The Hydrant



CAPE SAN JUAN WATER DISTRICT June 2021 Newsletter No. 139

Improving our resilience against power outages

It has always been a concern of the Water Board that if we lose power from OPALCO for an extended period of time, we will eventually run out of water as our wells require power to pump water up to our holding tanks. For the last 10 years (or so) we've had a 2nd-hand diesel generator as our backup. Unfortunately, this generator got to the end of its useful life. Rather than simply replace it with a new diesel generator, we opted to migrate to a propane generator instead. This has many advantages:

- We can store propane at the well-head because leaks won't contaminate the groundwater (we stored our diesel fuel behind the firehall).
- We can store much more fuel to run the generator for much longer.
- Propane doesn't degrade with storage, so it will be good when we need it.

Having experimented with smaller generators, we found that we needed a minimum of 10kW to power all our pumps simultaneously. A 14kW Kohler propane generator fitted that requirement with a bit to spare, and we ordered one last December. It eventually showed up in late February, and was installed (together with a new (full) propane tank on the 2^{nd} March by InterIsland Propane.

We now have the capability to keep our water flowing for at least a month of lost power. One less thing for you to worry about!



CHLORIDES ON THE RISE

Two of the most important metrics for the Cape San Juan water system are water consumption and chlorides (or salt-water intrusion). Given the nature of our limited water resource as we understand it (a lens of fresh water floating on top of sea water) the two are directly related. That is, a higher consumption of water leads to higher chlorides. The consumption of water in 2020 increased significantly due to the higher average full time population at the Cape (because of the pandemic), resulting in an extra 400,000 gallons of water being consumed compared to our normal usage for a year. The average systemwide chloride level for 2020 increased to 127mg/L or 17% above prior years. The maximum allowable chloride level is 250mg/L. So, the system is still well within the statutory limit. However, the Board has initiated an inquiry to research the underlying dynamics of the chloride level as it relates to consumption as well as other factors such the state of the tides.

In the meantime, it is incumbent on each of us to increase our efforts to reduce water consumption. A separate article in a future Hydrant will address the outdoor garden irrigation issue.

EMERGENCY SHUTDOWN PRACTICE RUN

The Water Board has developed plans and procedures for if and when we have a disaster that necessitates temporarily shutting down the Cape water system. We expect to conduct a practice run sometime in the Fall. We'll give everyone plenty of advance warning. And we anticipate that a fair number of you residents will be involved in the effort.

NEW CAPE SAN JUAN WATER DISTRICT SERVICE AGREEMENT

Every resident connecting to the Cape San Juan Water District system has, at some time or other, signed an agreement relating to the policies and procedures with respect to CSJWD providing water service to the residence. It appears the last version of said agreement was crafted more than 30 years ago. The State of Washington has new requirements for such agreements and the Board is required to prepare a new document and obtain signed agreement from each resident. The Board is currently developing the document(s) and will be circulating them to each resident for signature. Stay Tuned.

VALVE REPLACEMENT PROGRAM UPDATE

You may have noticed a hole in the ground with plywood on it. The site was excavated in order to confirm the valve sizes. The contractor has not been able to make it back out to replace the 2 valves. It should be completed in the next month. That means a water shut down for part of the system. This winter the 4 valves in the 4-way intersection of Vista Way and Island Drive will be replaced.

Water Board Commissioners
Betsy Cooper 360-378-4513
Roger Hill 425-753-6560
Ken O'Brien 360-370-5642

Water System Manager and Administrative Officer Sherri Phelps 317-8335 <u>sjwawater@gmail.com</u>

Layout and design Susie Carey