

## Winter Is Coming

**Charles A Smith, PE, CESCL, WDM1**

Water Distribution Manager

Greetings to All. As winter approaches and things get wet and cold, it's a good time to review your facilities on your property. Do you have insulated covers for exterior spigots? How about some insulating wrap for exposed yard hydrants?

In this issue, I'll answer some more questions that I've received, talk about your meter box and describe how to install a frost free yard hydrant.

Let me know if you have additional questions or need to have the Herron Island Water Department check something out.

## 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 Tony Norris 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](mailto: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.

## Your Water Distribution Manager

### *My Responsibilities*

A few people have asked what a Water Distribution Manager is. I'm a part time employee responsible for operation, maintenance, and oversight of all water resources and water treatment required to insure an adequate supply of high quality water to support the current and future demands of Herron Island's Membership.

I work under the supervision and direction of the Island Manager and oversee the maintenance and operation of the Herron Island Water Department including all components of the water distribution system, water supply wells, pumping stations, generator, storage reservoirs, flushing hydrants and blow off valves, meters, and making minor repairs. I maintain the grounds and buildings at well site in good order and free of debris. I Act as Safety Coordinator ensuring knowledge of compliance to occupational health and water safety requirements.

I am responsible for the collection, analysis, and potential reporting of statistical data related to the operation of the water distribution system. These duties could include reading well pump flow meters and documenting water

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## CONTACT INFORMATION

### HMC Water Department

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

[HMCWater@herronisland.org](mailto:HMCWater@herronisland.org)

### Northwest Water Systems

Tony Norris: (360) 876-0958

[tony@nwwatersystems.com](mailto:tony@nwwatersystems.com)

Toll Free: 1 (888) 881-0958

### HMC Office (253) 884-9350

Claudia Ellsworth, Island Manager

[hmcmanager@herronisland.org](mailto:hmcmanager@herronisland.org)

Carolyn Snyder, Office Manager

[Office@herronisland.org](mailto:Office@herronisland.org)

## Frequently Asked Questions

*There is no such thing as a stupid question*

Question: Do I need to insulate the water meter?

Answer: No. The water meter will operate to zero degrees Fahrenheit before there are any issues. There is no need to add insulation, papers, or any other materials into the meter box. **DO NOT** fill the meter box with dirt. Filling the meter box with dirt can actually damage the meter in that acidic or basic soils can interact with the brass casing and cause corrosion.

Question: Why should I have a vacuum breaker on my exterior spigot?

Answer: As rules, regulations and processes change, one of the things I've been hearing about is providing a vacuum breaker on exterior spigots to prevent back flow of water into a house if the pressure in the house is disrupted. This can happen if you have a garden hose connected with a sprayer that keeps pressure in the hose and you start a washer. While not specifically required at this time, it's a good way to prevent cross contamination of the water service. Vacuum breakers can range in price from about \$6.00 to \$30.00. In the picture below: The brass is \$30, the nickel is \$24 and the adaptor on the right is \$6.



Vacuum breakers can be installed by simply screwing them on to the exterior spigot and then re-attaching the garden hose. Often, the vacuum breaker comes with a set screw that can be used to make the installation more permanent.

Question: My water meter and box look icky – can I clean them?

Answer: Sure. Use only water and a soft (terry cloth)towel when cleaning meter. Remember that the top of meter is plastic, the bottom is brass and the lens is glass. You do not need to use any soaps, detergents or cleaners such as dish soap or window cleaner. When cleaning the lens, wet the towel and then carefully swipe the glass then the meter parts. Question: It looks like I'm going to have lots of grass; can I mow over the

top of the meter?

Answer: Oh no – please don't! There is the meter antenna mounted loosely in the lid of the meter box. Even if you are careful, the up-draft from the mower blades may move the antenna and cause damage. I recommend that you stay at least 2 feet away from the meter box with any lawn mower. To trim grass up close to the meter box, use a line/string trimmer with plastic/synthetic line so as not to damage the box or antenna.

Question: I want to install a frost free yard hydrant in my water service; do I need to do anything special?

Answer: There are a few of things to keep in mind when installing a frost free yard hydrant. First, you should be at least 2 feet on to your property or at least 2 feet away from the meter box whichever is furthest. This will put the frost free hydrant at least 3 feet away from the meter box or property line when you are finished. Second, have all of your parts on-hand BEFORE you cut your line. And third, turn off the water service at the meter and open a spigot or faucet to relieve the pressure on the water service line before you cut the line. Trust me, I have personal experience.

Question: It seems like my meter box is in the way when I come and go in my driveway. Can I move the meter box?

Answer: Short answer – No, not by yourself. Call/email me and we can meet and see what the issue is and work out a way to resolve it. The meter and meter box are not your responsibility; they are the responsibility of HMC Management and the Water Distribution Manager.

Question: My kids want to decorate the meter box, is that OK?

Answer: While I'm always a patron of and cheerleader for personal artistic expression – discretion is better. The answer is no. The meter box should not be located on your property and is located within the HMC road right-of-way. As I stated before, the meter box is the responsibility of HMC and the WDM.

Question: What about landscaping and planting things near the meter box?

Answer: Again, discretion. Remember that on the roadside and property side of the meter box is your water service made of plastic pipe. The installation of support

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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.]	

<b>HMC Office Use Only</b>							
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	

rods, stakes, posts and other such potential to pierce the water line. If this is done on the roadside of the meter, it would mean turning off the local water main to isolate the break until it can be repaired – meaning that you and your neighbors would be without water service for that time. Not a good thing. Putting in small plants with shallow roots should not be an issue, but again, you should stay 2 feet away from the meter box in all directions.

Question: I'm on the Leak List \*AGAIN\* and I'm not sure what else I can do?

Answer: First, don't panic. I'm here to help you figure things out. Remember you can get on the Leak List a couple of ways. You're on the list because the meter has registered water flow continuously for more than 24 hours from the last meter reading or the volume of water that has gone through the meter is significantly larger than everybody else with a meter. Here are a couple of things you can do:

1. Turn off everything that runs water, then go and check the meter – if the meter is moving, even very slowly, it is likely that there is a leak between the meter and the outlet (i.e. house isolation valve, outdoor spigot, or sink/faucet). A way to isolate a possible location is to turn off the individual valves to the toilets or appliances, turn the water service back on, then turn each item on one at a time while checking the meter. If you turn an appliance on, no water flowing, yet the meter is turning, that could be a likely location.
2. If the meter is not moving – be patient and wait for 5 to 10 minutes or longer before turning the water service back on. When you turn the water back on, is something filling? Something like the toilet tank or the water heater? Then this might be the culprit. Again, having things off, and then turning on valves one at a time can help to isolate the location of a possible leak.
3. So, everything is turned off, the meter isn't moving and when you turn things back on, nothing seems to be filling, yet you are still on the leak list. This could be a very slow leak. If you are going to be away for a bit (like 24 hours or more), write down the number of gallons from the meter dial. Then when you return and before you turn the water service on, check to see if the number on the meter dial is different when you return. If the number is different, it is likely that there is a very slow (less than 3 gallons per hour) leak. This could be a leaky fitting or a pipe that is

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source production, operating, testing, maintenance and minor repair tasks, and reading meters when needed.

I am "on-call" for water related emergencies and complaints as directed by HMC Office Staff and NWS requesting information about severity of phoned-in problems, shutting down system to isolate a leak, and providing locates. I maintain a written record of all responses including the date and tasks completed and notify management as needed.

## **Frost Free Hydrant Install**

Question: I want to have a place to wash things off. What do I do?

Answer: I get asked this question a lot. Some of these inquiries come from the fact that during the installation of the new water system, old valves, pipes and other items were removed from the HMC road right-of-way. Others just want to add an outdoor spigot.

There is a significant amount of information on the internet demonstrating how to install a frost free hydrant or outdoor spigot in a water service line. I have provided some resources at the end of this section. For this newsletter, I will include the particular requirements and recommendations from the Herron Island Water Department policy and rules.

First: Decide where you want to have the spigot. This is often more challenging than originally thought. Look about and check for:

1. Drainage – where is the water from the spigot going to go? Make sure it's not to where you walk or toward your house or other buildings.
2. On the Property – Determine where your property line is (I can help if needed). It's good to be at least 2 feet inside the property line when you start just in case you need to move or make location adjustments.
3. Existing Water Service – Before you start digging, you should have a very good idea where your existing water service line is located – like 99% sure – because "exploring with a shovel" isn't nearly as fun as it sounds.
4. Trees and Bushes – Roots are difficult to dig through even with machinery. Look for a location that is "out in the open" or at least 2 feet away from existing trees and bushes.
5. Size Matters – Decide how tall you think the spigot should be for you, and then add 2 feet. There isn't really a specific frost depth regulation

for Herron Island, the 2 feet is more based on the likely depth of the existing water service line. Frost Free Hydrants come in standard lengths starting at 4 feet and increasing by 1 foot lengths. For most installations here, the recommendation would be for 2 feet below and 3 feet above the ground line for a total length of 5 feet.

6. Other Things in the Ground – Know where your electrical, telephone and any other buried service is located prior to digging. No surprise is a good thing when you're digging.

Second: Decide how you want to install the spigot in the existing water service line. There are many ways, but I'm just going to recommend 2 here.

1. The Tee Method – With this method, you will install the spigot offset from the alignment of the existing water service line. The plus of this method is the ability to install an isolation valve between the water service line and the spigot so that if the spigot ever needs repairs, you're not working directly with your existing water service.
2. The Direct Method – This is where you cut directly into the existing water service line to install the spigot. The plus of this method is that there are fewer parts required and less digging.

Third: Doing the Work. I often recommend that you consider doing the installation in 4 steps:

1. Excavation – Yes, digging the hole. Be aware of where the water shut off is located BEFORE you start digging. You'd be amazed how far away even a couple of feet can be when you have gallons of water spraying in your face. I'm just saying – preparation is good. When you have exposed the existing water service you'll want to dig about 2 feet to the left and right of the place you are going to cut the pipe. This is so you can have some flexible pipe length for installing the fitting and pipe clamps. You should also dig about 4 to 6 inches below the existing water service, so it is easier to cut and work with the pipe. This also helps prevent dirt from getting into the open ends of the pipe once it has been cut. As for the width of the hole, dig until you have a comfortable place to work and that the side won't cave in while you're working. A standard shovel is about a foot wide. Words of warning – if it looks like your excavation is going to be more than 3 feet deep – consult a professional. This is very important to be safe when excavating.
2. Got Parts? – It's likely that you've been to the

hardware store and picked up the parts you thought you needed. Look in the hole. Look at your parts. Look back in the hole. Back to your parts. Do you have what you need? If not, this is a great time to stop, assess what you need and make sure you have the right parts. Lay the parts (fittings, clamps, pipe tape, hydrant, etc.) out so that you can make sure you have everything. It's way better to do this now than have to get additional parts while your feet are getting wet. This is also a good time to pre-assemble as many of the parts as possible out of the hole and get them ready. It is easier wrenching on a work bench than wrenching in the hole.

3. The Cut and Run – Double check that your water service is off and that you have relieved the pressure on the water service line. Place the tee fitting next to the water service line so you can see how much existing pipe needs to be removed – then cut the pipe at the shoulder on each side of the fitting.

4. Installation and Backfilling – Work diligently to get the fitting into the existing water service line. At this time, you may find that you need to expose more line to have it flexible enough to place the fitting. Remember to put the pipe clamps on the cut pipe first, so that you don't have to take them apart to put them on later.

*Note: getting the fitting to fit with the existing water service line may require heating up one or the other or both. Make sure not to over-heat and damage the ends of the water service line as that repair can be tricky.*

Once you have gotten all of the fittings and pipe clamps in place – SLOWLY turn the water service back on and check for leaks. Leaks can be a spray or a very slow drip. Have a towel ready to clean each of the cut pipe locations and re-check for leaks. Once there are no leaks, you're ready to backfill. Most manufacturer's recommend that around the weep hole at the base of the frost free hydrant you should place drain rock 6 inches below, 12 inches above and a diameter of 12 inches around. I would add that it doesn't hurt to add a brick under the elbow or tee to help steady the hydrant as well. And speaking of stabilizing, it is also a good idea to place a treated 4 by 4 next to the hydrant and attach with pipe straps prior to backfilling. This will also help in making the hydrant installation stable. Place the drainage gravel first. You might need to use a bucket with



corroded or starting to split. These can be a challenge to find. Check over your exposed piping and in the crawl spaces to see if there is evidence of a leak – such as discolored wood, damp spots and the like.

**Question:** Every time it rains, it seems like my meter box fills with water. What can I do?

**Answer:** As some of you have found out when doing your own digging, most of Herron Island has a thick layer of clay near the ground surface. While this clay is good for sheeting water off the top, when you dig a hole in it, it works like a really good clay pot. Being very careful when digging around the water service pipes, you can dig down to the bottom of the meter box on the low side – the side where water will drain from the box. Then you can install a section of old garden hose as a drain in the bottom of the box and run the hose out until it's on the surface. Usually, this is done on the road side of the meter box and leads to the nearby ditch. This is something that you should let me know about with a service request form before you start digging. As I said before, the meter box is the responsibility of HMC and we should be able to come up with a solution.

**Question:**

We are trying to chase down these owner issues now before it starts costing you for water.

If you have additional questions, please email or call.

[=how%20to%20install%20a%20frost%20freeyard%20hydrant&sc=1-39&sp=1&qs=SC&sk=](http://www.bing.com/videos/search?q=how+to+install+a+frost+free+yard+hydrant&qs=SC&sk=&FORM=QBVR&pg)

How to do it yourself (DIY):

<http://www.diynetwork.com/how-to/how-to-install-a-yard-hydrant/index.html>

From eHOW:

[http://www.ehow.com/how\\_8756562\\_install-freezeproof-yard-hydrant.html](http://www.ehow.com/how_8756562_install-freezeproof-yard-hydrant.html)

The Woodford:

[http://www.woodfordmfg.com/Woodford/Yard\\_Hydrant\\_Pages/YHInstall.html](http://www.woodfordmfg.com/Woodford/Yard_Hydrant_Pages/YHInstall.html)

no bottom or a small section of pipe to make sure the gravel doesn't spread too far. I would also suggest placing a plastic sheet or bag over the top of the gravel to help make sure that the soil above the gravel doesn't clog up the drainage gravel.

It's a nice touch to replace any sod or grass that you dug up to install the hydrant or you can let the drainage gravel come all of the way to the ground surface so the water from the hydrant has a place to go.

Demonstration videos:

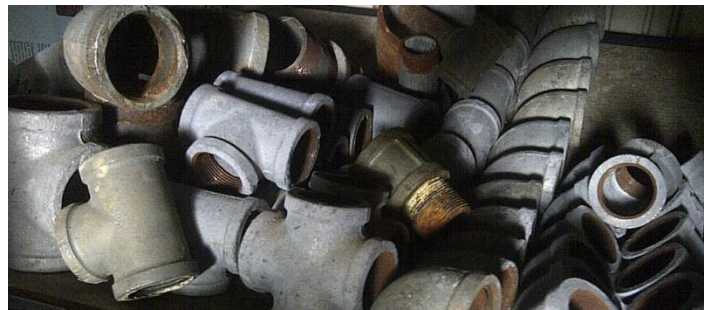
<http://www.bing.com/videos/search?q=how+to+install+a+frost+free+yard+hydrant&qs=SC&sk=&FORM=QBVR&pg>

## Inventory Reduction Sale

*I got stuff and it's gotta go*

### Got Galvanized?

Since we have transferred to the new water system consisting mostly of the plastics, we no longer have a need for galvanized pipe and fittings.



If you have a need for galvanized steel fittings send the WDM an email. We have fittings ranging in size from ½ inch to 3 inch. I have authorization from the Board to sell them at half retail cost.

### Got Stakes?

Planning on a garden or maybe a foundation or maybe you just need to do some lay out work. Some are old,



some are new, some are even written on and the color blue. I'm letting them go for 10¢ each or 12 for a \$1.00. First come, first served until they are gone.

All transactions will go through the HMC Office. Send the WDM an email listing what you need.