

From: Lisa Dunn [mailto:ldunn@islandstrust.bc.ca]
Sent: Friday, February 25, 2011 12:06 PM
To: Living Water Smart ENV:EX
Cc: Minister, ENV ENV:EX; Graeme, Ian ENV:EX
Subject: Islands Trust response to Water Act policy proposal

Hello Ministry of Environment staff,

Please see the Islands Trust's response attached.

Thank you for the opportunity to influence this important legislative change.

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*Preserving **Island** communities, culture and environment*



Islands Trust

**ISLANDS TRUST EXECUTIVE COMMITTEE
RESPONSE TO WATER SUSTAINABILITY ACT POLICY PROPOSAL
February 25, 2011**

In June 2008, the Islands Trust Chair wrote to former Minister of Environment Barry Penner to convey Trust Council's support of the commitments expressed in the ministry's new *Living Water Smart* plan. We were encouraged by the identification of the Gulf Islands as one of only two priority areas for the regulation of groundwater use and our letter expressed eagerness to provide advice to the Minister's staff in the development of such regulation.

Minister Penner's August 2008 reply was to instruct the Director of Innovation and Planning to meet with our staff, which she did along with several other senior staff in September 2008. We appreciated this, but over two years later we seem no closer to having groundwater regulations suitable for the Islands Trust Area's urgent circumstances.

Staff, trustees and island residents have been active participants in the new *Water Act Modernization* process and are now responding to the policy proposal in good faith. We do appreciate the general policy statements and the name change to "*Water Sustainability Act*," but urge you to convert these policies into effective legislation as soon as possible. Local governments have little authority and no capacity to regulate groundwater extraction and so we rely on the province to protect our increasingly vulnerable groundwater supplies for domestic, ecological, agricultural and commercial uses.

Several island communities within the federation are making submissions on specific issues of water governance such as bulk water extraction, salt water intrusion, hydro-fracturing and water conservation measures such as rainwater and grey water catchment and storage. We will not repeat the content of local submissions here but encourage you to take them seriously. When you have proposals to address these concerns, we would be happy to review them.

Our most pressing and particular concern about the policy proposal is the need to define low enough thresholds for water extraction to enable licensing and regulation of private wells on some of the Gulf Islands. The Gulf Islands have long been identified as a priority area for special groundwater regulation, and we continue to hope that special thresholds will be defined using local knowledge as soon as possible. The few tools we can use as a local government to prevent harm to the water supply (e.g. residential bylaw enforcement) are on hold pending the outcome of the Province's legislative review. Local and regional governments like ours are experiencing intense public pressure to resolve the situation even though it is the Province's legislated jurisdiction to protect this life-sustaining resource. Please consider this your top legislative priority.

To follow up on any of the topics in the attached, please call Lisa Dunn, Director of Trust Area Services, 250-405-5174 or e-mail her at ldunn@islandstrust.bc.ca

Sincerely,

Sheila Malcolmson, Chair Islands Trust Council

cc. Minister Murray Coell env.minister@gov.bc.ca and Ian Graeme Ian.Graeme@gov.bc.ca

cc. Islands Trust web-site under Chair Correspondence

Islands Trust Council Executive Committee Comments on BC Water Act Modernization Policy Proposal

The policy proposal contains many encouraging statements, particularly those recognizing the critical status of our area and the recognition of the need for a diversity of approaches around the province. Our concern at this point is the timing and specifics of regulatory implementation.

*From page 5: Using an **area-based approach** means that local conditions, issues and interests, and local knowledge and information, including traditional ecological knowledge, will influence water management and help inform decisions.*

*From page 6: In areas experiencing declining water supply, water quality or deteriorating ecosystems – known and chronic problem areas – additional and more stringent requirements will apply... **Criteria and thresholds** will guide identification of these areas, and increasing risk, conflict and scarcity will drive increasing levels of planning, collaboration, and regulatory action.*

From page 12: Domestic licensees and small private domestic well owners will not likely be required to measure and report, except potentially in problem areas.

We are concerned that the focus on adjusting allocations and tinkering with the license system ignores the problems faced by ordinary property owners with private wells that are not allocated, licensed, monitored or regulated in any way. Because the Gulf Islands are already identified in Appendix B as having significant problems, we hope your criteria for “problem areas” will allow for measuring and reporting on private wells on some islands. In designing criteria / thresholds, please consider that special regulation is urgently required where any one of the three following situations exists on the Gulf Islands:

1. Bulk water extraction

- **Issue:** Under the current system, individuals can and do buy residential lots for the purpose of extracting and selling groundwater, without knowing what risks this poses to neighbouring wells. Failure to regulate this type of water-extraction from finite sources is a de facto privatization of water. The burden of proof about harm to the water table is now on those who are affected, rather than on those withdrawing water.
- **Issue:** Private well owners on Hornby and Gabriola Islands – both with severe summer water shortages – are extracting groundwater and trucking it to other islanders, threatening neighbouring residential water supplies. This withdrawal is threatening the supply to neighbouring residential lots drawing water from the same limited source.
- **Issue:** Local bylaws attempting to regulate water extraction for sale have been ineffective despite significant investment in legal advice and court challenges. The current threshold proposed for regulating commercial extraction is much higher than the production of typical low flow wells on the Gulf Islands and yet that is where the damage is being done. The few tools we can use as a local government to prevent harm to the water supply (e.g. residential bylaw enforcement) are on hold pending the outcome of this legislative review. We are under significant public scrutiny and pressure to protect this life-sustaining resource, and we consider this to be the Province’s responsibility.

Recommendation: Special regulation is urgently needed in the Gulf Islands, including an immediate ban on commercial extraction of groundwater until well owners prove their practices are sustainable. The policy proposal threshold for defining “large” bulk water withdrawals should be based upon the characteristics of particular aquifers and the demand upon them, with a much lower threshold for fractured bedrock aquifers. Where there is high demand in relation to recharge capacity, the threshold should be just above the volume required for normal domestic purposes (e.g. 50m³ per day). It is important that the threshold is sufficiently low to account for the cumulative impacts of multiple smaller withdrawals. Some have suggested that the commercial extraction of groundwater should be prohibited altogether in the Islands Trust area. Others suggest that groundwater extraction for transportation should be limited to publicly-controlled wells with proven capacity that are subject to a monitoring regime. There should be no grandfathering / FITFIR rights.

2. Saltwater intrusion (the movement of saline water into freshwater aquifers)

Issue: Salt water intrusion is not mentioned in the policy proposal and yet it is a significant threat to coastal wells. Most wells on Gulf Islands are clustered near the ocean boundary, in the salt water / freshwater interface zone. Depletion of an aquifer can lead to salt water intrusion which can spread to many wells along that interface.

When fresh water is withdrawn at a faster rate than it can be replenished, the water table is drawn down as a result. This draw-down also reduces the hydrostatic pressure. When this happens near an ocean coastal area, salt water from the ocean is pulled into the fresh water aquifer. The result is that the aquifer becomes contaminated with salt water. This is happening to many coastal communities and is predicted to increase as a result of climate change.

In coastal aquifers, there is a sensitive balance between the amount of recharge and the position of the saltwater interface.

- A decrease in recharge will result in encroachment of the interface.
- A rise in sea level will also result in the interface moving inland.
Increased pumping can also cause this interface to shift.

Recommendation: The province should be licensing coastal groundwater wells, based on careful assessments and on-going monitoring of aquifer capacity and potential impacts of saltwater intrusion. In areas where salt-water intrusion is a possibility, there should be a provincial budget and strategy for monitoring and enforcing section 78 of the *Water Act* which currently provides for fines of up to \$200,000 and 6 months in jail.

3. Hydrofracturing

Issue: This volume-increasing process used by the oil industry is now being used to increase water supply in domestic wells on the Gulf Islands. No studies have been made by professional hydrologists on the impact of hydrofracturing on the region. The islands are small, water is a fragile resource, and domestic wells are vulnerable to salt water and septic intrusion. Hydrofracturing may now occur anywhere, without prior notification to neighbours, and with no recourse if a neighbour’s well is depleted by the process or ruined by salt water or septic intrusion.

Recommendation: In June 2007, the Islands Trust Chair wrote to Minister of Environment Barry Penner to convey Trust Council’s concerns about hydrofracturing and

the Minister replied in detail, promising very specific actions and investigation of the practice. (See August 2007 response attached.) Over three years later, it is even more urgent that these promises be kept. Hydrofracturing in the Gulf Islands should be prohibited altogether until there is a licensing system in place that will prevent harm to the already fractured aquifers of the Gulf Islands. Permitting of the practice should only occur after studies prove that no harm will occur to neighbouring users of the aquifer.

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Letter from former Environment Minister Barry Penner  
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Reference: 93627
Aug 17, 2007
Kim Benson, Chair and Trustees
Islands Trust
200 – 1627 Fort St
Victoria BC V8R 1H8

Dear Ms. Benson:

Thank you for your letter of June 28, 2007, expressing the Islands Trust Council's concerns regarding hydrofracturing of water wells in the Islands Trust area.

The Ground Water Protection Regulation (GWPR) being developed under the *Water Act* is being implemented in "phases". Phase 1, which came into full effect on November 1, 2005, focuses on registering drillers and pump installers, well construction and closure standards and provisions for identifying wells. The plan for Phase 2 includes additional standards for well construction and testing, well siting considerations, controlling artesian flow and reporting of information to increase the knowledge base for ground water. Phase 3 will likely include development and implementation of specific regulations in Water Management Plan areas (which might include drilling authorizations in specific areas, if necessary) and regulation for well operation. Within the ministry's current legislative framework, regulating hydrofracturing of water wells in the Gulf Islands is likely best accomplished as a possible provision of a water management plan. Presently, the Township of Langley in the Lower Mainland region is piloting a water management plan, the first in the province since the *Water Act* was changed in 2005 to recognize water management plans. The ministry expects that some of the outcomes of this pilot Water Management Plan will have implications for other regions such as the Gulf Islands. I would like to acknowledge that a water management plan for the Gulf Islands was requested in earlier correspondence dated January 19, 2007, from yourself. However, the ministry is currently intending to assess the results of the Langley Pilot Plan prior to initiating new plan areas. Ministry staff are being advised by the Ground Water Advisory Board, which is composed of academic, industry and government experts in ground water.

By way of copy of this letter to the board's co-chair Mike Wei, P.Eng, Deputy Comptroller of Water Rights, I have forwarded your letter to the advisory board and ask them to review the

practice of hydrofracturing water wells in the context of our current legislative framework. The specific questions I have asked them to address include:

1. Do we have the appropriate data, science and expertise in British Columbia to support our decision-making on the practise of hydrofracturing water wells in a coastal environment?
2. What types of data, studies or investigations could be undertaken to confidently address the issue of hydrofracturing water wells in a coastal environment?
3. In the absence of current appropriate information, how should we proceed to ensure that in regard to the practise of hydrofracturing, our regulation is proactive and leads to the management and protection of the ground water resources?

The Ministry of Environment is committed to ensuring that valuable water resources are protected for future generations of British Columbians and, together with the Islands Trust, share a commitment to protecting the sustainability and quality of ground water in the Islands Trust area. The ministry feels that this is best accomplished through appropriate legislation and proactive water stewardship in partnership with community groups, local government, other provincial agencies and the general public.

Thanks for writing.

Sincerely,
Barry Penner
Minister

pc: Honourable Murray Coell, MLA (Saanich North and the Islands)
Mike Wei, Deputy Comptroller of Water Rights