

**Water Protection and Sustainability Branch,
Ministry of Environment and Climate Change Strategy
Government of British Columbia**

Via email to livingwatersmart@gov.bc.ca

Cc: Honorable Josie Osborne, Minister of Land, Water and Resource Stewardship; Honorable Sheila Malcolmson, Minister of Mental Health and Addictions; Doug Routley, MLA, Nanaimo North Cowichan; Adam Walker, MLA, Parksville Qualicum

Re: Written Submission in Response to the BC Watershed Security Strategy and Fund

Background

The Regional District of Nanaimo has long been a leader in advancing initiatives related to drinking water and watershed protection at the local level, particularly since our the parcel tax funded service dedicated to these activities was launched in 2009.

The RDN's Drinking Water and Watershed Protection (DWWP) program coordinates collaborative regional programs advancing water awareness and stewardship; water information and science; and water-centric planning and policy support. Funded by member municipalities and electoral areas alike, this service operates at the watershed scale, developing partnerships across jurisdictions, sectors, departments and geographic areas in order to support effective watershed management and stewardship. DWWP initiatives include community education and outreach, rebate programs, community-based monitoring initiatives, scientific studies and reporting, water-expertise to support development referrals, and advocacy for policy improvements.

Here we present our key feedback pertaining to the Water Security Strategy and Fund Discussion Paper, released by the Government of BC on January 25, 2022 for public review. This submission reflects professional and community perspectives, local concerns, as well as solutions and priorities based on the input of our experienced staff, elected officials and advisors. Given the space limitation to five pages, we have chosen to address six out of the 10 proposed outcomes that we feel best positioned to comment on. This should not be taken to infer that the other four outcomes are not equally important; they are.

Definition

The discussion paper provides a definition of *Watershed Security* that implies the availability of good quality water for healthy ecosystems and communities, including:

- Safe drinking water for all,
- Healthy and resilient aquatic, riparian, wetland, and watershed ecosystems,
- Sufficient water to support food security, recreation, jobs, and local economies,
- Sufficient water for First Nations, and
- Reduced risks from water related hazards such as flooding and drought.

This definition has merit but should go further to include: protection of natural assets to support resilience to climate change; local oversight over industrial activities in community watersheds; and more specifically, water for Indigenous communities to realize their economic and cultural potential.

Proposed Outcomes

Outcome One: Support and enable watershed governance

- In addition to what is proposed in the discussion paper, to better enable local / regional watershed governance initiatives, the Province could:
 - provide funding directly to First Nations to engage in governance processes related to watershed decision-making in their traditional territory;
 - prioritize and enable inter-agency collaboration that is locally-led but supported by participation of Provincial staff in local / regional forums (roundtables, committees, working groups) dedicated to watershed planning and governance;
 - update the Private Managed Forest Land Act to require more consultation with / oversight by local communities regarding harvest plans and require more forestry data sharing for transparency;
 - implement improved and more open data management by Health Authorities around water quality in small water systems – for transparency and use in modelling / risk assessments;
 - provide financial resources to the agricultural sector to adapt to hydrological climate change impacts;
 - improve Ministry of Transportation and Infrastructure design standards and communication with local governments on road drainage, culvert replacement and stream-crossing improvements.

Outcome Two: Enhance our understanding of watersheds and the risks they face

- Characterization of watershed health should be based in science as well as include traditional ecological knowledge, as shared with permission from First Nations and Indigenous communities, to ensure place-based and cultural factors are given weight in decision-making around risk.
- To effectively tap into the potential of community-based science as a key means for enhancing our understanding of watersheds and risks they face, the Provincial government needs to provide:
 - clear and accessible data collection protocols including training / ‘trainer the trainer’ programs for community level monitoring (including groundwater level, snowpack, stream level and flow, vegetation, surface water quality etc.), and clearly outline what potential analysis and decisions would be supported by that data;
 - clear processes and pathways for how that data can get into user-friendly data management structures / centralized databases, and be subsequently analyzed and mobilized;
 - ramped up Provincial capacity to collaboratively analyze, interpret, report out and act on the data that is submitted to close the loop back to the community level;
 - *NOTE: this robust standardized and centralized support from the Province should also be in productive conversation or interplay with decentralized, local and context-specific knowledge systems to maintain the richness and nuance of place while having a strong Provincial framework to operate within.*
- Better Provincial science on forest hydrology should be informing practices on private forestry and crown forestry land, including the effects forest harvest, regrowth, soil compaction, age of

stand etc. on run-off, snowpack retention and groundwater recharge. This should be transparent and shared with the community.

- There is also a strong need for the Province to support better analysis and sharing of hydrology-related road impacts and drainage changes in rural areas (under the jurisdiction of the Ministry of Transportation and Infrastructure) and the resulting effects on watershed hydrology including the risks posed.
 - The Ministry of Transportation and Infrastructure should also be resourced to play a stronger role in rainwater management across the landscape via their road and highway networks, using green infrastructure principles and practices to support the maintenance of the natural water balance while providing safe travel corridors.

Outcome Four: Achieve healthy water for everyone

- Communities, all levels of government (local, provincial, federal, and First Nations), and industry can more formally work together to better protect drinking water for human health and well-being, now and in the future if there are Memorandums of Understanding (MOUs) established for community watersheds / aquifers, along with accompanying forums (roundtables, working groups, committees, boards), to enact agreed upon Objectives, Best Practices, Regulations, Monitoring and Reporting.
- The Province should 1) consider a “community aquifer” designation in addition to improving mapping of aquifers and other water sources, and 2) broaden the “community watershed” designation to not just be limited to surface water intakes with a certain percentage of crown land upstream, but any watershed where communities get their drinking water supply, regardless of upstream landownership. This would help identify the risk to drinking water and require mandatory notification of drinking water suppliers when resource extraction or development activities are proposed.
- The following principles should underlie source water protection:
 - the precautionary principle;
 - the Indigenous principle that water is a relation to be treated with respect, dignity and reciprocity, a living entity that is a unifying feature on the landscape which all other activities should be planned around;
 - the intrinsic and economic value of intact ecosystems and natural assets recognized for their provision of key drinking water services such as water storage and filtration (as well as stormwater management services, among others) at a fraction of the cost of engineered infrastructure, with many co-benefits;
 - local oversight / input over resource extraction activities in drinking watersheds;
 - groundwater and surface water managed as one resource;
 - rainwater management as a key source water protection measure;
 - that protecting drinking water for human health is fundamentally tied to the Declaration on the Rights of Indigenous Peoples Act (DRIPA) and reconciliation with Indigenous peoples, which cannot be separated from the efforts promoting environmental well-being for sustaining non-human life systems.

Outcome Six: Reset the water supply and demand relationship

ALL opportunities listed under Outcome Six in the discussion paper are critically important to help implement solutions to water conservation and efficiency. In addition, we emphasize:

- Water users from all sectors can be encouraged through financial incentives and enabling regulatory structures to reduce the amount of water they use via the following measures:
 - harvest rainwater to augment supply;
 - update appliances for indoor and outdoor water efficiency;
 - adopt low-water use landscaping practices / retain naturalized landscaping including topsoil;
 - utilize greywater for non-potable uses and irrigation as appropriate.
- In particular, industrial water users such as pulp and paper mills and mines should have water efficiency plans and measures in place as part of their license to operate. They should demonstrate through audits the achievement of a high standard of water conservation in order to continue to use their licensed water and their licensed volumes should be adjusted according to a standard of conservation.
- The Province should actively reduce policy barriers in building / plumbing code and health regulations to better enable the use of rainwater and greywater as alternative water sources, especially for outdoor irrigation.
- Also as a priority, the Province should financially support the agricultural sector to:
 - enhance water efficiency in irrigation and livestock watering practices and equipment;
 - improve soil health for better water retention and reducing irrigation demands;
 - implement water storage solutions to minimize pressure on surface and groundwater during growing season.

Outcome Seven: Improve habitats for aquatic ecosystems

ALL opportunities listed under Outcome 7 in the discussion paper are critically important to support the restoration, rehabilitation and improvement of water and aquatic habitats in our local watersheds, as well as:

- requiring restoration or enhancement as part of riparian area assessments and as part of any resource permitting;
- using updated mapping, modelling and remote sensing to identify priority areas for restoration of riparian or aquatic habitats;
- the Province should actively partner with DFO, First Nations, local governments and community groups on freshwater restoration activities with financial and/or in-kind support;
- the Riparian Area Protection Regulation (RAPR) should be implemented in a more integrated manner with the Water Sustainability Act regulations and objectives. Further, it should include as part of the professional assessment requirements purposeful data collection and sharing;
 - For example, shapefiles with geospatial coordinates of stream location should be submitted as part of the RAPR process, and made available to update publicly available watercourse mapping.

Outcome Ten: Create a Watershed Security Fund

The Watershed Security Fund should be the lead component of the strategy, coming first so as to enable all the other outcomes listed. The fund should focus on these key priorities (many of which are cross-ministerial and support existing provincial commitments in other related strategies):

- a funding stream direct to Indigenous-led or co-led efforts;
- boosting provincial support staff and liaisons that can fill roles in data interpretation, expanded monitoring, support for community initiatives, and advancing regulatory implementation (i.e. groundwater licensing and reporting, WSA Objectives, implementing WSPs etc.);
- financial support for the agricultural sector to improve water efficiency and on-farm water storage;
- funding for locally-led natural asset protection related to rainwater management and drinking water provision;
- funding and structural support for communities to transition towards regenerative economies centred around healthy, functional watershed ecosystems rather than current extractive economies that pose risks to watershed health;
- resources available to local governments so they can exercise leadership in advancing watershed protection initiatives of direct benefit to Provincial mandates on freshwater protection;
- boosting resources for improved provincial data management– particularly the Ministry of Health and Health Authorities water quality data; Ministry of Transportation and Infrastructure roads, culverts and drainage data; and Ministry of Forests harvest and hydrology data including for Private Managed Forest Lands – for transparency, reporting and analysis.

Conclusion

By investing in watershed security, the Province can create many important benefits for British Columbians such as building resilience to climate impacts (flood, drought); advancing reconciliation with First Nations; securing clean drinking water sources for communities while protecting ecological health; and ensuring recreational and cultural water quality and access.

Local and regional governments play a crucial role in bridging to the community, convening across levels of government, allying with our First Nations neighbours, and delivering essential services to residents. The proposed Watershed Security Strategy and Fund is an urgent and necessary foundation for the Province to lay in order to advance key commitments to British Columbians in terms of community and ecosystem health, resilience to climate change, self-determination for Indigenous peoples and a regenerative economy that will support a thriving future. With a solid foundation provided by senior government, local communities are better enabled to leverage their own capacity to support these common aims.

We look forward to swift action by Provincial leaders in implementing this urgently needed fund and strategy so that we may collectively secure the well-being of our watersheds and therefore the well-being of us all.