

PIERS ISLAND WATER TRUSTEE REPORT – 2017 ANNUAL GENERAL MEETING

Once again it is time to report on that priceless amenity to life on Piers Island - our domestic water system. Reporting at regular trustee meetings has intended to provide much of the contemporary detail around water system issues so this report merely broaches the main system facets in a general way -- *Volunteers, Quality, Finances, Infrastructure and Projects* -- with the hope it will inspire a fuller discussion at the Annual General Meeting. The trustees appreciate the opportunity of each annual meeting to receive input from islanders on all topics of interest so please come prepared to share your questions, observations or concerns on the water system with the trustees and water team.

Water System Volunteers

Piers Island holds a privileged status among Gulf Islands because we receive fully treated water from the Greater Victoria Water System. Notwithstanding, a small group of island volunteers invests much time and effort to steward this valuable commodity and manage its distribution from the intake vault in North Saanich to every tap in our community.

Again this year the water team has included members who monitor water quality to ensure it meets all provincial and federal regulations for microbiological and chemical parameters. They are certified water operators **Mary Jordan, Philippa White, and Velvet Warrior**, and operator in training, **Lloyd Phillips** who will pursue the EOCB certification later this year, and **Cam Russell**, who with unfailing dependability records the island's daily water intake and raises the first flag that a leak may be present. To build a strong line of succession for these valuable volunteers, **we are currently seeking at least one more certified operator**, so if this appeals to you please contact the trustees or any member of the water team.

Other indispensable members of the water team are those skilled volunteers who get their hands dirty repairing and improving the fabric of our system. They are **Bob Crooks, Colin Robertson, Kelly Stevenson, Scott Denoon, Barry Tate**, and others who come to assist when called. Again, our work crew is too limited so **new members to this elite association are needed** and would be most welcome.

In recognition of their excellent service over the past year, the trustees offer their heartfelt thanks on behalf of all islanders to these hardworking members of the Water Team.

Water System Quality

Water samples taken during September and November of 2016 did not comply with biological standards due to the presence of total coliforms, primarily detected at our intake pump house. In each instance, close contact with our VIHA Drinking Water Officer was maintained and all necessary steps were taken to notify residents during remediation. Since December 2016, all biological, chemical and metal constituents have fully complied with Canadian guidelines and B.C. drinking water regulations. (Please see VIHA Annual Report for 2016 posted on the PIID/Water tab on the Piers Island website at www.piersisland.ca.)

The annual inspection of the water system was conducted in May when our VIHA Drinking Water Officer and a VIHA water consultant attended on island. During their visit, the VIHA officers made a point of noting that the water team was doing a very good job of keeping our simple but effective system well monitored and maintained.

Discussion focussed on the problem posed by low chlorine levels in our intake supply from North Saanich and upgrades that the CRD is currently undertaking for completion in October. The work is expected to deliver higher, stabilized levels of disinfection throughout the system and if successful, the VIHA staff suggested that Piers Island's problem of low chlorine levels might be resolved without any incremental retrofitting. In light of this new information, the water team will continue to closely monitor water safety while the project completes

and results are assessed, but at the same time will continue to plan how best to retrofit if that becomes necessary.

Water System Finances

Largely because of the water team volunteers, our community remains self-sufficient in managing our water service and operating costs continue to occur at an amazingly low level.

In 2016 the actual water budget expenditures of \$37,054 included \$21,628 of water purchase costs paid to North Saanich which were then largely recovered through individual property water billings. The balance of \$15,426, which included supplies, equipment and labour, equated to an annual cost to each property of less than \$118 or \$10 per month!

In addition to the annual tax levied for maintaining and operating the water system, the trustees also levied a tax for renewing and replacing the existing water assets once they reach the end of their useful lives. In 2016, collections for the water reserve fund amounted to \$23,238 which equated to \$177 per year or \$15 per month per property. While some might perceive this particular tax levy as perhaps overly ambitious, especially if sustained at this level, it is notable that in fact our community carries a significant infrastructure deficit due to the lateness of initiating a defined renewal savings programme relative to the age of our infrastructure.

Water System Infrastructure

Our water system is a precious asset that is aging and moderately fragile, but as long as we continue to maintain and replace components when necessary, and respect its limitations, it should serve us well for many years to come. Our wood stave tank is prone to small leaks, especially during sunny, dry weather, and one undersea line is currently undergoing repairs as this report is written but otherwise all other system components are problem free and operating well.

Presently, the number of new residents in our community is increasing quickly and renovations and buildings are becoming more substantial, which seems to make this an opportune time to re-emphasize that our small, water-isolated community runs almost entirely on volunteer labour. This has especially important ramifications in regard to our water infrastructure.

1. We do not have a salaried public works department: rather, every resident is encouraged to see themselves basically as an unpaid "employee" of our private "corporation" and be willing to be enlisted at some time or another when needed to help out with water projects.
2. We do not have easy access to construction equipment nor materials to make emergency repairs; rather every resident is encouraged to exercise due care and attention at all times to ensure our potable water main and system components remain undamaged, uncompromised and fit for purpose.
3. Most components of our water system infrastructure are vulnerable to damage: the two submarine lines run parallel to several properties to the west of our boat ramp and government dock and can be easily damaged by dock construction, anchoring or mooring buoy placements, or by barges putting down "spuds". Our polyethylene water main lies buried at variable depths at every rear property line and can be damaged by construction equipment or digging. Our seven air valves and twenty-one standpipes are exposed to vehicle traffic. Our water meters and individual shut-offs are susceptible to water infiltration in some areas where the water table is high or undiverted runoff occurs.
4. Of great importance, also, is the potential risk to public health that our system harbours because we do not have backflow preventer devices on the majority of our 125 serviced properties. This mandatory requirement is being very slowly addressed and the current trustees support an escalation of the check

valve programme in 2017 and its continuation in future year budgets. Also, there is a recognition that the existing water system bylaws that are intended to protect the water system in all things, including this potential backflow risk, need to be modernized and then adequately adhered to more fully and consistently than is the current practice. (Bylaws #61 & #80 can be found on the PIID/Governance/Bylaws tab at www.piersisland.ca.)

Providing the above information in regard to our water system infrastructure is offered, not to alarm residents, but rather to inform and advocate that appropriate care and attention be paid to our valuable water asset and its components whenever a new project is undertaken or appurtenances connected that could adversely affect the water we are drinking and enjoying.

Water System Projects

Projects undertaken in 2016:

- Backflow check valves installed on five high properties
- Water main flushed
- Water golf cart serviced off island
- Water tower ladder retrofitted for better safety
- Repair kits assembled and catalogued for the water main, service connections and water tank.
- Chlorination system serviced, injection pump rebuilt
- Chain link fencing extended around the lower reservoir sinkhole
- Water tower valves reinsulated
- Monday Morning Crew attended to vegetation around water tower

Water Team Projects Current and Upcoming: (a list of additional tasks is attached and will be circulated at the AGM for volunteer sign-up)

- Repair undersea water line
- Protect exposed water line on beach at Piers Road
- Install sun curtain on water tower
- Install 10 – 15 backflow check valves
- Test air valves
- Clean and inspect water tank
- Service Water Cart

Closing

It has been my pleasure to have served as trustee responsible for the water system for the past three years. In addition, it has been an honour and a privilege to have worked with so many dedicated water team members, past and present, who demonstrate their devotion for our community through their efforts and accomplishments on our behalf in keeping our water safe and delicious! This year will continue under a new Water Trustee and I wish that person great success in meeting the challenges of this very important role.

Respectfully submitted,
Maureen Crooks, Water Trustee
On behalf of the Piers Island Water Team