



Dedicated to Service

Newsletter

March 2023

Hartstene Pointe Water-Sewer District

(360) 427-2413
772 E Chesapeake Dr.
Shelton, WA 98584
Email: info@hpwatersewer.com
Website: hpwatersewer.com

General Manager:
Jeff Palmer
gm@hpwatersewer.com

Commissioners:
Andrew Hospador
Commissioner1@hpwatersewer.com
Jim Anderson
Commissioner2@hpwatersewer.com
Stacy Swart
Commissioner3@hpwatersewer.com

Pay Your Bill 24/7
Online: hpwatersewer.com
By Phone: 360-427-2413

Billing Office Hours
Mondays: 9:00 am—2:00 pm
Tuesdays: 9:00 am—2:00 pm
Thursdays: 9:00 am—2:00 pm

Board of Commissioners meetings are held on the 1st & 3rd Thursdays of the month at 1:00 pm in the District Office, 119 E Liberty Rd. All meetings are open to the public.

Hartstene Pointe Water-Sewer District is not associated with or governed by the Hartstene Pointe Maintenance Association. Please direct water-sewer service related questions to the District.

Hartstene Pointe Water-Sewer District is an equal opportunity provider and employer.

Hartstene Pointe Sewer History

Many years ago, when the sewer system was installed here at Hartstene Pointe, it was not built to the standards required today. Many of the lateral pipes were not properly joined together, leaving gaps. Obviously, this leads to roots finding their way into the sewer lines, leading to blockages in the pipes. The other problem it caused was I&I.



Sewer line break, misplaced gasket a potential to cause blockage

What is I&I? It stands for Inflow and Infiltration. Inflow is where things like basement sump pumps or rain gutters are tied into the sewer collection system; Infiltration is where the rain has saturated the ground and then makes its way into the gaps in the sewer pipes. You may wonder, if it's just some extra water, what's the problem?

The problem is the wastewater treatment plant (WWTP) wasn't designed to take in all of this extra water. When engineers designed it, they considered how many lots there were and calculated how much water would be used each day. And that "extra" water...it adds up. After Labor Day, when the population decreased significantly and before the rains hit, we averaged from 30,000 to 40,000 gallons per day (GPD) of flow into the WWTP. But once the rain came, we saw those flows go up significantly - once in December, to over 500,000 gallons in one day! When this happens, we have no way of stopping all that extra water from coming in. And it still must be treated. This results in a lot of extra equipment runtime, increases in chemical treatment, as well as additional manpower hours in monitoring levels, to keep from overflowing. I always hate to hear about heavy rain coming, as I know it will cause me to lose sleep.

Another problem is these flows often exceed what we're allowed. The Dept. of Ecology issues each WWTP a permit and one of the conditions for our permit is that the *influent* (incoming sewer water) not exceed 342,000 GPD or an average of 186,000 GPD for each month. When we exceed those amounts, it is a violation of our permit and Ecology can fine us for each occurrence. Thankfully, that hasn't happened yet. They understand that we can't control the incoming flow until repairs are made to all the pipes and that takes money - a lot of money!

Which leads me to the point of this story. We are working to correct this decades-old problem of I&I. Because of the cost, we needed to go through certain steps to secure funding. And that

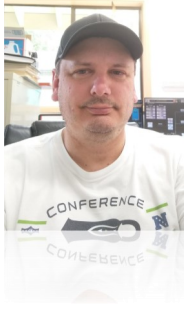


Sewer pipe connection shifted out of place, root infiltration

takes time. The first step was employing an engineering firm to update the system's *sewer plan*; this stage is completed. An application was submitted to Dept. of Ecology and our project ranked fairly high on Ecology's draft for project funding. Although it is a draft, the favorable rank gives us hope that funds will be designated for us when final decisions are made in June. As this moves forward, we will continue to keep the community updated.

— Jeff Palmer, General Manager

Nutrients in Puget Sound



Over the past few years, WA Department of Ecology has been focusing on reducing nutrients in the Puget Sound. Excess nutrients and nitrogen can decrease dissolved oxygen in water, thus affecting marine life. Wastewater plants (WWTPs) that discharge their effluent into the Puget Sound are one source of it, as are many other things. But there is an environmental group that forced Ecology to focus on WWTPs and require them to reduce the amount of nutrients they discharge.

“Discharges of excess nutrients — particularly nitrogen — to Puget Sound from domestic wastewater treatment plants are contributing to existing low oxygen levels in Puget Sound. The Clean Water Act and federal rules require WWTPs that contribute to water quality impairments by discharging excess nutrients to take action to prevent this pollution. The Nutrient General Permit applies to 58 domestic WWTPs discharging to marine and estuarine waters of the Salish Sea in Washington.”

ecology.wa.gov/Regulations-Permits/Permits-certifications/Nutrient-Permit

Several years ago, this same group asked Ecology to require our WWTP to reduce nutrient output, but at the time, Ecology told them that we weren't discharging in an affected area, so it wasn't necessary. Since then, the environmental group threatened a lawsuit, so Ecology now is making these requirements of any WWTP discharging to a Puget Sound waterway - ours included.

What does all this mean for Hartstene Pointe? So far, we're just required to collect additional samples for testing. Ecology will collect this data, and at some point, inform us of the nutrient levels we currently discharge, and how much we will need to reduce it. There are different methods to do so: sometimes, it's simply a matter of adjusting runtimes on our current equipment; sometimes, it's purchasing and installing new equipment. Obviously, we're hoping for the former. Until we know how much we must reduce, it's difficult to know what adjustments will be necessary in the future or how much of a financial impact. In addition, there are some systems that are fighting back against these requirements, as there is some debate about how much of an impact WWTPs have on the environment versus all the other causes.

Until we are told otherwise, we will continue with the additional sampling. If/when we are told how much to reduce by, we'll proceed from there. Obviously, these are changes that cost money. So while it's still too soon to tell what changes will be required, please know that we will do our best to keep these costs to a minimum. Fortunately, we are receiving Ecology grant money that's being given out to help offset these costs. We'll keep everyone posted once we know more.

— Jeff Palmer, General Manager



Drippy the Droplet's Water-Saving Tip:

“Install a dual flush or low flow toilet or put a conversion kit on your existing toilet. Modern toilets are designed to flush using 1.25 gallons or less, potentially cutting usage in half or more!”

SLIDE GATE ACTUATOR REPLACEMENT

One of the capital projects scheduled for 2023 is the replacement of the Wastewater plant's two *slide gate actuators*. The actuators are not functioning as well as they should, which is not surprising—they are likely the original equipment installed when the plant was built.

These actuators raise and lower the slide gates that allow and direct incoming sewage into the basins for primary treatment.



Pictured left, the crank allows staff to manually close the slide gate for basin #2, when the actuator fails to fully lower the gate.

Lower, right shows slide gate #1, in closed position. The incoming raw sewer water to the right of it has been through pre-screening treatment.

Lower, left is one of the aging motors that controls the slide gates.

While this may not be a glamorous project, slide gate functions are a critical component in maintaining proper, daily wastewater treatment operations.



Saving Water in the Bathroom

💧 Fix Leaky Toilets

A toilet leak can waste as much as 200 gallons of water per day—pouring food coloring dye in the reservoir can help you determine if it drips into the bowl

💧 Take Showers *Instead* of Baths

A bath can use about 70 gallons of water, but a short, five-minute shower goes through between 10-25 gallons

💧 Install Energy Showerheads

A 1.5gpm showerhead uses one-third less water than regular showerheads—ask the office for a free showerhead

💧 Fix Leaks

Each second water drips adds up fast—more than 3,000 gallons of water per year!

💧 Install Low-Flow Aerators on Faucets

Swap a screw-on aerator in a flash—look for a 1gpm unit