

Desalination

A direct quote from the Trust Policy Statement (TPS) reads

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

Ask yourself: **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?** What exactly were the Islands Trust Staff and the Island Trustees thinking?

“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. “

Source: American Membrane Technology Association:

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.
