## The HYDRANT



CAPE SAN JUAN WATER DISTRICT December 2020 Newsletter No. 138

## EMERGENCY DISASTER PLAN AND SECURITY MEASURES

This year the Board completed work on an emergency disaster plan and introduced security improvements for the water system. We are planning to present the plan for comment early next year (2021) and conduct an actual emergency drill with emergency team members in the Spring of 2021. This will require a shutdown of the system while volunteers test the supply lines as if we had just had a major earthquake. We will give everyone plenty of notice. If you'd like to join the emergency team, contact Sherri Phelps or Roger Hill.

## WATER CONNECTION AGREEMENT

The water service to each residence is provided subject to a service agreement that was originally signed by the resident and the Water District. Some of the older agreements do not reflect the Washington State requirements for a community water district. Therefore, the Board is reviewing and revising the current agreement and will be proposing to execute new agreements in conjunction with current owners of the property for which water is provided. This will likely take place in 2021.

## VALVE AND HYDRANT REPLACEMENT PROGRAM

You might have noticed that the system water was shut off a couple of times these past few months, for up to a day at a time. During these shutdowns 3 important valves were replaced. They affect the entire system; that's why they are so important. All the valves in the system are getting old, wearing out, and getting stuck. The water board has put into place a schedule to replace all of the valves and fire hydrants over the next several years. The consequential outages will be spread out and affect only a section of the system at a time. Unfortunately, air is introduced to the water main during valve replacement. Although the lines are flushed in order to get most of the air out, it's impossible to remove all of the introduced air. You may get some banging of your water pipes if air bubbles entered your system, along with cloudy-looking (but perfectly safe) water.


Water Board Commissioners

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## WHERE YOUR WATER COMES FROM

The water for Cape San Juan comes from two wells dug into the eastern flank of Mount Finlayson. Pumps at the bottom of these wells pump water (which gets sanitized) up to 2 large storage tanks. Water then flows downhill from these tanks to your house without any mechanical assistance. The pumps at the bottom of our wells are in an aquifer and below sea level. So why isn't the water salty? It is because there is a continuous supply of fresh water from rainfall on Mount Finlayson that flows through the aquifer and keeps the seawater back. If we ever pump more water out of the wells than is being replenished by rainfall, we will get salt-water intrusion which would be very bad and very, very expensive to fix. Our problem is that we do not know the rate of replenishment, although we can assume it is lower when it hasn't rained for a while. We, as a community, need to ensure that our peak usage never exceeds the rate of replenishment, and conservation is the only way of ensuring that.


FINES FOR EXCESSIVE WATER USE - ugh!
Because we need to avoid pumping water too fast from our aquifer, we need to discourage excessive water consumption. To that end, a system of fines was implemented many years ago to discourage excessive consumption. This was last updated on $11 / 15 / 2019$ and is viewable on the Cape website. We assumed, based on published data, that a per capita consumption of 50 gallons/person/day is reasonable. For a residence with two people that would amount to 3,000 gallons per month. Many Cape residents consume less than this, but some use a lot more. Between April and November of 2020 there were 104 instances of household consumption in excess of $5,000 \mathrm{gal} / \mathrm{month}$, and during those 8 months the Cape Water District pumped 400,000 gallons more than in the same period last year. Normal consumption for the year is about $3,000,000$ gallons.
Our Water Manager, Sherri Phelps tries to let folks know in advance if they are heading toward a fine, but it is up to the homeowner to keep track. (If interested, a homeowner may have a remote reading meter installed on their service line for their own information.) The initial trigger for a fine is 7,500 gallons in a month. Some homeowners apparently assume the 7,500 figure is the acceptable maximum and try to stay just below that value. This is a BAD ASSUMPTION.

Your target should be 1,500 gallons per person per month!
Landscape irrigation systems are a frequent cause of elevated water consumption. Several homeowners have installed roof-drain water collection systems to help reduce the impact of landscape watering; a responsible action. The Board can provide more information on this strategy, if requested.

## REBATES/BILL CREDIT STILL AVAILABLE - NEW TOILETS AND SERVICE LINE

We still have a rebate/bill credit program to replace old (pre-1994) water-wasting toilets with new efficient units. You can take advantage of this rebate and help reduce water consumption for the Cape. The toilet rebate is a $\$ 75$ credit on your bill, per new toilet. If you replace a pre-1980 toilet, you could save between $\$ 100$ and $\$ 500$ per year on your water bill (depending on the top water rate you are paying). Replacing a 1980-1994 toilet will save you about half this amount. You can also get a bill credit for $\mathbf{\$ 2 5 0}$ if you replace your service line, from the meter to your home. Contact manager Sherri Phelps for instructions on how to receive the rebates.

