

It's Spring!

Charles A Smith, PE, CESCL, WDM1

Water Distribution Manager

I was asked by a friend of mine that lives in Buffalo, New York – How do I know it's Spring? I replied that "the rain is warmer and slightly less sideways".

There are plenty of Spring Checklist items when it comes to turning on your water service for the first time this season or even – for some of our new members – for the first time. Check out the questions and answers and the tips that I've gotten since the last issue.

Remember, if you have any questions about your water system, you can contact me as noted below.

To Make a Report

Information to Have At Hand

If you want to report something, have this information ready to go:

Your Name: _____

Contact Number: _____

On Island Address: _____

And a brief description of the problem or issue. This will go a long way in getting a speedy response. Report forms are available in the HMC Office or the website.

An Emergency

Don't panic and don't wait. If there is an emergency on a lot - turn the water service off at the meter and call Charles Smith, WDM or Sean Burns at NWS.

If there is an emergency with the water main or meter – call Charles (206) 707-4645 or Tony (360) 876-0958 and let them know what is happening.

A Non-Emergency Repair or Service

Send me an email (HMCWater@herronisland.org) with the above information on who, where and what and I'll get there as quickly as I can. You can also fill out the Water Service Request Form and drop it off at the HMC Office. The office will notify the Water Distribution Manager when there is a request in the office.

The Pump Station Project

Charles A Smith, PE, CESCL, WDM1

Water Distribution Manager

It's kind of amazing – cut down a few trees and a lot of people notice. As several people have let me know, there is work being done at the pump station.

First, a little background. At the pump station there is (now was) a large grove of alder trees (46 of them) and fir trees (7 of them) that kind of hid the fact that the surface water wasn't really running off site to the ditch like it is supposed to, but instead was ponding in the south west corner of the site. This may not seem like such a big deal, but the water created a breeding ground for insects, a wash pool for raccoons and kept everything around it wet through the year.

Next, the Roads Committee was looking for a place to store some road gravel so that when the roads needed to be graded or there was a need for more gravel, there would be a cost savings in having a bigger volume delivered and having a supply of gravel on hand.

Working with HMC, the Water Committee and the Roads Committee determined that to the mutual benefit of the members and the island, a road gravel storage area could be developed in the unused portion of the pump station yard. This could resolve a couple of

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CONTACT INFORMATION

HMC Water Department

Charles Smith (WDM): (206) 707-4645

HMCWater@herronisland.org

Northwest Water Systems

Sean Burns: (360) 917-4649

sean@nwwatersystems.com

Toll Free: 1 (888) 881-0958

HMC Office (253) 884-9350

Claudia Ellsworth, Island Manager

hmcmanager@herronisland.org

Carolyn Snyder, Office Manager

Office@herronisland.org

Frequently Asked Questions

There is no such thing as a stupid question

Question: How do I know how long to run the water?

Answer: This question came from a new member that was out for the first time and I reminded them that it is a good idea to flush water lines that have been idle over the winter (or for more than a month).

There is a simple calculation that can be done, but you need to know a couple of things first. Let's assume that your water service line is a $\frac{3}{4}$ inch polypropylene (typically black plastic) pipe and that it is 100 feet from your meter to the first spigot. What we want to determine is the volume of water in the pipe. We do this by calculating the area (a perpendicular slice through the pipe – but please, don't cut your pipe) times the length of the pipe.

The area of a circle is: PI divided by 4 times the diameter of the pipe times the diameter of the pipe. PI can be approximated as 3.1417 and the diameter is 0.75 inches.

This gives the result of 0.4418 square inches. To make sure we are working with consistent units, divide 0.4418 square inches by 144 square inches per square foot and the result is 0.003068 square feet. That's pretty small, but then it is only a $\frac{3}{4}$ inch pipe.

Next multiply the area (0.003068 SF) by the length of pipe (100 feet) and you get 0.3068 cubic feet.

To convert cubic feet to gallons, multiply by 7.48 gallons per cubic foot and the result is 2.29 gallons.

This means that there is only 2.29 gallons of water in 100 feet of the $\frac{3}{4}$ inch diameter pipe.

Most outside spigots have a flow rate (how much water comes out how fast) of between 2 and 5 gallons per minute. If you know the flow rate, divide 2.29 gallons by the flow rate (I'm going to assume 2 gallons per minute) and the result is 1.15 minutes. Therefore, if you run the water from the spigot for a couple of minutes, you will have flushed the line.

Question: How do I know the flow rate of my spigot?

Answer: Tell me you didn't see that one coming.

A simple way to measure the flow rate of a yard hydrant or spigot is with a 5 gallon bucket and a watch. Place the 5 gallon bucket under the spigot, note the time (or use a stop watch if you have one available) when the bucket starts to fill and when the bucket is full. This will give you a "minutes per 5 gallons" flow rate for your spigot. Divide the time by 5, and you'll

have the time it takes for one gallon to flow through the spigot. You can then use that time to know how long to run the water to flush the line.

Question: You've talked about "cleaning the screens" in sinks and appliances after flushing the water line – I don't know where these screens are located?

Answer: This is a good question and can really change how the water flows from your sinks and appliances. Typically, the screen is located inside the chromed holder at the end of the sink fixture. Be careful removing this holder, it should come off by just twisting clockwise by hand, but some may need a little persuasion with pliers or a wrench. Use a towel to help protect the chrome surface from the bite of the wrench. You may note that the threads of the holder could be inside, outside or both on the holder.



There are a multitude of different items that can be stuffed in that little space. Below are just the three that are in my home.



Some have a single cartridge unit that includes screen, aerator and gasket in one. Some have a screen, aerator, a second screen and gasket. And others have a screen, aerator and flow restrictor and separate gasket.

An aerator is used to add bubbles to the flow of water from the faucet. This reduces the amount of water that can get through the faucet and acts like a flow restrictor.

A flow restrictor is basically a plate/washer with a small

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Requestor:	
Name:	
On-Island Address:	
Contact Number:	

Description of Issue:	
[Enter a brief description of the issue to be addressed.]	

Sketch of Issue:	
[Sketch the location of the issue to be resolved to add clarity to where the work is to be done.]	

HMC Office Use Only							
Issue Resolution:							
[Enter a brief description of how the issue was addressed.]							
Personnel:			Hours	Cost/Hour	Total		
Water Distribution Manager					\$0		
Office Administration					\$0		
Subtotal					\$0		
Materials:	Description	Amount	Unit	Cost/Unit	Tax	Total	
			EACH		\$0.00	\$0.00	
Subtotal						\$0.00	
						\$0.00	

Cross Connection Control

Judy Greinke

Water Committee Chairman

The Washington State Department of Health (DOH) requires all water systems to have a Cross Control Connection Program. This program is to prevent unintentional pollution or contamination of the Herron Island Water System by requiring the installation of backflow assemblies for existing cross connections along with their annual testing.

Cross connection checklist forms were sent by HMC to all Members. The signed form must be kept on file at the HMC Office and Northwest Water Systems for Department of Health documentation. A small number of property owners still have not returned their checklist. Compliance is mandatory for each member of the water system; therefore additional delays will result in additional fees to those Members who have not turned in their forms.

Please contact the HMC Office if you have any questions.

Water Billing

Judy Greinke

Water Committee Chairman

Your Herron Island Water Department reads all water meters monthly to inform members of the possibility of a water leak on their property and collect the data needed for our rate study. Because of our seasonal population, at least one full year of data is needed to analyze our specific requirements. We are planning toward a tiered rate structure for water billing in the 2015/2016 fiscal year.

The goal is to insure that revenues from our rate structure cover the true costs to run our Water Department and promote water use efficiency. When tiered billing is in place, members will be charged higher rates per gallon for each tier. This sends a strong signal and incentive to conserve water.

Members need to be aware that the loan payment portion (\$44.55 quarterly) of your water bill is completely separate from the water rates which are used for expenses to operate the water system, maintain the facilities, and build reserves.

As we finalize the data collections and determine the rates, more information will be available. If you have any questions, please contact the HMC Office.

Issues at the pump station:

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- The unused portion of the pump station yard could be graded to drain properly, thus reducing the nuisance factor, and
- The Roads Department could have a secure place to store road gravel until it was needed.

As with most projects on the Island, people had questions, and I will present them here:

Question: Does the State and County Health Department know about the stored materials?

Answer: Yes. Part of the reason that things seems to be moving slowly at the Pump Station is that we are notifying all of the regulatory agencies and getting their buy-in or approvals as necessary prior to doing any of the work at the Pump Station Yard. We are following all regulatory agency recommendations and requirements.

Question: You talked about using plants to screen the view into the pump station. What types of fertilizers are you planning on using?

Answer: None. The option of using slow growth cedars or other plants will be discussed as one of many possible options for screening the view into the pump station. We will consult with the State Department of Health and Pierce County on what plantings are acceptable to use near well type water supplies prior to making a final decision. Another option for screening the view into the pump station is to use plastic slats in the chain link fence.

Question: I hear that you are going to park construction equipment near the wells.

Answer: Possible. We are looking into the permitting, zoning and other requirements to accommodate parking one dump truck and possibly the Island water truck at the pump station. We are currently talking with Pierce County on the requirements for contaminant controls, grease and oil containment and all other regulatory requirements prior to any final decision.

Question: There is a lot of broken concrete on the ground, why is it there and could the chemicals in the concrete contaminate the wells?

Answer: The concrete is there to provide a solid base for equipment to drive on so the equipment does not cause damage to the yard area. Basically, the concrete allows the equipment to not turn the place into a mud-bowl.

I've had a lot of experience with concrete in my construction and engineering career and I've learned a few things. First, it may be possible for some chemicals to leach from or be washed from fresh or new concrete construction. That is not what the situation here. The concrete that is being used came from the nearly 50 year

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hole in the middle that doesn't let much water through.

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The screen is used to keep small particles out of the water flow and over time, can become plugged.

You clean the screen by rinsing it under flowing water with your fingers. You may need to use a small brush (like an old tooth brush) if the sediments and particles are not coming off with your fingers.

You should look at cleaning the screen after you have run the water for a few minutes after turning it on for the first time of the year.

I've talked to several of you about this and have come across some other items to look out for:

- Some faucets are combined with a dish sprayer unit and typically don't have a removable holder for the screen. Check with the manufacturer or supplier to see if they have instructions on how to clean the unit.
- Some sinks have water filtration units installed. Again, check with the manufacturer to verify how to clean these units.
- Some sinks have no screens and "cascade clear water for cleansing". Yes, the installation instructions really say that. This usually means that the screen is located at the base of the faucet instead of at the end.

Call Before You Dig

As it is Spring, that also means that people are getting ready to build new homes, trailer platforms and other such items. If this means that you'll need to establish a new water connection – please let me know.

Examples would be if you want to install a new yard hydrant so that you have a place to wash off your boat or equipment. Or maybe you're getting that green thumb going and need a new spigot for a garden.

If you're going to be digging within 2 feet of the meter box, please let me know. Oh, hey, you're still going to be the one digging, but I can be helpful in letting you know where things are and how things were connected to existing services during the water system replacement project.

Utility Notification Center

811 or 1-800-424-5555

www.callbeforeyoudig.org

HMC Water Department

Charles Smith (WDM): (206) 707-4645

HMCWater@herronisland.org

You Know You Need It Sale

I got stuff and it's gotta go

Got Shelving?

Maybe you're looking for a nice set of shelves with only slight weather damage and possible – minor so you'd hardly notice – varmint leavings. All this can be yours for the low, low price of just taking it away! Yeap, that's free to you and me. Let me know if you want the storage unit that is on the west side of the Generator Building (facing West Madrona) before 01 June 2014. After that, it will be taken apart and recycled.

Got Sump?

Think you got water in the basement? Maybe you need to replace an existing pump?



This Water Ace R5S-1, ½ HP clear water sump pump works great. The float switch operated the motor for the pump – there is no external on/off switch. According to the internet it retails for about \$200 – The HMC Board says I can let it go for \$100. If you want it, let me know. All monetary transactions will be handled through the HMC Office.



old basketball court covering the old wading pool at Goodpastor Park. If there was any chemistry issue, it has long since passed. Both the State Department of Health and Pierce County have said that the concrete is not an issue.

Question: Are there any more projects planned for the Pump Station Yard?

Answer: Yes. These projects will not proceed without the proper approvals from the appropriate regulatory agencies and the HMC Board. Possible projects include:

- Adding 6 feet of culvert to help widen and stabilize the driveway entering the pump station.
- Covered work area because I find it challenging to wrench and assemble plumbing repairs in the rain.
- Cleaning and painting the interior of the Generator Building and possibly the Well Number 2 "Dog House".

If you have a more questions on the work planned for the Pump Station Site, please let me know.



The Bat Hutch

Charles A Smith, PE, CESCL, WDM1

Water Distribution Manager

Since we took down some fir trees and in an effort to keep the bats out of the generator building, we've installed a new place for the bats. So far, so good.

