

From: M&GBurandt [REDACTED]
Sent: Wednesday, January 19, 2022 11:45 AM
To: Islands2050
Subject: Desalination Directive - NOT SUPPORTED

Trust Policy Statement Bylaw 183 Desalination of sea water:

I DO NOT support the directive to ban sea water desalination. It is a foolish idea amid the Islands Trust claim that fresh water resources in the Gulf Islands are dwindling. The claims for banning are debunked below. Nowhere else in the World is there a ban on sea water desalination.

Desalination

TPS quote banning desalination;

“Prohibits new desalination plants due to their high energy usage and adverse impacts to the marine environment (4.2.5, 4.2.9)”

American Membrane Technology Association:

“Based on nationwide data from the American Energy Information Administration, a typical refrigerator average annual energy usage is 1,400-1,500 kwh. Using the average US water use per household of 100,000 gallons per year, the energy requirement for supplying desalinated water to a house in the US will be less than an old refrigerator, but the same as a newer, more efficient refrigerator power use.

The theoretical absolute minimum amount of energy required by natural osmosis to desalinate average seawater is approximately 1 kilowatt-hour per cubic meter (kwh/m³) of water produced, or 3.8 kilowatt-hours per thousand gallons (kwh/kgal).

In summary, when traditional supply sources are not feasible or available, seawater desalination can be achieved in an environmentally friendly manner, without aggravating climate change concerns. “

One kwh, according to BC Hydro costs approximately \$0.14

Therefore to desalinate the average daily household use of 250 gallons (1 cubic metre) costs \$0.14

Several solar panels can supply this energy, if required.

The heavy tidal flow around all the islands makes the issue of heavy saline going back into the ocean over a period of time moot.

In the Trust area that is seasonally short of fresh water and surrounded by vast quantities of seawater where did this directive to ban desalination originate??

Sincerely,

Manfred Burandt

[REDACTED]

North Pender Island, BC V0N2M1