of desalination and/or the use of the BCLT well downtown. Staff has spoken with the County Parks office and the bathrooms will remain open for now, but the Parks office is making contingency plans for portable toilets and handwashing stations if that should become necessary. As for short-term rentals, those properties will be subject to the same ration amount. As for desalination, that is something the district is evaluating, as well as potential groundwater sources as emergency back-up water supplies – both of these options require time, engineering and regulatory analysis.

Alan Sullivan asked: what is the district's back up plan? Staff referenced the comprehensive rationing plan, emergency back-up water supply investigation and trucking in of water if that should be needed. Mr. Sullivan asked about long-term planning to secure water if drought conditions continue for 20 years or more. Director Siedman explained the district has searched for additional water sources but has been unsuccessful thus far. Mr. Sullivan said the district needs to try harder; he said people are concerned about the future. Staff noted another option the district has considered is enlarging the size of its reservoirs as well as desalination – the latter seems the most promising given the district's location, but desalination requires a lot of energy (and is therefore costly, so the district is looking at renewable energy sources) and challenges are posed by the disposal of brine. Both of those are much longer term projects; in the nearer term, staff is focused on partnering with others on potential temporary use of existing groundwater sources.

Janine Aroyan noted that exceptions are planned for businesses, but what about single family residences with seven or more people living in them? Janine also inquired if there is any evaporation control for the Woodrat reservoirs. Finally, she asked if it would make sense for the district to add another water storage tank? Staff said that the district unfortunately does not have any means by which prevent evaporation from the reservoirs. As for an additional storage tank, staff explained that the two existing tanks hold *treated* water (as opposed to the reservoirs, which hold raw water); each tank holds approximately 400,000 gallons of water (whereas the reservoirs hold millions of gallons). Director Smith commented that an additional tank would provide very little additional overall storage and would be very costly.

Kevin McElroy said he also has concerns about long-term viability of the water system and noted that desalination could be many years down the road; he therefore hopes the BCPUD is considering additional options. In addition, he noted that at a prior Board meeting there was discussion of 25 gallons per day per person ration amount rather than a set amount per property, and he wondered what happened to that discussion and whether it could be revisited. Finally, he asked if the current water shortage is unique to Bolinas or are other water districts experiencing similar shortages. Staff said that other water districts in Marin are under heightened conservation alerts and California in general is in moderate to severe drought conditions and noted that Bolinas is particularly vulnerable because of its geographic isolation and no ability to tie-in to another water system. As for the per person vs. per connection approach to rationing, staff said

this will be up to the Board eventually; staff is recommending the per connection approach as the most equitable solution across the customer base.

Elizabeth McFadden expressed concern about rationing properties with 2 or 3 people living on them in the same manner as properties with more people and/or second or third units. Ralph Camiccia suggested it might be possible to berm an area behind the fire station (which is BCPUD property) and create a holding pond of perhaps five acres. Director Siedman said that when he was on the Mesa Park Board and a pond was considered at that site, there was opposition from the “downstream” neighbors (i.e., those down below on Gospel Flats). Ralph suggested that a well on the Bolinas School property might be productive as it is in the Merced formation; however, he acknowledged that it would be complicated from a regulatory standpoint.

Jack McClellan asked what will happen to someone who ignores the water rationing requirements, ignores the written warnings, and then attempts to turn the water back on at their property after it is shut off. Chief Operator Bill Pierce said that the meters are designed to be padlocked and staff can do so to ensure a property owner cannot circumvent a water service shut-off.

Barbara McDonald, Nina Bellak, and Michelle Sullivan requested to speak. Barbara McDonald said that she does not understand the regulations pertaining to well installations; is she allowed to dig a well on her property? Director Siedman said she can check with the County Environmental Health Department as it has jurisdiction over wells in Bolinas; director Smith noted that all wells must be set back at least 100 feet from all property lines. Nina Bellak commented that if someone applies for an exception from the ration amount and an exception is granted, then everyone else will have to use less to accommodate the exception – she suggested everyone keep this in mind when considering whether to request an exception. Michelle Sullivan raised an equitable concern about rationing on a per connection basis vs. per person basis; director Siedman said several people have expressed similar concerns and the Board will need to make the final decision on a ration approach.

Director Godino asked if there is an agreement in place between the BCPUD and the Fire District to hold water in reserve for fire emergencies. Staff said there have been extensive discussions with the Fire Department on this topic and staff was told that the amount of water available on any given day in the district’s water storage tanks (approximately 750,000 gallons) is more than adequate to meet anticipated fire-fighting needs. As for wildland fires on a much larger scale, the Fire Department advised that it would not be relying on the BCPUD’s water system but rather on mutual aid, fire retardant, water tanks and the like as happened in Inverness during the Woodward Fire; BCPUD water likely only would be used at the periphery to control embers. Director Godino asked if staff’s “running out of water” scenario reserves the two water storage tanks of water for fire-fighting purposes. Staff said that per advice from the Fire Department 200,000 gallons has been held in reserve, but staff can increase that to 750,000 gallons if the Board prefers.

Director Smith said his main concern is for large families and those with multiple units providing affordable housing to the community. As such, he encouraged customers in these situations to provide a declaration to the district as to how many people are dependent on the same water meter (no particular identifying information is needed) for the Board’s consideration. He is concerned that tenants may be evicted and forced to leave town; he noted that crises like this tend to impact the poor first, and the district should do what it can to mitigate such impact. Director Walker thanked the community for its conservation efforts and staff for the detailed presentation. She acknowledged the burden on staff of enforcing mandatory rationing as well as the potential inequities for properties with numerous people living there. She said she appreciated the constructive suggestions regarding desalination and supplemental groundwater sources.

Director Comstock commented that with regard to water for firefighting, his view is that back-up water for firefighting is a high priority and the district will do everything it can to ensure an adequate supply is in place. As for the district’s limited water supply, this is something the district has known about for decades and the basis for the moratorium – in other words, this is not a “new” issue but rather something the district has been addressing and evaluating for years. Desalination as an option is years down the road, he said, and quite expensive; the principal problem as he understands it is brine disposal. He noted that customers may be interested in pursuing the installation of rain catchment tanks and suggested that perhaps the BCPUD should have a role in encouraging this. As for exception requests, director Comstock said he is extremely concerned about the Board opening the door to numerous requests for exceptions from the ration amount. He noted that the BCPUD has no information about how many residents are served by each water meter, nor does the BCPUD know if the residents are full-time or part-time. He wondered how the BCPUD would be able to verify information submitted for an exception and stated that he is not comfortable granting exceptions based on unverified declarations as to how many residents use the meter. In fact, he said, he thinks it is impracticable for the district to administer such a system rather than a per connection ration system.

Director Siedman said he does not agree; he feels that the Board will have to take into consideration the number of people served by a meter, but that some sort of verification process will be needed. He acknowledged that staff is working very hard and thanked staff for the presentation; that said; the Board will need to figure out a fair and reasonable means by which to ration water. Staff has suggested that exceptions be submitted by a certain date; however, director Siedman said that the Board needs to establish criteria for the exceptions. Director Smith said that the Board should simply request that any customer who thinks they have a legitimate need for more water write a letter explaining why by a specific date and the district can then

assess all requests and figure out how to make things work. He said it would be intrusive to verify how many people live in a household and will need to trust that people will be honest. Director Smith offered to help read through all of the submissions for exceptions to minimize the burden on staff.

Staff suggested that the Board hold a special meeting on February 8, 2021 to develop criteria for exceptions; this will help narrow the scope of the requests. The deadline to submit requests could be set as February 22nd with decisions to be made by the Board at a special meeting on February 24th. Director Walker suggested perhaps all those properties with more than four people should be encouraged to write and identify themselves. Director Smith said that by soliciting the letters the Board will understand the community's needs. Director Godino disagreed; she said that everyone who has moved here signed up for living in a place with a very limited water supply. If customers make the decision to move here with ten people, that is a decision they make, but when push comes to shove during a drought, everyone has personal responsibility – whether it is taking laundry out of town, signing up for water delivery, or whatever the circumstances may be – to live within the allotted ration amount. Director Siedman said he isn't sure he agrees, but the meeting has been going for nearly two hours so perhaps the Board should reconvene when everyone is fresh. Director Smith said he would like to say one more thing about the equity issue: the town is in the midst of an affordable housing crisis and the district needs to acknowledge this. He said that he and his wife can manage on 40 gallons per day and he is willing to do so to enable other customers in need to have more water. Director Smith estimated that only about 10% of customers will submit exception requests.

Director Walker suggested that if the ration amount is 100 gallons per day per connection, perhaps information could be supplied about what that might look like in terms of showers, laundry, and so forth per household. Director Smith suggested 25 gallons per person per day is a reasonable ration amount, noting that the Bolinas Community Land Trust uses that figure as a benchmark; as such, 100 gallons per day would be a reasonable ration amount for a 4-person household. Director Walker suggested that perhaps households of more than four people should be eligible to apply for an exception. Staff interjected that this cannot be the starting point because the district does not have enough water available. Director Smith agreed, noting that the default ration amount may not be 100 gallons per day once all exceptions are taken into consideration (or if the district receives less rain than projected). Director Siedman said that perhaps the Board should let people know that the ration amount to be determined will be “x” number of people and if a customer believes they cannot manage with that amount, they write to the district. Director Smith said he thinks the ration amount should be set assuming three people at a property; he said the average occupancy per meter in Bolinas is 2.3 people. Director Godino inquired if the district would consider full-time or part-time status; director Walker said that should not matter. Discussion continued about water uses for people per residence vs. other potential uses such as gardening.

Staff said that the foregoing discussion by the Board has day-lighted a tremendous number of policy implications which cannot be easily resolved at this meeting. Staff suggested that the Board defer a decision on exception criteria until staff can formulate and propose a specific structure for exception requests for the Board to discuss and debate at another public meeting. Staff urged the Board to take the time needed and provide adequate notice for the community to be heard on the topic of appropriate criteria for exception requests. Staff again suggested February 8th for such a meeting; this will provide staff sufficient time to prepare for the meeting and then still hold a subsequent special meeting to consider and decide upon the requests. Director Comstock endorsed this suggestion and said the Board should not make the decision “on the fly” this evening. Director Walker, Smith and Godino all indicated they are available for a special meeting on the evening of February 8th. Staff thanked the Board for the accommodation, saying that the district will achieve a better result for the community if it takes a more structured approach to exception requests.

5. Adjournment.

9:27 p.m.