

WATER DEPARTMENT REPORT – AGM 2016

Water Consumption: 2014: 11,505 Cubic Metres. 2015: 12,679 Cubic Metres (10% increase)

Our Most Valuable Asset:

Each year your volunteer water team appreciates this opportunity to report to islanders on the **most important asset** we have in our small, isolated community – our excellent domestic water system.

It is no secret that this precious amenity is the envy of the Southern Gulf Islands, and Piers Islanders have been known to exhibit a certain degree of smugness on this topic as they bask in their very good fortune. For no small reason: many nearby communities are sorely challenged, at great expense, to make their limited ground, surface and rain water potable while Piers Islanders enjoy an abundant and pristine supply from a high-quality source. As a bonus, our location at the end of the line also means that our water undergoes treatment and many points of monitoring before it reaches us from the Sooke Lake reservoir.

And putting our good fortune in even better perspective is the sobering knowledge that on the bigger world stage, safe drinking water is a huge luxury many populations do not enjoy: the World Health Organization currently reports that 1 in 10 people (663 million!) lack any access to safe drinking water.

The point, of course, is that we must continue to value our water asset more than any other and steward it accordingly. Corporate responsibility must involve shared ownership of our water system by every resident, not just the water operations team and trustees, to ensure that we have the training and skills to manage it, the financial resources to support, renew, improve and sustain it for future generations, and--most importantly of all--the people willing to do the things that can be done with just elbow grease when needs arise.

Water Quality:

Public drinking water in British Columbia must conform to the BC Provincial Regulations and Federal Guidelines, and it is with great pleasure that we report that all sampling results since December, 2014, have exceeded requirements in every aspect of compliance.

Our water operators conduct a mandated testing regime that is monitored by VIHA. This program returns biological, chemical and physical information on the quality of our water and reflects the effectiveness of the safeguards in place that protect our water from "source to tap".

In addition, a similar biological testing program now being conducted bi-weekly (and paid for) by the CRD at our intake point in North Saanich ensures their attention is focused on us to a much higher degree than we have ever previously experienced—which is a good thing for your safety.

Welcome oversight by these two main agencies who carry the responsibility for public health and water quality in the Greater Victoria water district is supplemented by the very good working relationship that has developed between our Piers Island water department and that of North Saanich who directly supply our water. On a weekly basis, their group performs a mini-flush of the lines at our North Saanich connection point and reports to us the chlorine concentrations being achieved there. To help avoid problems caused by wide-spread, chronically low levels of disinfection throughout the system, particularly the end points on the Peninsula, the North Saanich water crew has recently very aggressively flushed the mains proximal to our supply lines, which has resulted in notably higher levels of chlorine reaching us.

On island, the water team flushes the entire water distribution system at least once a year and the undersea lines several times with the same goal of delivering safe, adequately disinfected drinking water to all service connections.

Reporting: So that you will soon be able to access reports resulting from all of the aforementioned sampling programs as well as rules and regulations around drinking water and other links to useful water information, work is currently underway to improve the information that is available to everyone under the "Water" tab on the official PIID website, www.piersisland.ca . Please watch for future changes.

Infrastructure and Projects:

Our water system infrastructure is in fair to good condition and generally has needed only minor repairs during 2015 and first part of 2016, but as with most of our capital assets it is aging and renewal planning is about to begin for one major component. The trustees intend to begin the initial phase of replacing our 40,000 gallon wood stave tank, and possibly installing a dedicated supply line, later this year when we hope to undertake an investigative process to define methodology, timing, alternatives, costing and resources. The trustees would want and need to engage island and external resources to assist them in this initiative so if you have relevant technical, project management skills or island water system knowledge, please consider if this is an area where you might be able to contribute as a committee member.

The water system's capital asset renewal/replacement fund will reach \$225,000 in 2016, inclusive of the 2016 water reserve allocation of \$191 per property (\$25,000). In comparison, \$400,000 was recently given by an expert in the field as a very rough indicator of what this type of project would typically cost today so the overall financing strategy and timing to put this project into play would be foremost in any proposal. Being able to plan on utilizing our existing tank for several more years is the ideal solution and the goal we will pursue. However, recent leaks caused by a gradual crushing deformation of one of the vertical wall staves is creating minor but diffuse water escape that will accelerate deterioration and affect the replacement horizon if it cannot be remediated by applying an inside patch to the affected area.

Our chlorination system, on the other hand, is now seven years old but still performing perfectly for us, a benefit we are told of having such high quality source water to process. Should it fail, monies are set aside to replace the components of this system.

Projects completed in 2015 and early 2016:

- A sudden, spurting leak in the floor of the tank was discovered by a water operator last Fall. It was easily fixed with a bit of ingenuity and a carefully crafted wooden plug!
- Exposed water tank piping was re-insulated.
- Pump platforms at the upper and lower reservoirs were re-built.
- An unreported break in a service connection caused by an excavator accidentally pulling out a water meter was discovered by our Fire Chief late one January evening. A temporary repair was accomplished--in the cold rain--by Steve Cruise, Pauline Olesen, and Mary Jordan, and subsequently a permanent fix was made by Lenny Green and Colin Robertson. Many thanks to you all.
- This incident made clear the need for better pre-planning of our response to such issues, and since then individual repair kits have been assembled for repairing service connections, major leaks in the water tank and breaks in the ring road water main. The other piece of emergency response equipment purchased in 2015 by the water department is a small generator for the pump house on the ramp road.
- Currently equipment is being acquired by the PIID for PIVFD response but also to avoid work party volunteers having to use personal equipment and machinery on PIID & PIVFD projects. The water department has recently purchased two good-quality weed whackers for clearing around the water tower, pump houses, and reservoirs, and for other non-water department related tasks. So if you volunteer to do a community job, please be aware that some equipment is available to you by request from the Fire Chief or a trustee.

Upcoming Projects:

- Very soon, emails will go out to the remaining high properties that need to have backflow preventers installed, advising that this work will proceed in August. Property owners will be asked to ensure their plumbing is up to code so as to handle the installation of these check valves.
- A work party call out will be issued as soon as weather permits to clear tall grass and returning broom from the water tower area. Hopefully that will occur while many helpful hands are still on-island.
- Air valves will be serviced. This will include disassembling the seven valve boxes you see along the road, checking the valves and re-assembling the boxes. Volunteers will be appreciated for this easy, but labour-intensive work.
- A consultant who is familiar with our water system will assist in compiling a comprehensive water system preventative maintenance plan beginning in July & August.
- Commencement of the water tower replacement project later in the year and 2017.

And a final note from the Water Trustee on **OUR VOLUNTEERS!!!**

We all know our island runs on a volunteer "staff" and that through their efforts alone we enjoy a high level of service at very little cost. For instance, the 2015 budget for running the water service, net of water purchase offsets, amounted to **\$126 per year or \$10.50 per month per property**, an amazingly low number that can only continue if our organization continues to be self-sufficient and volunteer-based. For that to happen, every member of our community is encouraged to consider themselves a "staff member" and to proactively commit to assist in some way rather than waiting to be asked to help by an over-worked core of people. Even if you feel you are too busy or not physically able to help, you likely have some skill we could use. If one person from every property offered to help in some task once a year, that effort would assist in a huge way to alleviate the load and keep our island running smoothly.

In regard to the water operations team volunteers specifically, as your Water Trustee I am very proud to be associated with the people who make our system work and wish to pass on well-deserved accolades to the following:

Mary Jordan - our lead operator and overseer of our sampling program. Mary's efforts are invaluable to the team she leads, and to the trustees and islanders overall.

Jackie Charlesworth, one of our certified operators for the past nine years who has decided to retire. Thanks go to you, Jackie, on behalf of all islanders for your valuable time and effort, generously given. Much appreciated!

Philippa White and Velvet Warrior who are gearing up to challenge the Small Water Systems Operators course and exam. They will be very welcome additions to these esteemed ranks and have our best wishes.

Scott Denoon, Vicki Morrison, and Lloyd Phillips: our other aspiring water operators who are accumulating the requisite hours of experience and working hard on our behalf.

Cam Russell, who has taken on our much-missed Frank William's daily job of recording water intake. Cam also checks the undersea lines for leaks twice a month, and is a reliable addition to almost every work detail. Perhaps we can persuade him to move towards operator certification at a future time.

And finally, we wish to express heartfelt appreciation to the several islanders who do the basic repair, maintenance and project work to improve what we have and generally keep things running: Bob Crooks, Colin Robertson, Lenny Green, Barry Tate and Bob Noble.

On behalf of all Piers Islanders, thank you, Team!

Respectfully Submitted:

Water Trustee and the Piers Island Water Operations Team