



*In a continuing effort to provide information to our users, here is the latest newsletter. Please let us know what we can do to improve it.*

#### New Management at MBWD

Mill Bay Waterworks Improvement District is very excited to introduce RaeAnn Reitor as our new Corporate and Financial Administrator. RaeAnn comes to MBWD with a wealth of knowledge and experience, and we consider ourselves very fortunate to have her join our team.

RaeAnn has replaced our previous District Administrator Paul Carver who is no longer with MBWD.

#### Community Engagement

Please join us for our Monthly Trustee meetings held the second Tuesday of each Month from 5 pm till 7 pm at Brentwood College. A map can be found on our MBWD website.

#### Water Restrictions

MBWD water restrictions were removed on September 16th after careful consideration of all factors. We expect to function without restrictions until conditions dictate reinstatement next summer.

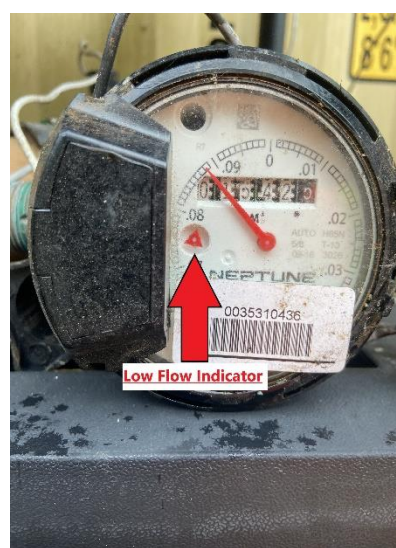
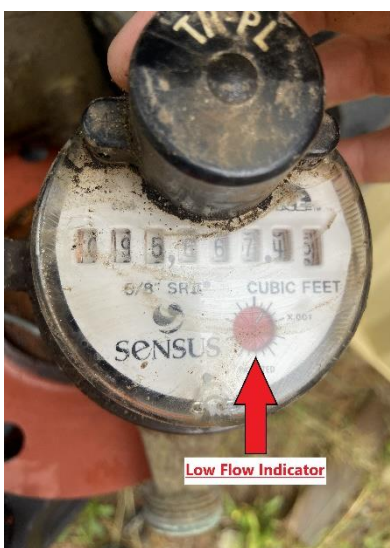
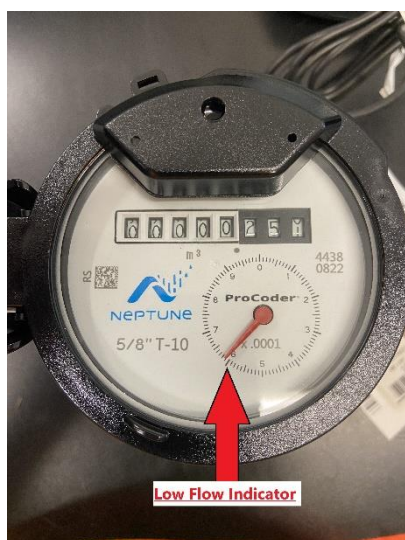
## Water Leaks

During the past two Months, MBWD had 3 customers with water bills ranging from \$3,000 to \$12,000. It was determined that the high-water charges were due to faulty irrigation systems on the owners' property, rather than a water line leak between the MBWD service connection and the house, which would be covered by our leak allowance policy.

Rather than charge our customers with these overage costs, our Board of Trustees decided to forgive the high billing and instead, communicate the best practices of leak detection and avoidance to everyone. The following information is for everyone's benefit to avoid high water billing and possible damage to the home.

## Leak Detection

The water meter's installed by MBWD is the best leak detection device you can use. Below are illustrations of the three types of meters installed by MBWD.



Here are a two scenarios for leak detection on a customer's property:

### 1.) Service line supplying water to a home with no irrigation system:

- Ensure no water is running on the premises then check the water meter red flow indicator for turning/spinning. Any flow of water will be indicated.
- If the flow indicator is not spinning, there is no leak in your water system.
- If the flow indicator is spinning, there is a leak.
- If you have a shut-off valve in your home, which most homes have, shut it off. Now check the flow indicator again.
- If the flow indicator is still spinning, there's a leak between the meter and the house.
- If the flow indicator stops spinning, the leak is within the home and further troubleshooting should be considered.

## 2.) Service line supplying water to a home with irrigation system installed:

- Ensure no water is running on the premises, then check the water meter to see if the low flow indicator is turning/spinning.
- If the low flow indicator is spinning, there is a leak present on the property, possibly from a toilet.
- If you have a shut-off valve in your home, which most homes have, shut it off. Now check the flow indicator again.
- If the low flow indicator is still turning/spinning, the leak is in between the meter box and the shut off valve at the house, possibly on an irrigation line.
- Irrigation valves can then be turned off one at a time if several are present, and the meter can be re-checked to narrow down the irrigation system leak location.
- If the low flow indicator stopped spinning when the shut off to the house was originally shut off, the leak is within the home possibly from a toilet.

Irrigation systems and toilets should be checked periodically as they are two common causes of water system leaks.

1. Conduct periodic checks for water system leaks by using the methods above.
2. Have your irrigation system serviced annually to prevent water loss.
3. Check with your Plumber for advice on automated leak detection devices.

Another cause of high-water billing and damage to your home is from failure of hot water tanks. Be aware that most insurance companies do not cover damage or excessive billing caused by hot water tanks in service beyond the age of ten to twelve years, as failure beyond that age is common and considered preventable by the homeowner.

1. Service your hot water tank annually by flushing the minerals through the garden hose connection at the bottom of the tank.
2. Check with your plumber for anode rod maintenance to extend the life of the tank.

Apart from communicating a solution for residents to determine water leaks on their property, MBWD is actively sourcing a program to install smart water meters on every home that will allow us to monitor for leaks for you.

## Bill Payments

A reminder to our valued customers, as stated in previous newsletters, if paying invoices through online banking, please make your payment at least 3 business days before the payment is due. The payment must be received in our bank account by the due date in order to avoid a late penalty.

## Conversion to the Regional Municipality

There does not appear to be interest from MBWD or the CVRD at this time to warrant further effort toward conversion.

## RFPs and Contracts

MBWD has issued a request for proposal (RFP) through BC Bid for engineering firms services on October 1st. We expect the RFP process to complete for review on October 28th.

MBWD has issued an RFP for the supply of smart water meters for our distribution system.

The status of both of these RFPs will be reported in the next newsletter.

## Environmental Public Health

The following statement is from our health officer at Island Health concerning the study on the MBWD water quality.

As Drinking Water Officers have been conducting routine inspections of water supply systems they have been applying the most recent provincial guidance document, “Guidance Document for Determining Groundwater at Risk of Containing Pathogens (GARP) – Version 3 in September 2017”. The GARP assessment process is currently being conducted for the Mill Bay Water Works District water supply system. Until this time, the Mill Bay Water Works District water supply system has been operated in compliance with the prevailing provincial guidance for the operation of water supply systems, and in accordance with its Island Health Operating Permit. As our understanding of the risks to ground water sources has evolved, the GARP assessment provides an evidence-based procedure that assists public health officials in determining if a ground water source is GARP. The GARP assessment tool identifies potential risks to water wells from sources of contamination surrounding them. For example, pathogens like viruses and giardia may cause adverse health effects for water system users if contamination from wastewater treatment systems or surface water find entry into a well. Preliminary findings suggest that some of the Mill Bay Water Works District’s wells are vulnerable to the risk of containing pathogens. This potential vulnerability was determined through the application of the GARP assessment tool. No adverse water sample test results have been obtained that indicate that the wells are currently contaminated. Wells that are at risk of containing pathogens require treatment or disinfection equipment to remove the identified risks.

The Drinking Water Officer is awaiting the receipt of a source water protection plan authored by a hydrogeologist for consideration toward the final GARP determination. The completed GARP determination report is expected in early 2025.

Additional Well Sample Testing by MBWD

Starting in October we'll be sampling all of our raw water sources for bacteria every month and starting in October we'll be sampling two locations (Hayden Pl and Mill Bay Rd end - the furthest North and south points of the distribution system) in the system for disinfection byproducts (this will be completed quarterly moving forward).

#### Engineering and Asset Condition

As recently reported by our hydrologist engineering team and our MBWD operations team, our water system, including the health of our aquifers and mechanical fitness of our facilities, is in a stable state and fully capable of supplying service to the community.

- There have been no line breaks or service disruptions since the last report.
- Our newly instituted hydrant maintenance program is in place and remains as an active and ongoing policy of MBWD.
- We've provided redundancy to our chlorine injection system by installation of secondary or backup pumps at the last two locations in our system.
- We have completed repairs for secured ladder access to the top of our reservoirs.
- We are working with Brentwood College to refit the Shawnigan Creek Pumphouse facility to ensure compliance to electrical code and safety standards.

#### Developments

MBWD is currently working with Western Water Associates Limited (WWAL) to prepare for Well pump testing of the new system Wells which have recently received conditional licenses for the Limona Stonebridge development, Malahat Property development, the Mill Springs Development, and the MBWD Noowick Well.

The purpose of the tests is to qualify sustainable water sources from the Wells and to ensure there is no interference to the senior or existing Wells in the immediate area.

All of the new Wells will be turned over to MBWD to support our current and future customers. These tests are the next phase required for developers prior to development.

Figure (1), below illustrates the location of the proposed development Wells and the MBWD Noowick Well.

Gary Orton  
MBWD Board Chair



