

Village Point Improvement District Town Hall Meeting

March 2nd, 2024, 1 pm

Mayne Island Community Centre

Summary

The meeting was called to order at 1:00 pm by Michael Jones, Board of Trustees Chair, with the following statement: *We start this meeting with the acknowledgement that we live and meet on the unceded territory of the Coast Salish peoples. May our words and actions always reflect our awareness and appreciation of this.*

Attendance:

- Trustees Michael Jones, Philippe Kruchten, David Boal
- Manager Ian Cocker
- Administrator Moira McCulloch
- 54 Property owners

OVERVIEW OF VPID

WHAT WE DO:

- Water:
Provides potable water to properties on Callaghan Crescent, Dalton Drive, Dinner Bay Road, East West Road, Leighton Lane, Letour Road, Lundy Lane, Mariners Way, Merriman Drive, Spinnaker Drive and Wood Dale Drive.Sewer:
Provides sewer service to properties on Leighton Lane, Lundy Lane, Mariners Way, and Spinnaker Drive.
- Our services are entirely funded by taxes for capital works, and tolls for operations.

WHO WE SERVE:

- Water:
29 properties are not connected to water and pay water taxes only.
184 properties are connected to water and pay both water tolls + water taxes (however two of these properties have secondary dwellings that pay an additional water toll only.)
Total:
Water tolls = 186
Water taxes = 213

- Sewer:

53 properties in this category are connected to water plus sewer, and thus pay both water/sewer tolls and taxes.

2 properties in this category are not connected to water or sewer, and thus only pay water/sewer taxes.

Total:

Water/Sewer Tolls = 53

Water/Sewer Taxes = 55
- Operations:

Water:

 - six wells, five operating presently
 - water is pumped and chlorinated before sending to the treatment plant, filtered, chlorinated again, and treated with UV light, and stored in five tanks, with a capacity of 88,000 US gallons.
 - water is distributed from the plant through a network of pipes, with valves to distribute water from the main lines (corporation stops) and on individual properties (curb stops)
 - water is routinely tested at the treatment plant and sent to Vancouver Island Health Authority (VIHA) for verification.

Sewer:

 - Sewage from properties is delivered from owner's septic tanks to storage tanks, called lift stations, from which sewage is pumped to community septic fields.
 - We have six lift stations that pump to three septic fields on Lundy Lane, Spinnaker Drive, and Quadrant Road.
 - Operations staff regularly check septic tank filters on individual properties.

REVIEW OF 2023

- **Summer drought:**

Mayne Island typically receives 33" rain per year. Of that approximately 2" goes into the aquifers, with the rest lost to evapotranspiration or runoff directly to the ocean. During late summer 2023 some of our wells on Mariners shut down occasionally because the pumps detected air; after a short period of time the pumps resumed operating, but this is evidence of low water in the well.
- **Failure of electronics and repair:**

Ian Cocker recounted the series of events that began on May 11, 2023, when a leak in the plant resulted in water damage to the electronics that control operations of the filtration system. It took until the end of the year to completely diagnose the problems and obtain the necessary replacement parts. The electronics are now working properly again. A water shield has been installed to prevent future water damage. During the repair period operations staff had to conduct manual backwashes, which are required to clean accumulated materials from the filter tanks.
- **Filtration system:**

Likely because of the problems with the electronics and the need to do manual backwashes, the problems have emerged with the filtration system wherein pressure into the first filter tank is higher than it should be, and the high pressure has occasionally caused wells to stop pumping. We may need to replace filter tank media to mitigate this problem.

- **Leaks:**

Ian summarized the main leaks that occurred during 2023 and into early 2024. There were two road crossing leaks during summer/fall, one on Spinnaker and a second on Mariners. Both leaks required road closures to replace water lines under the roads but were detected and controlled quickly. He also noted 5 leaks on homeowner properties, ranging from 2-14 gpm. Again, these leaks were detected and addressed quite quickly. Finally, he discussed two recent leaks on Mariners that were very difficult to detect and caused major challenges in January 2024, including overnight water shut-offs in mid-January. In the end these leaks were detected with help from specialists from Victoria and have been repaired. We are currently not experiencing any leaks.

- **December/January storage depletion, including Mariners Way leak:**

The combination of the leaks on Mariners, and the problems with pressure buildup in the filtration system led to a major challenge in December-February, as we were not able to replenish storage as rapidly as it was leaving the plant. This resulted in us having to bring in a lot of water in trucks, just to offset this deficit. Since detecting and repairing the leak on Mariners Way we have been able to restore full storage of water at the plant.

Discussion ensued about main water lines: leak experts and Capital Regional District (CRD) advised us that the main ductile pipe should last another 50 years (100 years total), however the connections from the main line to corporation stops and the lines under the roads are more vulnerable.

In terms of production capacity, Red Williams (a local well expert who has drilled VPID wells) noted that we may have access to an additional well on Merriman Drive (10 gpm) that is not connected to the lines to the plant. He supported the idea of adding storage tanks between the wells and the filtration system.

Al Wallace suggested that VPID's biggest problem was recovery and not having enough storage. He indicated that we should consider pumping more water from Well 19 and Well 7. See further discussion in Q&A.

PLANNING

Mike Jones noted two important strategic (planning) efforts currently underway by the trustees. First, we are committed to increasing storage capacity at the treatment plant. We purchased two 5,000-gallon tanks in 2023 and will purchase two more this year. This will add 20,000 gallons of storage capacity at the plant (equivalent to six tanker truck deliveries). Second, our finance committee is working to establish reserve goals for operations and capital, for both sewer and water, informed by experience from other water utilities. We currently have reserves, but do not have goals for how large they should be.

Q&A

Property owner questions are in regular font. *VPID comments and response are in italics.*

- Mike Halliday – Mariners 199:
Backwash, volume of materials, 2-3,000 gallons of mucky water: what happens to it?
Mike Sywulich (former trustee) responded: it goes into 2 tanks for settling, and then into a septic field at the plant.
Could we use roofs to collect water?
Mike Sywulich (former trustee): Not a realistic option currently. Rainwater and surface water need completely different treatment processes than groundwater because of the presence of parasites and algae, among other things.
- Shawna Farmer – Dalton 514:
Thanks for this meeting and the work you do. Note that I am not a climatologist or investment advisor. Here are a few ideas to consider - great challenges for future:
 - Blue Sky thinking (10 to 15 years.)
 - Consider a university student to help map it all out.
 - What about CRD new builds for rain capture?
 - What are new technologies that might be promising?
 - Consider 1/3 federal, 1/3 provincial, and 1/3 VPID shared funding approach.
 - Design a ‘fool-proof’ system.
 - Can we dig our own wells to mitigate our risks?*Response from Mike Jones:*
Islands Trust Southern Gulf Island-wide survey on groundwater conditions. Provides some data on potential of our aquifer. Not at capacity yet but we can't be complacent. Difficult question to answer, science is not precise.
David Boal added: population went up by 50% in recent years, and more people spending more time on Mayne.
- Stephen Cropper – Lundy 257:
My question revolves around what we're learning and how we'll use this knowledge going forward; trustees (and staff) come and go. Could this knowledge be written in policy document – ‘how to’ in a book.
Response from Mike Jones:
Yes, VPID does commit important procedural ideas to policy and has Standard Operating Procedures, for example for emergencies. Also valuable to be able to rely on former trustees.
- Deborah Goldman - Dalton 518:
Good ideas being discussed here. I would like to know about the current state of the system.
Response from Mike Jones:
 - *Storage at 98%*
 - *No leaks at the moment*

- *Will deal with the problem of pressure build up in filtration system next week by doing a back wash. If it doesn't help, we will have to replace media.*
- John Glover – Leighton 263:
As a former trustee I know these are very complex issues. For example, as Al Wallace noted, we are likely to have many future challenges with pipes crossing under the roads; maybe we should have a budget formula, create something like a “fifth bucket to quickly fix the next ‘issue’ – consider preventative maintenance.
- Lorne Yeudall – Mariners 198:
I spent many years looking for leaks. Developed manual to find quickly. Elaborated on his calculations; took 7 days to find leak; that’s why more wells added; output 25 -27,000gals/day from 3 wells.
Question: should we be looking at a new well?
Why so different now?
Sometimes difficult to find leaks.
Can’t open or close corporation stops.
Mainline valves leaking at about 2gals/minute.
Lorne again: mainline vital for finding leaks comes back to maintenance; had to shut down 5-6 houses to find leak near his house.
Response from Ian Cocker:
Mariners Way: every curb stop and corporation stop has been found and has risers on them. Same with Leighton Lane & Lundy Lane.
- Somebody asked ‘how much water is pumping?’
Answer: 23,000 gals
- Stephen Cropper – Lundy 257:
Can we isolate every area/location?
Ian Cocker’s response:
Every section can be isolated in the system to narrow down the location of a leak.
- Someone raised the question about purchasing the special leak detector machine used by Pacific Leak Locators.
Response from Mike Jones:
VPID will discuss, but initial thinking is that specialized equipment plus training is not justified given the cost relative to simply bringing the experts to Mayne Island when we need them. Ian noted that it was an injection of gas into the line that pin-pointed the leak. The high-tech listening equipment found the proximity of the leak, but gas was necessary to pinpoint the exact location.
- Question by someone about Well 14:
Response from Ian Cocker:
Well 14 – install valve, comes on hard and kicks off other wells, doesn’t produce a lot of water.
- Could we drill to get more water from Well 14?
Response from Ian Cocker:
Will ask Red Williams Well Drilling expert.

- Mike Sywulich – Mariners 185:
Noted that historical documentation was lacking, but much better now. He asked Ian if he'd be doing a 2023 water report.
Response from Ian Cocker:
Yes, but challenging because of inability to do proper backwashes; no way to easily document data; but it will be a good report, regardless.
- Shawna Farmer – Dalton 514:
Could we use digital mapping system/software to support our work, such as GIS systems used by municipalities?
Response from Mike Jones:
We will follow up with you.
- Brian Dingsdale – Mariners 300:
Would it be a consideration to acquire the leak detection equipment for the larger Mayne Island community?
Response from Mike Jones:
Yes, possibly, via the Mayne Island Integrated Systems Society (MIWSS)
- Graham Coombs – Spinnaker 254:
I noticed there was a lot of surface runoff on Mariners Way; like walking in a creek ; can this water be collected for use?
Response from Mike Sywulich (former trustee) – Mariners 185:
As noted above, surface water treatment is very different from wells, we don't have the system for surface water.
- Lorne Yeudall – Mariners 198:
What is the situation regarding media replacement for the filtration system at the plant?
Response from Ian Cocker:
Tank 2 media has been replaced 3 times. Tank 1 and Tank 3 media have not been replaced but we may need to be.
- Stephen Cropper – Lundy 257:
Where are sewer fields located?
Answer: Lundy Lane, Spinnaker Drive and Quadrant Road.
- Al Wallace – Spinnaker 212:
Followed up again on Well 19 & 7. Why can't we pump more from these wells?
Response by Ian Cocker:
Well 7 shut down last summer because of low water; the pump detects air and shuts down automatically; Well 19 is believed to be pumping at capacity in the mid-summer period.
- Mike Sywulich – Mariners 185:
Asked Ian Cocker if he was still recording well depth at year end.
Response from Ian Cocker:
Yes. Same level at end of 2023 as in January 2023.
- Lorne Yeudall – Mariners 198:

He bought very expensive meters, excellent in detection of sea water. Didn't write the specifications, but 'obviously not being used.'

Response by Ian Cocker:

Wells are tested every day for Total Dissolved Solids (TDS) and salinity.

Lorne responded: But this meter predicts what must be done, anticipates future problems.

- Al Wallace – Spinnaker 212:
Bylaw regarding pressure washing saying it is unnecessary as water volumes from pressure washers are relatively low compared to a regular garden hose. Please reconsider this bylaw
Response from Mike Jones: Trustees will look into this.
- Mike Halliday – Mariners 199:
Pointed out that his shower head uses more water (per minute) than a power washer.
- Kurt Boehm – East West 291:
If we pay off current VPID debt in 2027, could we consider a new investment? He suggested considering a large concrete cistern instead of a bunch of plastic storage tanks.
- Mike Sywulich – Mariners 185:
Commenting on the potential for cost sharing with federal government and province: If we did this, VPID assets would be taken over by CRD. Experience suggests that rates would increase substantially.
Added comment from Ian Cocker:
Surfside (on Wood Dale Drive) rates being incrementally increased.
- Shawna Farmer – Dalton 514:
Noted that her experience from a previous home was positive when they hooked into a CRD system, increased rates, but 'worth it.'
- Al Wallace – Spinnaker 212:
Noted that if CRD ran the water district they would not use local contractors, instead their staff would come over by ferry and property owners would pay.

Meeting adjourned at @ 2:35pm