

General Manager's Update

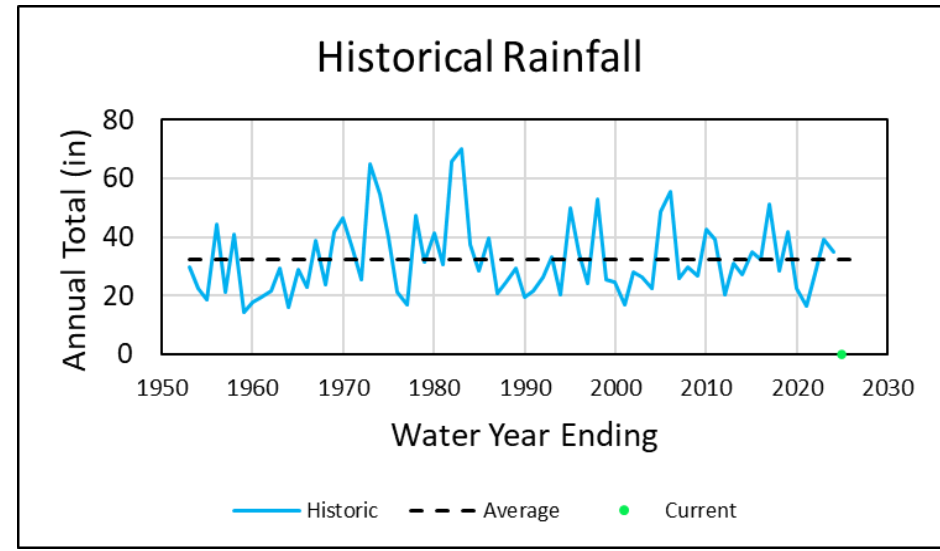
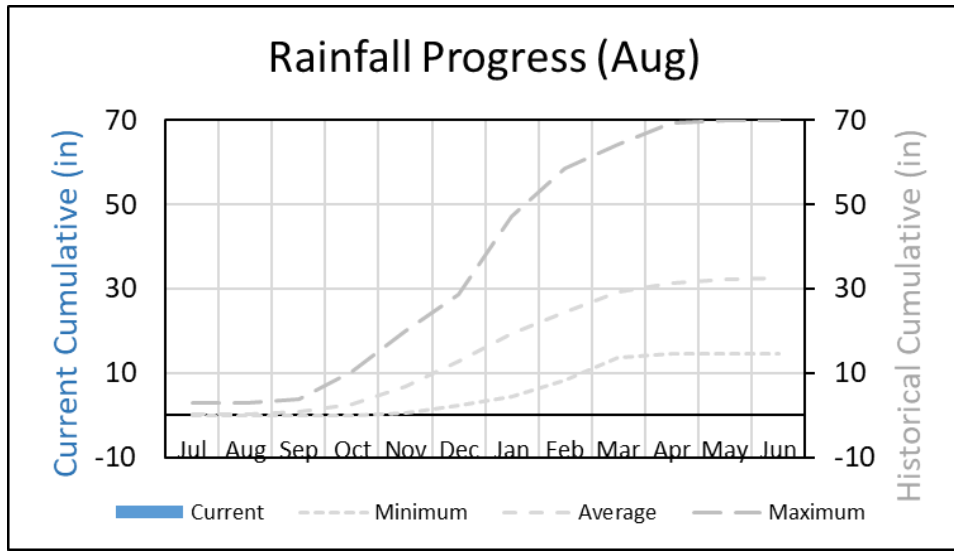
September 18, 2024

Regular Board Meeting

Presented by Georgia Woods

Status of BCPUD's Water Supply

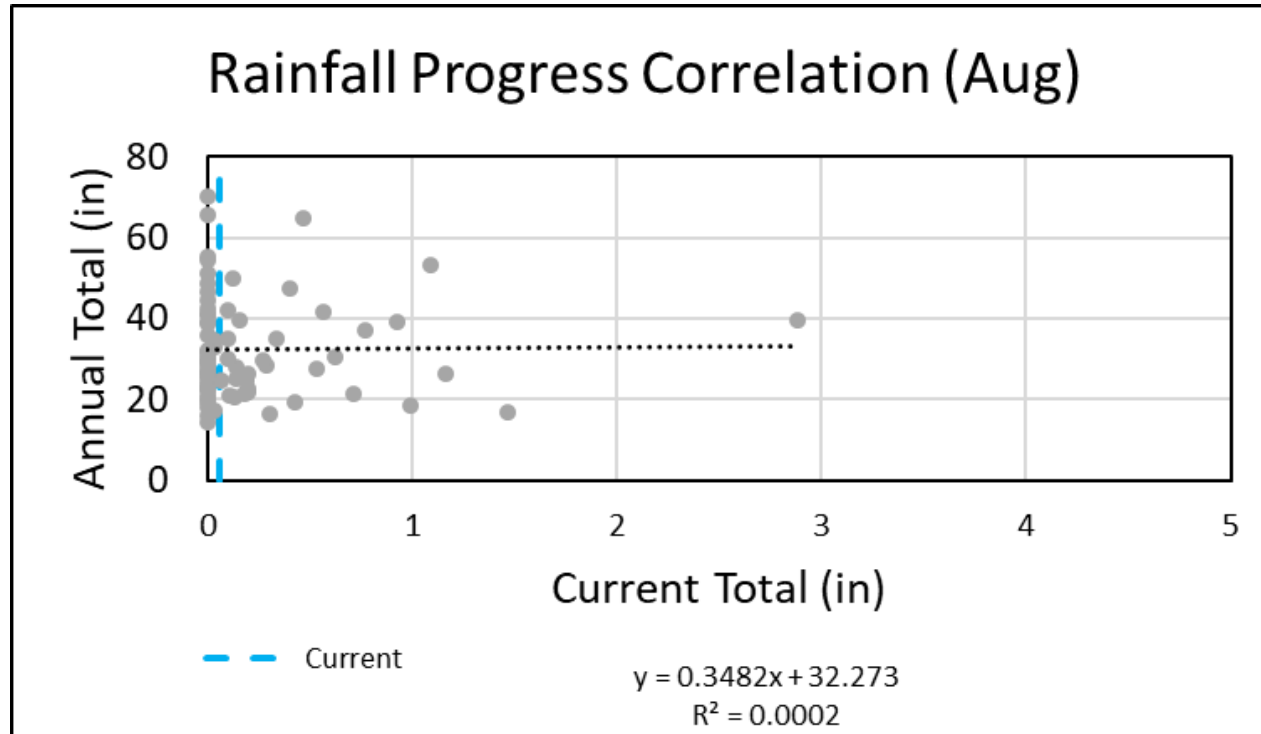
Rainfall through the end of July



As of the end of August 2024, the District had received **0.06 inches** of rain since July 1, 2024 (the beginning of the rain year), which is slightly below the average of 0.12 inches for this time of year.

This is the Second month of the new "2025" Rain Year. We received 0.06 inches of rain in August.

Rainfall Progression Analysis

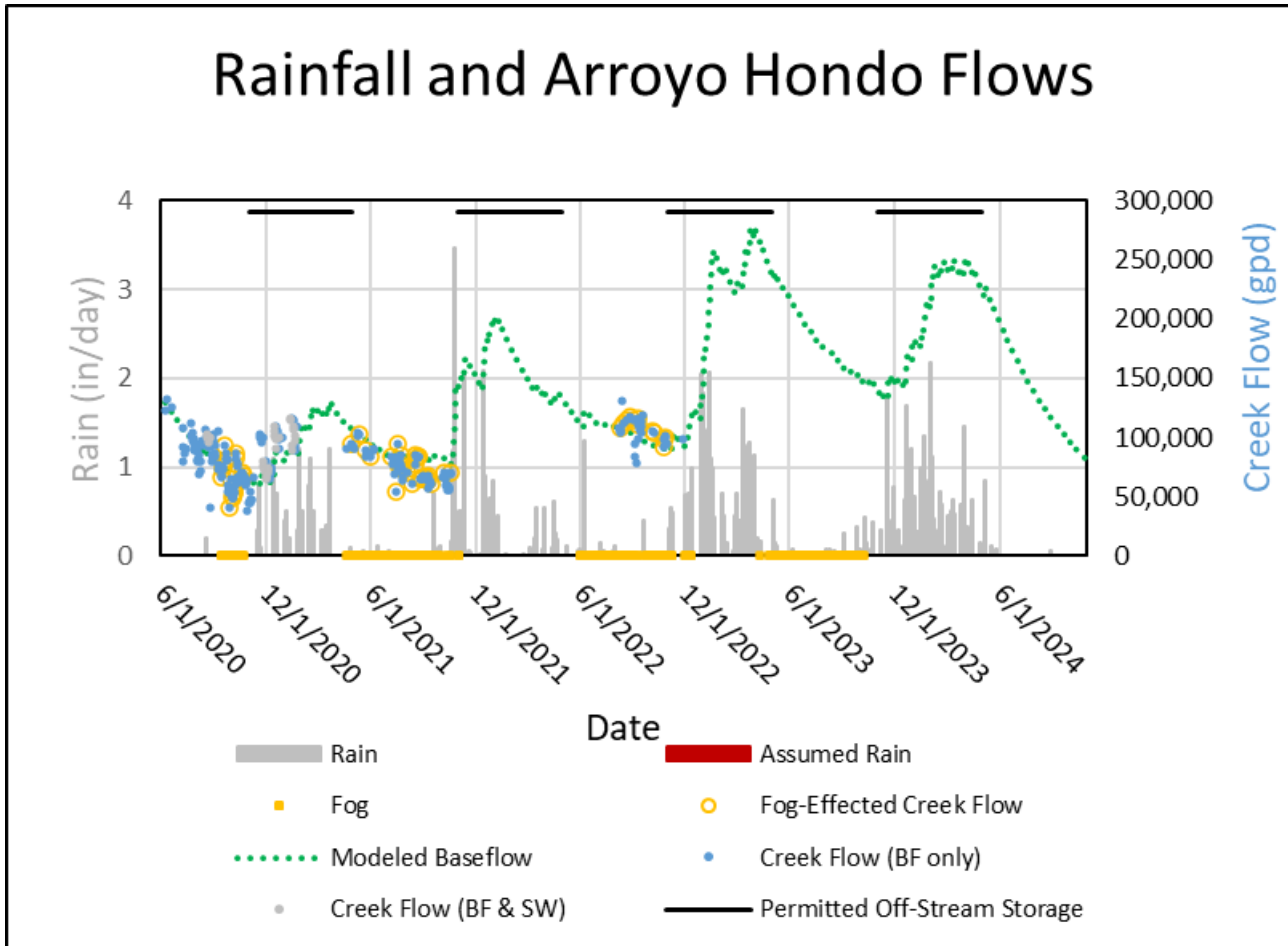


The cumulative total through August 31 is 0.06 inches, and using this progression correlation analysis, we are projecting that we will have **~31.63 inches** by the end of this rain year (June 30, 2025).

This analysis uses historical data to predicts how much rain we will have by the end of the year, based on the current year total. However, because July 1 through August 31 is just capturing the first two month of the new rain year, (and these first two months of the rain year tend to have very little rain) we are essentially predicting average rainfall for the year.

Of the 73 years on record, **45% of the years** had more rain by the end of August, compared to this year (24/25 Rain Year).

Model of Arroyo Hondo Creek Flows

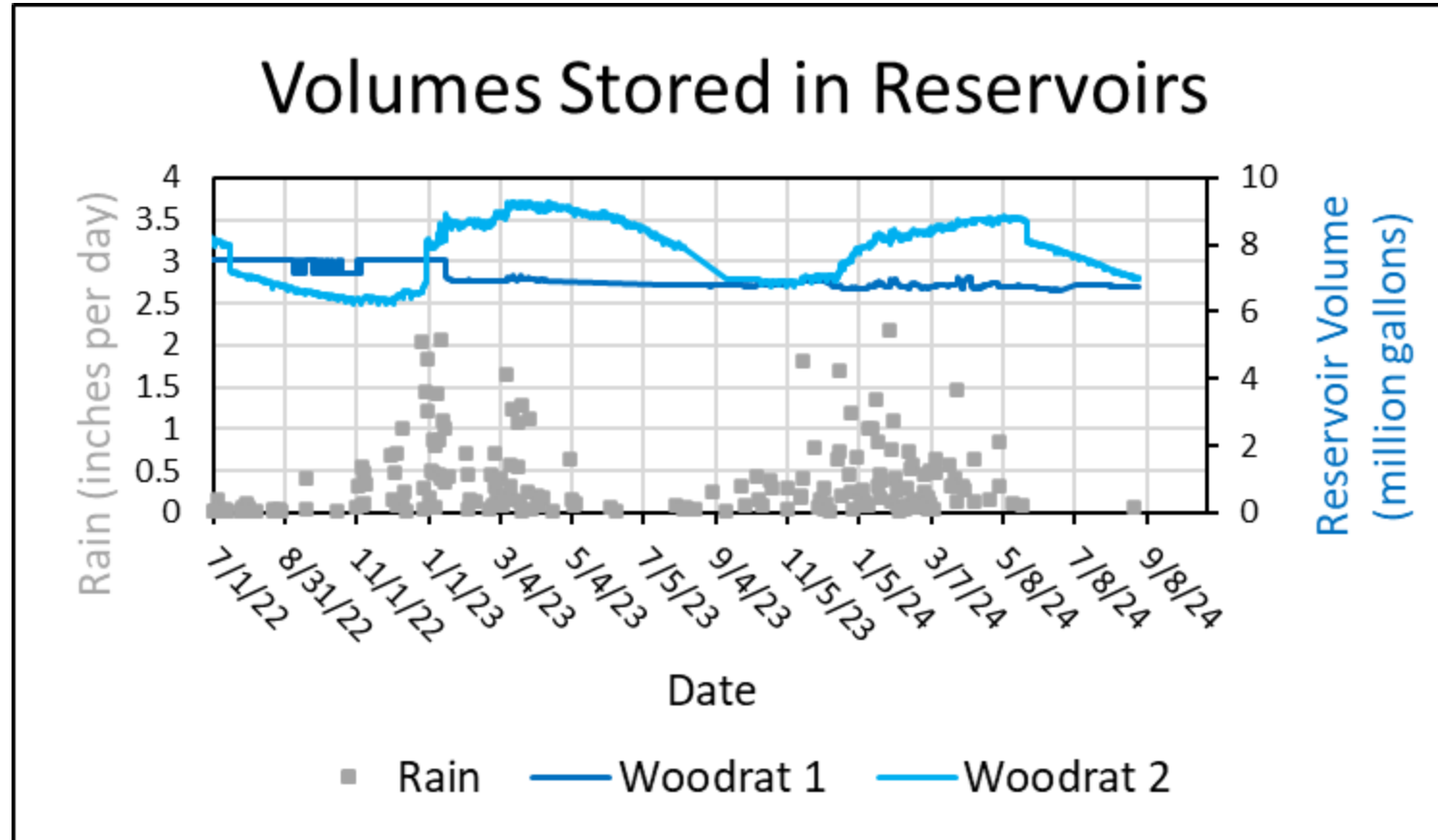


Graph is the District's Base Flow (BF) recession model for the Arroyo Hondo Creek, updated to depict predictions of the base flow portion of creek flows through the end of October 2024, based on actual rainfall through August. The creek is no longer flowing over the impoundment structures, and depending on the rate of water production, when we are drawing from the creek, water levels recede below the lip of the dam. This would allow us to gather empirical data to calculate actual creek flows, and to validate the model, however we have not yet collected this data.

Creek flows continue to meet District Demand

- However, now during "potable water production" (when we are actively drawing from the lower dam) the water level recedes about 3" from the lip of the dam.
- Average flows by the end of August were modeled at ~120,000 GPD
- This is below flows at the end of July, which were estimated at ~140,051 GPD
- Flows by the end of September are predicted to be ~ 100, 000 GPD
- Despite this decrease in flow, we have not yet had to divert from the Woodrat Reservoirs

Water Storage



Woodrat 1 Reservoir and Woodrat 2 Reservoir are no longer spilling but are still close to full.

Water **Production** and **Consumption** in July

PRODUCTION

- In August 2024, water *production* in the district averaged **92, 039** gallons per day (GPD),
- This is **DOWN** from July production, which averaged **115, 219** GPD.

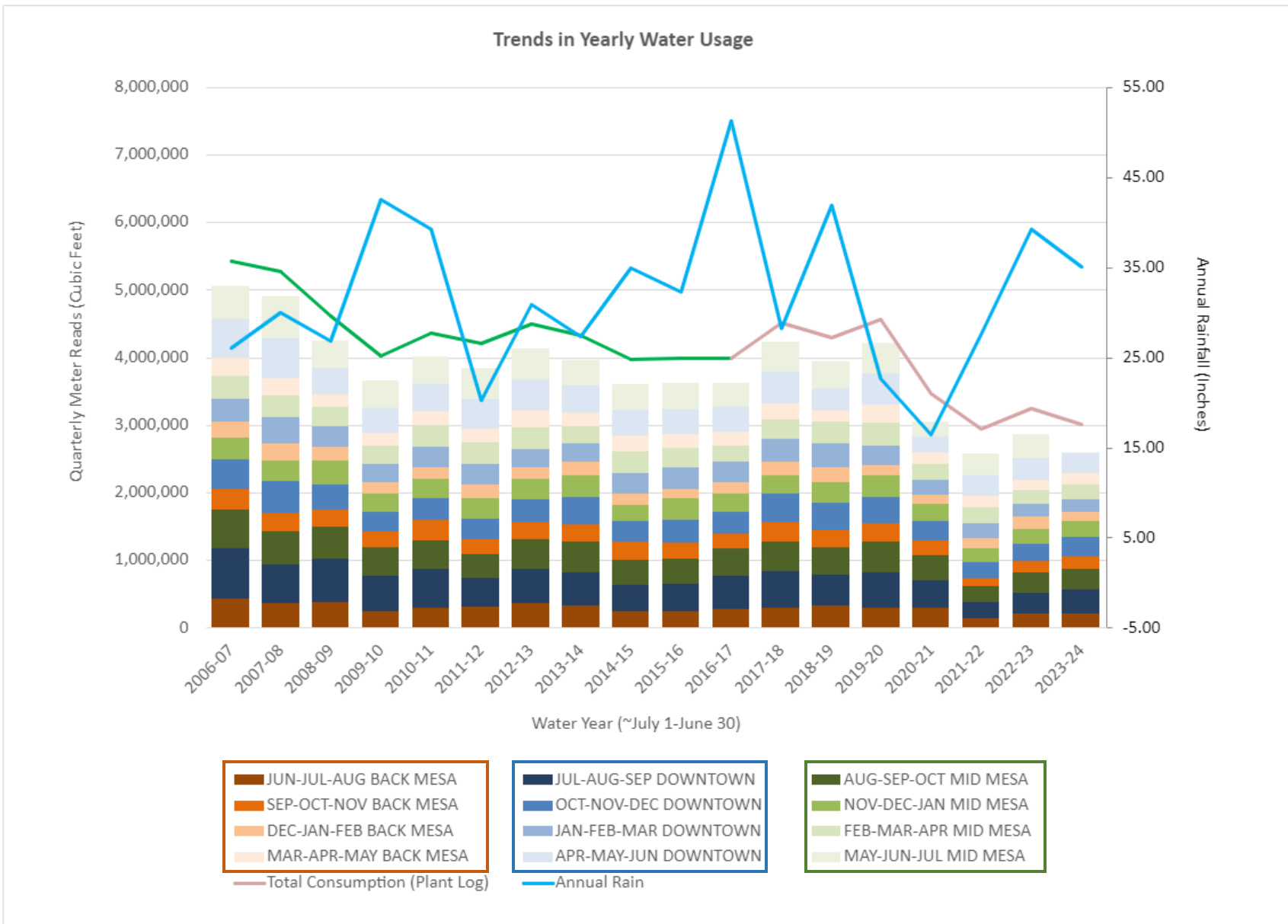
CONSUMPTION

- Water *consumption* in July averaged **92, 215** GPD (approximately **158 GPD** per connection)
- This is **DOWN** from June consumption, which averaged **116, 374** GPD (approximately **200 GPD** per connection).

RECENT WATER CONSUMPTION: From Sept. 1- Sept. 11 consumptions averaged **189 GPD**

Annual Trends Since 2006

Quarterly Water Usage through May 2024



This graph shows “Cumulative Quarterly Water Usage”, as measured by “Regional Quarterly Water Meter Reads”

- Remember: at the beginning of each month staff reads all meters within 1 of 3 given regions:

- 1) BACK MESA
- 2) DOWNTOWN
- 3) MID MESA

- Annual Rain Fall is plotted as a **BLUE LINE**

- Town Consumption Estimates, based on the amount of water leaving the treatment plant daily is shown in **PINK LINE**.

- GREEN LINE** is an extension of pink line, which a model of Consumption based on an absolute unaccounted for water loss of 437,856 CuFt (~10% loss)

NOTE: No updates since August Meeting. We are behind on inputting data from the most recent meter readings.

Meetings Attended

Meetings Attended (1 of 2)—Met with Director of Office of Emergency Management

- Steven Torrence, Director of OEM came out to BCPDU office to discuss Alert Marin—Thank you, Steven!
 - The OEM will have a draft MOU that they will be sharing with us in ~October. This MOU will proscribe how we will be allowed to use Alert Marin.
 - **BCPUD and BOLINAS FIRE STRONGLY URGE BOLINAS RESIDENTS TO SIGN UP FOR THIS SYSTEM IF YOU HAVE NOT DONE SO ALREADY!!!**
 - Alert Marin is a very powerful system!
 - We learned that in "real emergencies" this system will allow BCPUD to alert "visitors" on their mobile devices that are located within District Boundaries.
 - It will also allow us to alert folks that opt-in to Alert Marin, whether or not, the individual (and their cell phone) is located inside or outside of the district boundary at the time the message is delivered.
 - Messages can even be targeted at the level of individual addresses, so BCPUD could, for instance alert an individual block, of a potential water shut-off.
 - However, while this is a very effective and useful Emergency Alert System, it really is an EMERGENCY alert system. Alert Marin is designed to go through OEM's dispatch. Only select "managers" at BCPUD are allowed to relay messages to Alert Marin's dispatch.
 - An Emergency Water Quality Notice meets this threshold of an emergency—and BCPUD will use Alert Marin in the event of a "Boil Water Notice", or a "Do Not Drink Notice."
 - However, a temporary water shut off, where BCPUD would like to, when possible, alert customers of a water shut off as a "curtesy" would not likely reach this "Emergency Threshold".
 - This means that this system is not particularly well suited for BCPUD Operators, while in the field, to acutely alert customers of a potential water shut-off, which is something Staff would like to implement. So, BCPUD staff continues to investigate alternative alert systems that will better serve the everyday need of BCPUD to communicate with water users, customers and the community in real time.



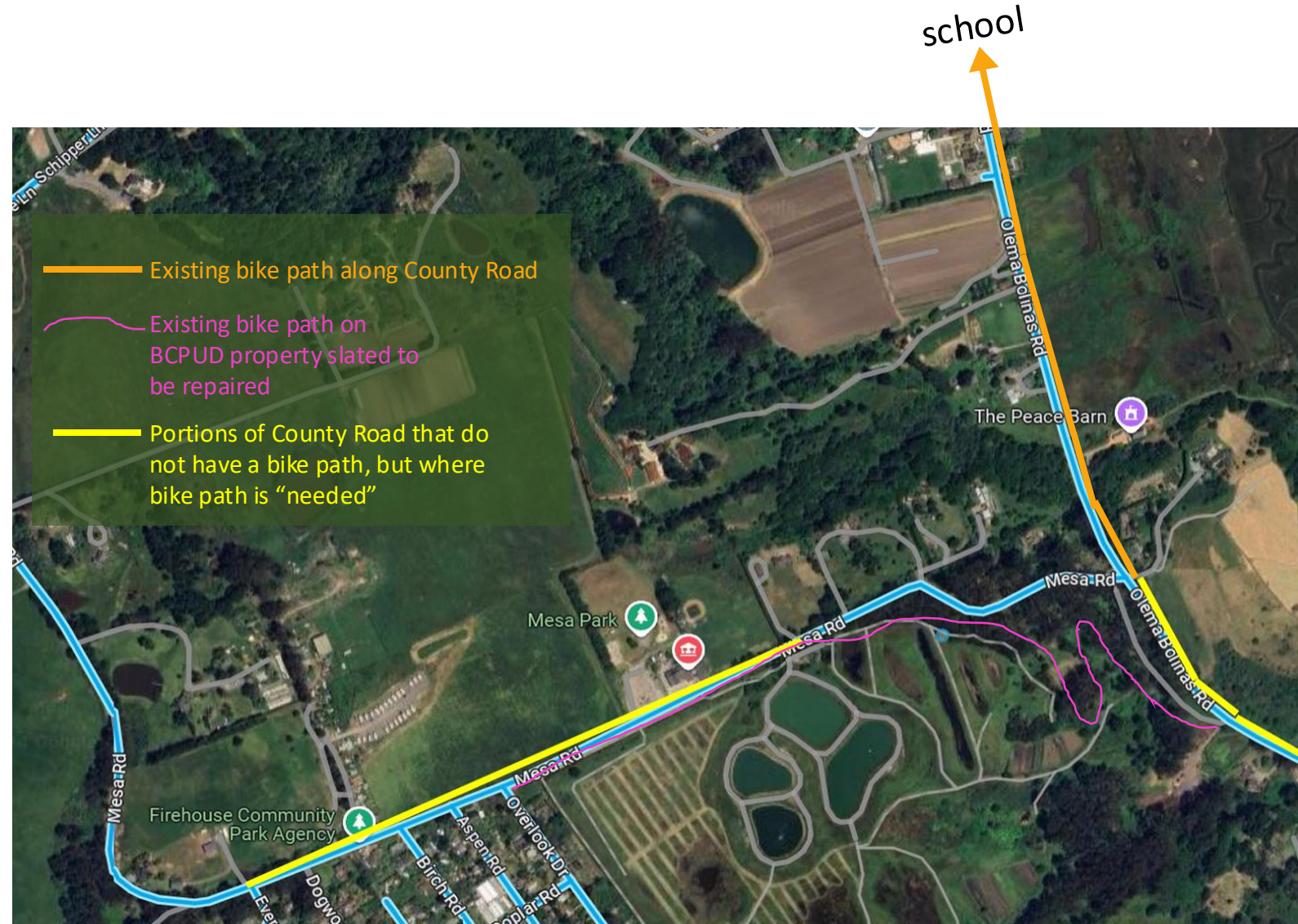
Steven Torrence of Director of OEM



[SIGN UP FOR Alert Marin!](https://AlertMarin.org)

Meetings Attended (2 of 2)— Safe Routes to School/ BIKE PATH

- On September 9, I met Leo Kostelnik, Superintendent of Bolinas-Stinson Unified School District. He directed me to this meeting with Safe Routes to School.
- On September 17, I attended a Zoom meeting hosted by Safe Routes to School
- This is a group that promotes safe corridors so that students can safely travel to and from school.
- I attended this meeting with the intention to learn more about potential funding that would enable BCPUD's bike path to link up to other portions along County maintained Roads to ensure that in the end the bike path is a useful path that allows students (and everyone else!) to safely walk and bike from the Mesa to Downtown and to School.
- This was a good starting point for meeting people that understand better the potential funding sources that could serve BCPUD and BSUSD as we partner on this effort.



Operations Updates

Operations Update (1 of 6): *LEAKS!!!*

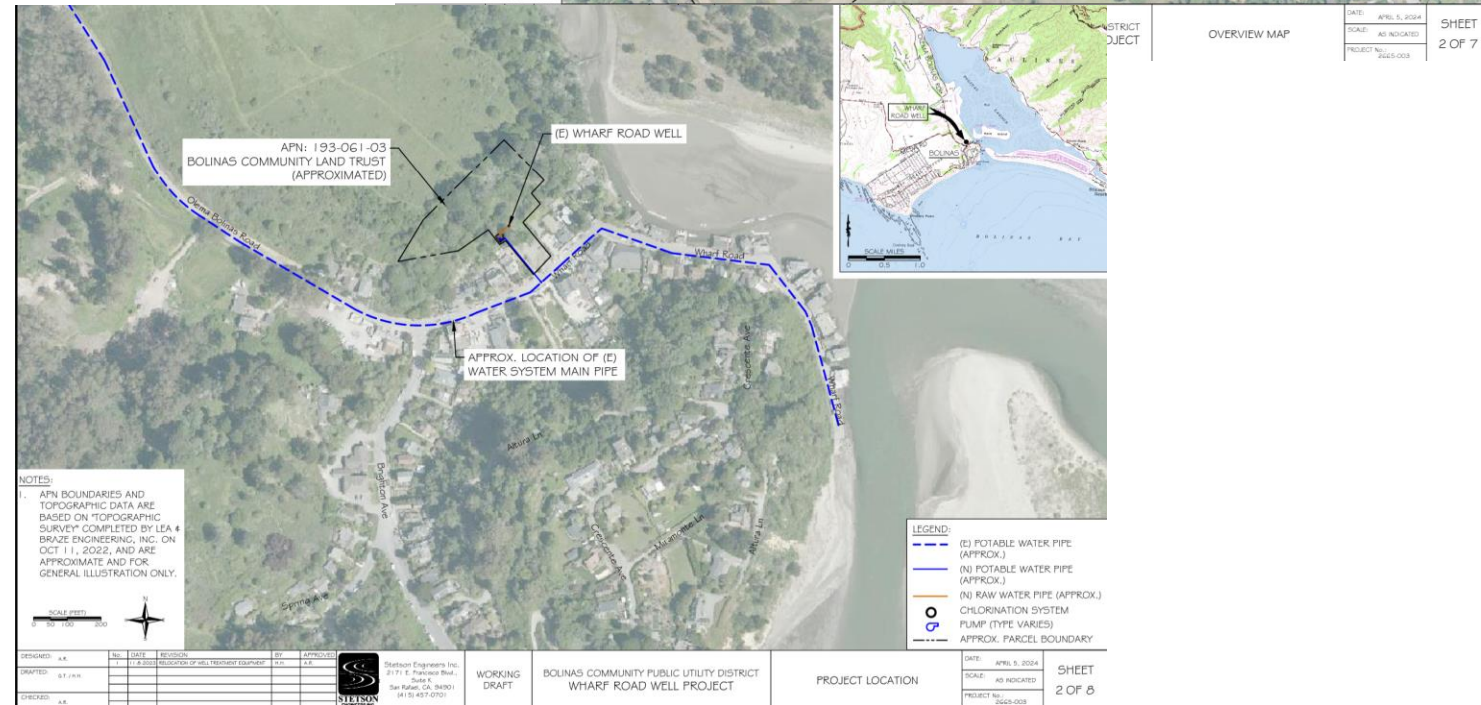
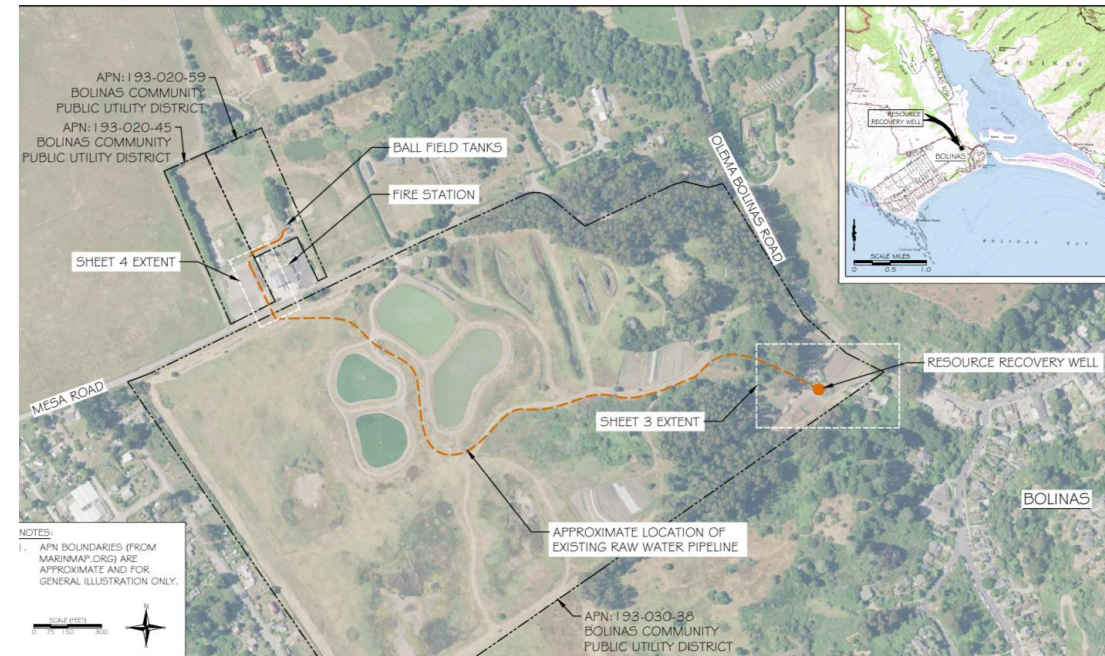
- We've had fewer leaks on paved County Roads—which is good in terms of expense
- But we've had a lot of leaks on grided Mesa, which creates a lot of strain on our Operators
- It is taking a toll on our Operations—We'd love to get these old pipes replaced!



Large leak on Birch this past week

Operations Update (2 of 6): *Well Projects*

- Well projects are moving along
- You will see a Resolution on for approval later in the meeting that will allow us to pursue to this relatively small-scale project with our own “Force Account Labor.”
- We’ve had meetings with BCLT and Habitat for Humanity to facilitate the well project at 31 Wharf, to ensure both our Well project and their housing development project are coordinated and compatible with one another.



Operations Update (3 of 6): *Tank-Site Pipeline Replacement project*

- As a reminder this is project that will replace and upgrade water pipe around the water tanks.
- Piazza Construction is slated to start this project on September 23rd!



Operations Update (4 of 6): *Radial Gate Repair*

- As a reminder there is supposed to be an assessment of the impoundment, surrounding cement wall and the gate when creek flows are low this Fall.
- What needs to happen here still:
 - We need to Gannett Fleming (Engineering Firm) to submit the full proposal for what the assessment will look like
 - We will also need this prior to submitting for the Special Use Permit from the National Park to allow for creek diversion. This permit will be needed prior to carrying out the assessment work.



Operations Update (5 of 6): *Wharf Road Sea Wall Repair*

Update from the County:

- FEMA has reduced the scope of what they consider new damage caused by the storm based on new information about existing conditions prior to the storm.
- The County would like to provide BCPUD more time to assess their utilities relative to the construction impacts, and the proposed drilling of the curtain wall is too impactful to the residents to be constructed without additional information.
- CSW has packaged a revised drawing that has a small area that FEMA is still considering, and a small area that the County will fund. .
- This project should cost under \$200,000 and be far less impactful to the residence or the utilities.
- **BCPUD's water main does NOT need to be relocated for this initial repair of storm damage**
- The 'curtain wall' is more of a preventative step that was not immediately necessary.

Operations Update (6 of 6): *Solar Inverters*

Solar Inverters and monitoring of Energy Production

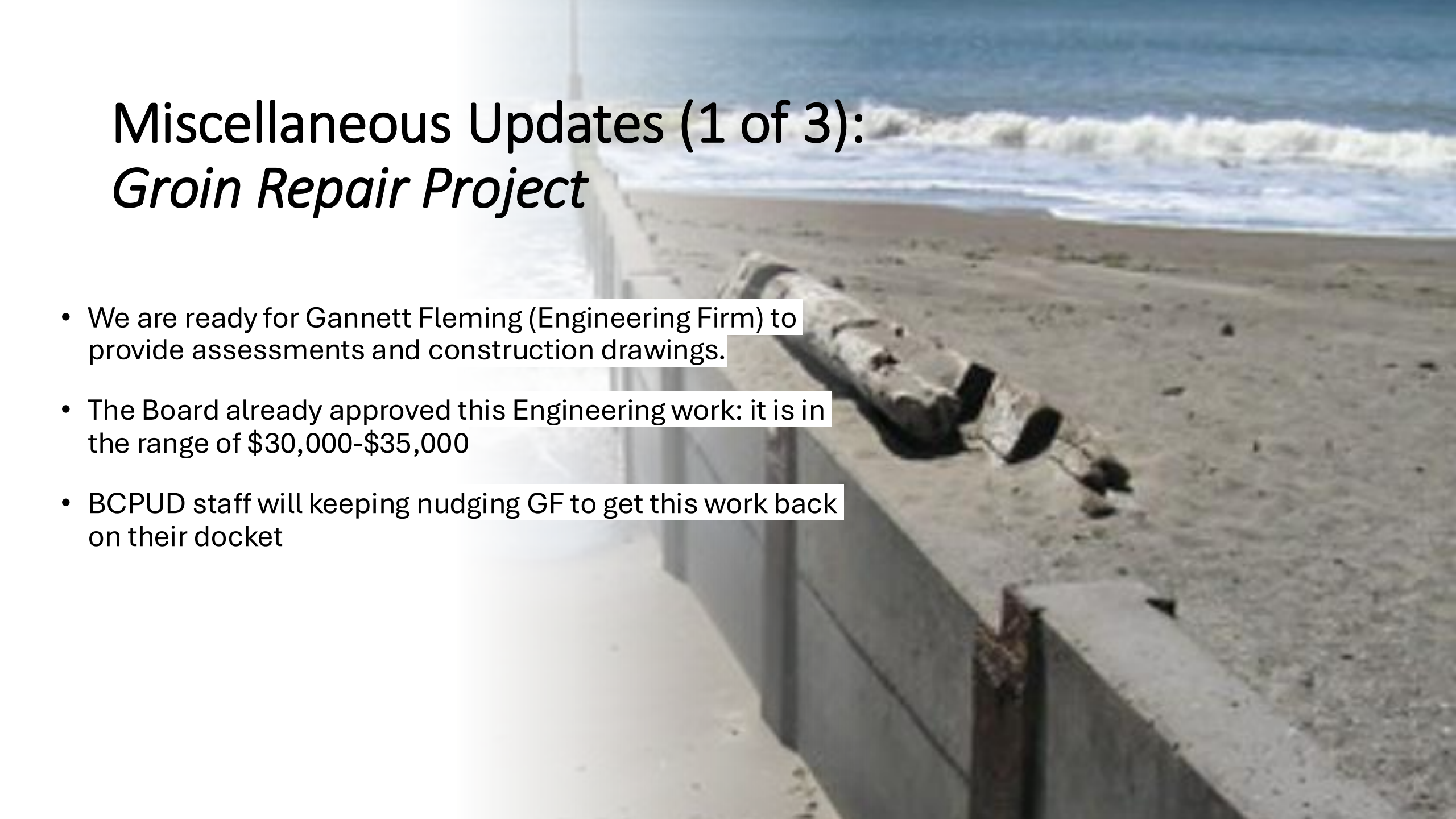
- *Solar Technologies* originally advised us to replace our two old Satcon 30kW inverters with a single Solectria 60kW inverter.
- Price tag here was ~\$40,000!!
- I've since met with their Engineer and they are now advising a repair of the old Satcon—their technician will be looking to come out ~Oct 3rd and 4th to further assess this possibility. This assessment should cost less than \$2000; they will also do some minor repairs on the other features of the solar array systems.
- Note: our PG&E True-up this summer was \$30,000!!!



Miscellaneous Updates

Miscellaneous Updates (1 of 3): *Groin Repair Project*

- We are ready for Gannett Fleming (Engineering Firm) to provide assessments and construction drawings.
- The Board already approved this Engineering work: it is in the range of \$30,000-\$35,000
- BCPUD staff will keep nudging GF to get this work back on their docket



Miscellaneous Updates (1 of 3): *Sea Wall Repair at Surfer's Overlook*

- This is another Gannett Fleming project
- As a reminder, this is no longer a BCPUD led project, but the County is continuing this spearhead this project.
- The last word BCPUD had on this was back in July, when GF asked if we could provide labor support to dig out the piles, so that their Engineers could assess the state and integrity of the piles, to determine if they are salvageable.
- We were told that this work would happen in August, but never heard back.
- BCPUD staff will nudge GF on this project too.

Miscellaneous Updates (3 of 3): *Welcome new District Employees!*



Sean Morgan—Full Time Shift Operator



Annie Laufman—Administrative Aide