

From: David Dunnison, Salt Spring Island
Sent: January 29, 2022
To: Islands2050 <Islands2050@islandstrust.bc.ca>
Subject: Opposition to New Draft Policy: Desalination

Islands 2050 Submission

Desalination

Reference: Page 18, Section 4.2.5 and Section 4.2.9 of Draft New Policy Statement Bylaw No. 183 – Updated July 15, 2021

Please count this as a submission “opposed” to adopting the proposed Draft New Policy Statement. In this case, this opposition is due to the new proposed ban on desalination.

4.2.5 It is Trust Council’s policy that new desalination plants should not be permitted in the Trust Area due to their high energy demands and adverse impacts to coastal and marine ecosystems. (new)

4.2.9 Local trust committees and island municipalities shall, in their official community plans and regulatory bylaws, prohibit new desalination plants in the Trust Area. (new)

These assertions of high energy demand and adverse impacts are incorrect. Energy demand for a single household is about the same, or less, as a fridge. Systems scaled for Islands Trust Area needs are easily powered by solar power – even during cloudy, winter days (confirming system output data available for review).

While solar power on the Gulf Islands can be delivered for lower cost, at BC Hydro rates the output of a fully costed residential sized system is competitive with current metered rates from North Salt Spring Waterworks, for example (cost analysis available for review). Systems applicable to Gulf Island requirements have been operating literally for decades in the Salish Sea with no detectable increased brine levels within centimeters of the discharge outlet.[i]

Long term, due to the extensive freshwater inflows into the Salish Sea thanks to our many rivers and the low brine concentrations for applicable systems, expected brine impacts are expected to be immaterial.

Water security is literally a life-or-death issue. The availability of fresh water is, and has long been, a critical issue within the Islands Trust Area. The results from the resident survey conducted expressly for the State of the Islands project summarizes this best:

“A significant number of respondents (41%) say they sometimes worry about their household running out of fresh water.”[ii]

Considering the high level of concern, the lack of sound alternatives to desalination – some residents do truck in water – and the favorable truth about actual energy costs and

imperceptible impact on the ocean, the Islands Trust position is indefensible.

In addition, this New Draft Policy proposal is in direct opposition to other portions of the New Draft Policy such as:

4.2.7 Local trust committees and island municipalities shall, in their official community plans and regulatory bylaws...shall strive to ensure: (4.4.2, 4.4.1)

- that freshwater quality is maintained; and
- that islands are self-sufficient in their supply of freshwater

Our freshwater supply and its long-term availability and viability is subject to increasing, not decreasing, risk and uncertainty. These risks arise most notably through already witnessed and expected future impacts of Climate Change. Additional well-known issues include seasonality, ground water contamination, saltwater intrusion, etc.

Island self-sufficiency and resiliency is increasingly indeterminate with high future risk. Even on Salt Spring, with its many lakes, a single structure or building fire can put the community at risk for days if not weeks or longer as was experienced this past summer.

“Due to the catastrophic fire in Ganges village and the extreme fire flow required to combat the blaze, some valving was damaged,” states an emergency notice on the NSSWD website.

... a boil water advisory for any user of the Maxwell Lake side of the NSSWD system was issued at 11 a.m. That includes Ganges village and all points south.

“Crews are actively working on it and more information will be available later. Affected areas on the Maxwell system will be out of water until the NSSWD crew can repair the damage.”[iii]

Climate Change related impacts to our water security include heightened summer drought as well as fall/winter deluge as we witnessed this past November.[iv] Both are expected to become more extreme.

As I write this, Saturna continues to have a boil water advisory that has been in effect for over four months.[v]

It is not just drinking water that is negatively impacted by this narrow view. But water for ... everything. Including water for fire-fighting in the face of increasing catastrophic wildfire risk.

The Islands Trust could expect a hero's welcome from many quarters – at least 41% of the residents according to the survey - for supporting desalination. Instead, the Islands Trust appears intent on putting residents and the environment at higher risk.

Please allow us to sleep easier at night knowing there will be water to drink tomorrow.

Regards, David Dunnison
Resident of Salt Spring