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Sent: Sunday, February 6, 2022 3:39 PM
To: Islands2050
Subject: Draft Policy Statement - Non Support for Inclusion of Ground Water Management Powers (GWM) in the Statement

I live on Saturna Island.

I've just had an opportunity to review in detail the studies used to justify inclusion of additional GWM powers and mandates in the Statement. GWM is the responsibility of our Provincial Government – in particular its FLNRORD department so the IT is expensively duplicating work better done by a higher level of government.

In relation to Saturna reporting flaws in the studies justifies this opinion. I've included a summary of my reasoning below.

Dave Paton
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Saturna.

It is apparent that the IT is allocating ever increasing funding towards studies on groundwater (GW) sustainability, often duplicating work already done by the Province – the body actually responsible for the issue. The topic has economic significance as it's been my experience that GW availability is often cited as a reason against development in the Trust area. In particular some of the GW study assumptions and findings may have the potential to exaggerate the issue of GW abstraction criticality.

One of the reports details a Groundwater Availability Assessment. This is a water balance determination for areas of the islands designed to identify the percentage of groundwater use relative to aquifer recharge. The data is presented in map form for the scenarios of normal and dry years, coloured for 3 levels of abstraction as a percentage of recharge – 0-5%, 5-10% and over 10%.

I'm most familiar with Saturna so I could assess the report's assumptions and data in relation to Saturna. I appreciate given funding limitations the study would necessarily be "desk top" without detailed site visits. In general in my opinion and as the report admits, the assumptions lean towards pessimism. **Some comments:**

Use is based on property tax zoning records which raises several anomalies for Saturna. This leads to errors in land use that would significantly inflate estimates water abstraction. We live on Saturna's East Point – the core of the peninsula is over 100 acres and zoned residential for around 3 SFD and currently has none – it's mostly a swamp – the report has it marked as commercial with a corresponding level of water consumption.

The report's water use assumptions seem more in line with a large metro area than our quite unique islands – e.g. irrigated city parks, larger family domestic consumption with waste water flowing to a treatment plant rather than returning to groundwater via septic. We live in the land of "if it's yellow let it mellow" and small family units, so the 625L/d residential figure seems high – our family uses around

200 and all that water returns to GW – we collect rainwater for gardening. I couldn't see if the report considered septic return in its water balance.

GINPR makes up almost half of the island and is forested. Further it retains a legal structure of several individual parcels – probably each designated by the study as a park. The map shows it in the irrigation category. The report admits “It is expected parcels within the irrigation category will overestimate water demand. The method assumes 50% of the land is actively irrigated with volumes assigned in Table 2 of the report.” GINPR is so massive, if this is so the results are totally skewed. Parks Canada doesn't even supply potable water to its campsite much less engage in irrigation. Neither do any of our own parks – there are several.

A large private managed forest on the south side of the island is considered industrial!

Many lots on Saturna, even though they might have a well, use rainwater harvesting for domestic supply – this is particularly the case in areas with poorer recharge so distorting the reports view of the areas' criticality. Pretty much all use captured rainwater for gardening. On East Point we mandated a degree of rainwater storage. I can't see how the authors would have access to this data.

Similarly vast numbers of the residences are seasonal or even weekends only – I can't see that this is considered in the report or even how it could be – for Saturna this would result in significant over-estimation of consumption. Even in summer a large number of the houses are empty most of the time. The report does however consider seasonality of agriculture and commercial use.

Most areas of Saturna fall into the least concern (less than 5% of recharge capacity) green category – our only area in the medium range (5% to 10%) orange category is Boot Cove/Old Point Farm which is 7.5% in a dry year. From a knowledge of the area the conclusion doesn't make sense. The east side of Boot Cove is on a CRD community water system fed remotely from a lake and some associated wells - as is Lyall harbour. The report shows Lyall harbour in the green category – both locations run off the same water system so there is no logic for them being different. Furthermore the west side of Boot Cove is part of the Old Point Farm community which has 3 wells feeding a community system serving just 20 houses on one acre lots – the land area is 270 acres – intuitively it would be one of Saturna's least stressed areas.

Given this experience in relation to Saturna, Trustees should review the report's conclusions for their island using local knowledge before considering GW LUB restrictions. Also they should consider if it will be cost effective to continue with large scale expenditure on further studies – perhaps the Province's FLNRORD would be willing to assist with this decision.

I've sat through countless Saturna LTC meetings listening to people citing GW as an excuse for blocking affordable housing development, business projects and subdivisions – often in areas that one wouldn't expect there to be a problem – even with its potentially pessimistic slant this report pretty much says there isn't a problem anywhere on Saturna.