

GW Solutions Inc. Comments on British Columbia's Legislative Proposal for the Water Sustainability Act

The proposed Water Sustainability Act addresses serious gaps in our province's ability to protect and manage water for the benefit of residents and the environment. In particular, the legislation recognizes the connection between groundwater and surface water, and takes important steps to regulate the use of groundwater. As the only province in Canada not currently regulating groundwater use, British Columbia currently lacks the ability to adequately manage our water resources.

This document highlights the aspects of the Legislative Proposal that GW Solutions Inc. supports, and lists recommendations for strengthening the proposal for the benefit of improved water protection and management.

GW Solutions Inc. – Role and Interest in Water Management

GW Solutions Inc. is a hydrogeology consulting company based in Nanaimo BC, specializing in groundwater supply and protection. We work with public and private water suppliers, and water resource managers to improve access to and management of watersheds and groundwater resources. Through our work we are aware of many of the challenges and conflicts with regards to safeguarding and wisely using groundwater. We see the need for additional and improved regulations around water wells and groundwater monitoring and use.

Recommendations on the Proposed Water Sustainability Act

Having reviewed the Legislative Proposal for the Water Sustainability Act (WSA), GW Solutions makes the following recommendations to strengthen the legislation:

Recommendation 1. Do not exclude deep saline groundwater from licensing and water use reporting. Deep aquifers may become a critical water supply source as desalination techniques improve and current water supplies are stressed. They may also be connected to shallower water systems. It is difficult to set a defensible definition of "deep saline" water based on depth or TDS. We recommend that the WSA does not create a two-tier system for groundwater management.

Recommendation 2. Exempt from licensing and water use reporting domestic users up to a limited use (not well rating), unless required to license or report under an area-based regulation. For example, Washington State exempts domestic wells from licensing for use up to 5,000 gallons per day.

Recommendation 3. Require surface water and groundwater license renewal at least every 20 years (10 years recommended). This is necessary to allow periodic review of licenses with up to date information on water supply and demand, and an improved understanding of aquifers, surface water and groundwater interaction and watershed dynamics.

Recommendation 4. Require groundwater quality testing and reporting for all new water wells. Water quality testing for new wells is required in New Brunswick, through a mechanism where well drillers are required to sell a coupon for a general water quality test with each well that they drill. The coupon is redeemable at the provincial laboratories, and this data provides critical information about regional groundwater, and also ensures that new well owners are informed about the quality of the water in their well.

Recommendation 5. Include all sectors in water licensing and reporting, and manage them together. There is no rationale for excluding any sector from the same water licensing and management process. A coherent approach across all watersheds and sectors is necessary for appropriate resource management. Do not exclude the oil and gas sector from the water licensing and reporting requirements, as is alluded to in the draft legislation. All WSA provisions should apply equally across all sectors.

Recommendation 6. License and rental fees should cover administrative costs at minimum. Income from licenses, fees, etc. above and beyond administration costs should be dedicated to water and watershed characterisation, monitoring, management, and protection. If roles and responsibilities in managing water resources are given to local governments (i.e. municipalities, regional districts) or local watershed committees, adequate funding mechanisms should accompany these processes.

Recommendation 7. Ensure that Environmental Flow Needs are scientifically defensible and appropriate for rivers and streams of different sizes and ecosystems. A single approach for identifying EFNs may not be appropriate across all streams and rivers. EFNs should take into account surface water and groundwater interaction and cumulative effects within a watershed.

Recommendation 8. Require mandatory submission of well records for well alterations (e.g. extending a well casing) and well closure / decommissioning / abandonment. This information, in addition to mandatory reports for new wells, will allow the identification of (potentially) active wells, and pathways between surface and aquifers.

Recommendation 9. Include well-rating requirements for new wells. A standardized well rating procedure should be required of well-drillers and hydrogeologists for new wells, so well-rating is comparable between wells.

Recommendation 10. Explicitly state how First Nations and local stakeholders will be consulted on local water allocation decisions.

Recommendation 11. Data on water licenses, water wells, water use, and water resources should be publicly available in a timely manner. The relevant databases will have to be administered by a fully independent provincial ministry or agency.

Recommendation 12. Water should be considered a Public Trust. This should include surface water, shallow groundwater, and deep groundwater.

Affirmation of the Proposed Water Sustainability Act

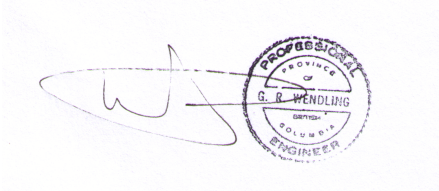
GW Solutions Inc. supports the following proposals in the draft WSA:

1. Requiring licenses for groundwater withdrawals.
2. Exempting domestic wells from licensing requirements.
3. Integrating rights allocations for groundwater into rights allocations for surface water, acknowledging the interconnection between the two sources of water, and allowing conflict resolution between groundwater and surface water users.
4. Expanding the Ground Water Protection Regulation to include requirements for:
 - a. Developing, testing and disinfecting water supply wells
 - b. Mandatory submission of well records for new wells
 - c. Banning well pits for new wells and regulating older well pits
 - d. Well pump installation and reporting
 - e. Well maintenance for storage of contaminants
5. Define requirements for stopping and controlling flow of artesian wells and require reporting of artesian conditions.
6. Protecting Environmental Flows through limiting surface water and groundwater extraction when Environmental Flows are threatened.
7. Area-based regulations and Water Sustainability Plans to address specific conditions in local areas.

Closure

GW Solutions was pleased to provide this document. If you have any questions, please contact me.

Yours truly,

A handwritten signature in blue ink is written over a circular professional engineer stamp. The stamp is from the Province of British Columbia and identifies G. R. Wending as a Professional Engineer. The text in the stamp includes "PROFESSIONAL ENGINEER", "PROVINCE OF BRITISH COLUMBIA", "G. R. WENDING", and "201101".

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