

From: Dave Paton [REDACTED]
Sent: Tuesday, January 25, 2022 5:54 PM
To: Islands2050
Subject: IT Revised Policy Statement - Non Support for the Proposed Desalination Ban

The proposed ban is yet another example of the IT trying to wastefully duplicate the responsibilities of senior levels of government and it takes the precautionary principal to a ridiculous level. Activities in our coastal areas below HHW are the preserve of both the Federal and Provincial levels of government. Uptake of seawater desalination is unlikely to be great in Trust areas with access to a reliable groundwater supply but there are locations where it would be an invaluable help in taking pressure off poorer aquifers. Something I would expect the IT to endorse rather than ban.

The Policy Statement's claim that desalination has a high power consumption and has an adverse effect on coastal and marine ecosystems lacks science. Typical domestic seawater RO systems produce 1m³/day. Power consumption with outflow power recovery is around 4kWh/day. Our Hydro power supply is already very low carbon so this minimal level of energy consumption is not a climate threat. The power demand could even be provided from a domestic solar system if desired.

Salinity varies seasonally in the Trust area but is always lower than the open ocean. Fraser River seasonal discharges give us around 30g/L in winter and 27g/L during the summer – in places the surface salinity can drop as low as 15g/L. Sea life already deals with a wide range of salinity. Trust area tidal ranges are big and coastal flow rates quite fast so supporting rapid dilution of any discharge. As a guide two studies in the San Juan Islands following installation of desalination plants, indicated rapid mixing of water near the discharge pipes. In each case salinities were reduced to concentrations near or not detectably different from that of the surrounding water within a few feet of the discharge pipe.

Regards,

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Saturna Island