

Hornby Water Stewardship

Water Stewardship is progressing along various fronts, with initiatives looking at both *quantity* and *quality* issues, thinking about both the short-term and long-term for Hornby Island.

Communication and Education

Signage: Our drought sign at the Gas Bar has become quite imbedded into the island. Groups and people refer to its latest drought level, which we update as required, driven by the level set by the province for eastern Vancouver Island.

Online: On our Facebook page we continue to publish regular statistics, stories, and photos, such as: precipitation, groundwater level, temperature trends, and project details (e.g., slowing water down to help with recharge). On our web home page (hornbywater.org), we also prominently display the latest drought level.

Elected officials: On a quarterly basis, we send a quick summary report of our activities to our Islands Trust and CVRD representatives, helping to ensure water issues are kept front-of-mind.

Public talks: A number of invitations arose: (February) New Horizon's Literary Lunch; (March) HIRRA update; (March) Hornby Island Education Society's Lifelong Learning series; (July) Natural History Museum's annual summer talks; (October) HIRRA's "summer reflections."

Workshops: With HIES, in June, we sponsored a septic maintenance workshop, delivered by the CVRD.

Water Quality

We are moving ever closer to offering an on-island water testing service for residents. Having explored issues around running such an operation (e.g., liability insurance, banking, employment), it was decided that this is beyond the basic volunteer basis of Heron Rocks Friendship Centre Society and Water Stewardship. A proposal was made to the HIRRA executive to create a new non-tax funded committee. HIRRA's broader mandate and capacity will bring "water" more visibility. It was agreed to put a motion and vote at the December meeting, which passed.

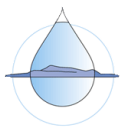
We continue to monitor a possible mandatory septic maintenance program being proposed by the CVRD. In October it was approved by the Board to move to the next phase: community engagement. Our main interest is ensuring that there is some financial support for low-income residents if and when they are required to make upgrades.

Water Quantity

We continue to monitor a CVRD feasibility study into a possible *watershed security service*, which could possibly include an incentive component for helping owners with the purchase of cisterns. Climate change (precipitation/drought, temperature) is affecting groundwater levels.

As requested, we approved in principle writing a letter to support changes to zoning bylaws such that cisterns could be allowed within property setbacks.

Hornby has one active well in the provincial observation network for measuring groundwater levels. A request to the province to reactivate two others wasn't successful. A team member is spearheading a project to gather up a handful of residents to perform a bit of citizen science, tracking well levels, and providing the relative high/low data.



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Slowing Water Down is our working title for a project to find ways — big and small, public and private — to assist with groundwater recharge. The observation well at Sandpiper indicates a deficit of over a metre compared to a few decades back (see Figure 1 below).

Advocacy

We provided input to the provincial government’s *Watershed Security Strategy and Fund Intentions Paper*, highlighting the need not to forget rural residents who act as their own water managers, either through groundwater or rainwater collection, and septic maintenance. We live in our watershed rather than relying on a municipal reservoir system.

Revenue

Fundraising: We were the joint recipient of the annual beautiful quilt raffle proceeds, filling our coffers with almost \$15,000. The lucky winner was Melanda Schmid-Ochieng. Wonderfully, her father, Klaus, was the designer of our logo a number of years back! As well, one Hornby couple was moved to give a five hundred dollar donation towards our water testing efforts. Total private donations for the year were close to \$1,000.

Grants: HICEEC supported our water testing efforts with a \$1,000 cheque, plus paying for three months of rental (water testing room) and membership at the Spark (\$150 per month).

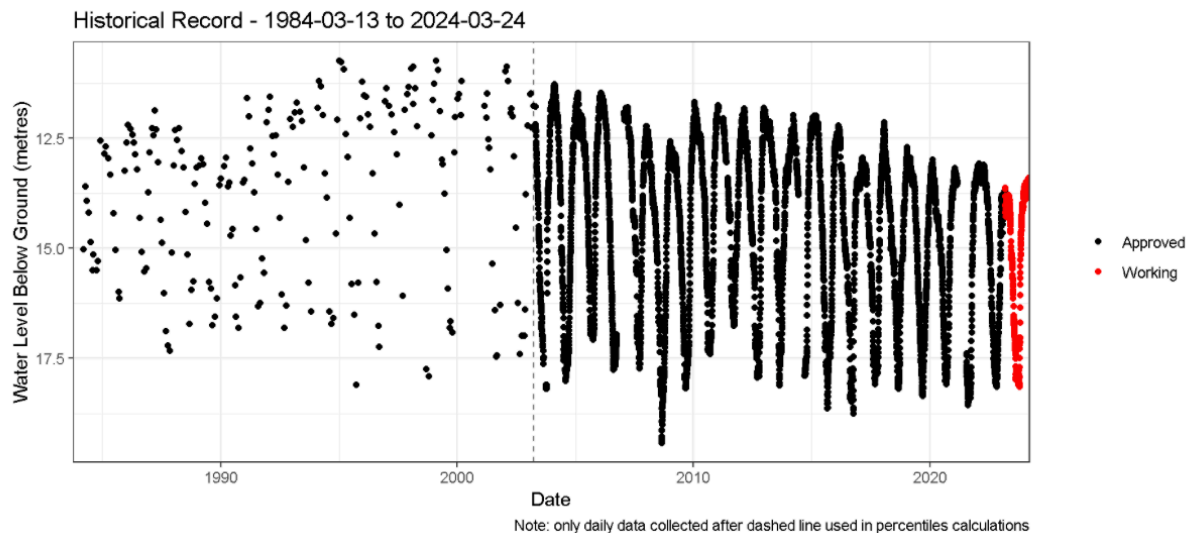
Team

Gordy Bateman, Darren Bond, Dr. John Cox, Lisa Dayan, Faroe des Roches, Katy Helliwell, Angeleah Hoepfner, Ellen Leslie, Ondrea Rogers, Melanda Schmid-Ochieng

Indicators

The metrics below suggest concern around drought based on declining precipitation and increased temperature.

Figure 1: Sandpiper Observation Well - groundwater level trend over time (source: Ministry of Water, Land and Resource Stewardship)



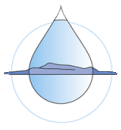
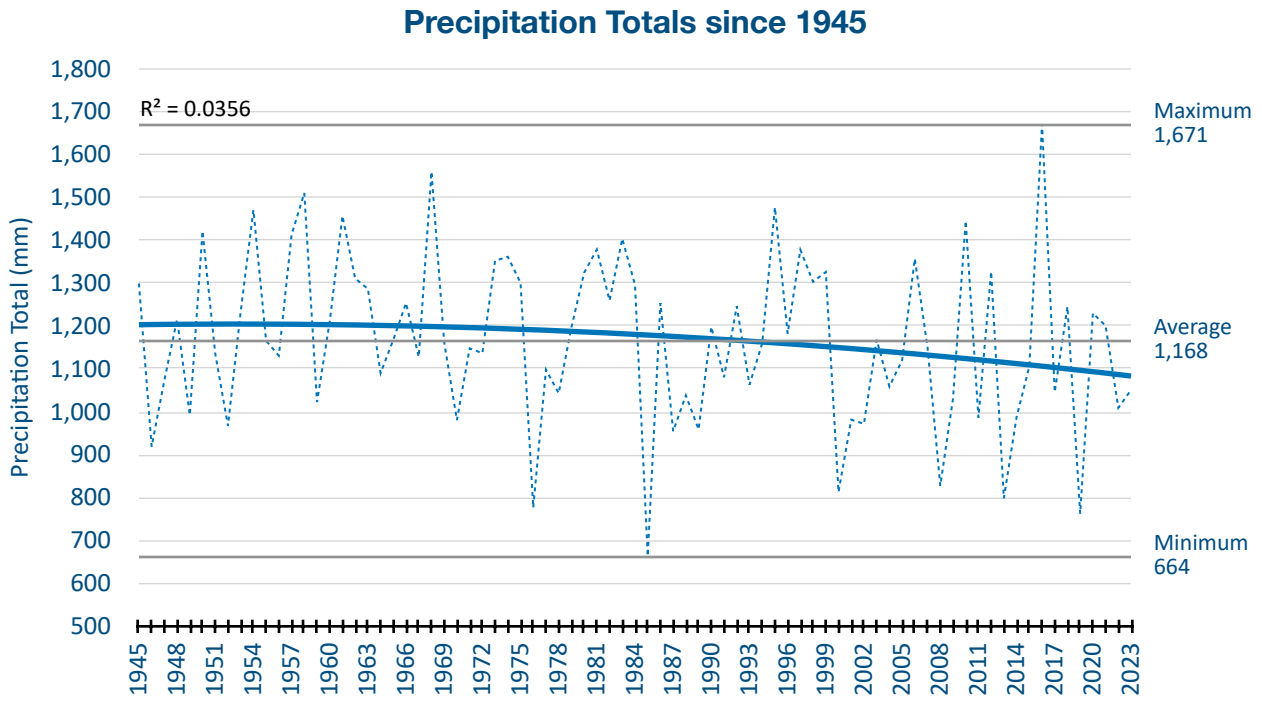


Figure 2: Precipitation Trend (Source: Environment and Natural Resources Canada)



Source: Environment Canada Comox

Figure 3: Temperature Trends (Source: Environment and Natural Resources Canada)

Temperature Trends (1945 to present) - Environment Canada (Comox)

	Avg High 1944/45	Avg High 2023/24	Avg High Change	Avg Low 1944/45	Avg Low 2023/24	Avg Low Change	Median 1944/45 - 2022/23	Median 2013/14 - 2023/24	Median Change
January	4.4	6.9	2.5	-1.6	2.3	3.9	3.3	4.4	1.1
February	6.8	6.2	-0.6	-0.2	1.2	1.4	4.1	4.1	0.0
March	8.7	9.9	1.2	0.8	3.1	2.3	5.6	6.1	0.5
April	12.2	13.0	0.8	3.1	5.4	2.3	8.5	9.0	0.5
May	16.9	17.0	0.1	6.3	9.1	2.8	12.2	14.1	1.9
June	19.5	20.2	0.7	9.7	12.1	2.4	15.0	16.4	1.4
July	22.2	23.5	1.3	11.2	14.4	3.2	17.9	19.4	1.5
August	21.4	23.7	2.3	11.0	14.3	3.3	17.6	19.5	1.9
September	18.4	19.1	0.7	8.1	11.1	3.0	14.1	15.1	1.0
October	12.9	13.0	0.1	4.8	6.8	2.0	9.3	10.1	0.8
November	8.3	8.7	0.4	2.0	3.2	1.2	5.6	6.3	0.7
December	6.2	6.0	-0.2	0.5	1.2	0.7	3.7	4.0	0.3
(Average)			0.8			2.4			1.0