



POLIS Project on Ecological Governance
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August 12th, 2021

Attn: Climate Action Secretariat, BC Ministry of Environment and Climate Change Strategy

Submission from the POLIS Water Sustainability Project re: B.C.'s Draft Climate Adaptation and Preparedness Strategy

Do the proposed actions address your community's organization's needs for climate preparedness and adaptation?

The University of Victoria's POLIS Project places water at the forefront of BC's Climate Preparedness and Adaptation Strategy. The IPCC report released on August 9, 2021 clearly indicates that carbon reduction globally will fail to meet the 2 degrees Celsius threshold and that a much higher priority must be placed on adaptation not only during the next three years but on a continuing and expanding basis over the coming decades of this Century.

POLIS feels that the Draft Climate Preparedness and Adaptation Strategy greatly understates the magnitude and urgency of the response to adapting to climate change. The hydrology of watersheds is already under serious stress, with severe consequences for droughts, floods, and drinking water quality. These three factors alone will have major impacts on economy, public and ecosystem health, and community security. The Strategy must explicitly address these concerns through a watershed security and resilience lens.

Loss of watershed function and security has cascading effects on critical resources such as wild salmon, irrigated agriculture and food security, source drinking water protection, flood potential and sea level rise, and resiliency of watersheds to withstand fires, pests, and mega drought, and to meet competing demands for surface and groundwater.

The Climate Preparedness and Adaptation Strategy must be substantially redesigned before the end of this calendar year to commit to specific projects, budgets, staff resources, accountabilities, and critical success indicators through this water lens. Many very powerful carbon mitigation strategies will have strong adaptation characteristics and should start with protection of critical wetlands and riparian areas and commit to restoration of critical watersheds and reaches within watersheds—including identified drinking water sources areas, salmon and other aquatic species habitat, riparian, and wetlands. At minimum, government should strengthen environmental flow protections and complete groundwater licencing.

Are there other priority actions you would like to see included?

Increasing watershed resiliency and security to adapt to constantly changing hydrology, precipitation, and temperature regimes requires a much more integrated land and water planning approach and development of a number of projects to which the government is already committed:

Healthy Watersheds Initiative to create jobs and advance watershed resiliency and adaptation. This program should be expanded and integrated into the new Climate Adaptation and Preparedness Strategy.



Old growth strategy to retain intact ecosystems, manage forest carbon, and protect riparian zones with an emphasis on critical source drinking water areas, groundwater recharge, wetlands, and at-risk watersheds.

UNDRIP and reconciliation to create plans which ensure Indigenous self-determination and co-governance for resource use and development, and reinforce Indigenous laws and recognition and exertion of rights and title through collaborative land, water, and watershed planning efforts.

Water Security Strategy to commit increased budgets to retaining healthy watersheds, reduce flood hazards, implement prepared drought response strategies and drinking water source controls, and strengthen the environmental flows protection regime.

Watershed Security Fund to provide communities and Indigenous nations with resources to plan their future for more resilient watersheds and implement priority restoration, co-governance, and other local protection initiatives.

Water Sustainability Act implementation including groundwater licensing, collaborative monitoring initiatives, and specific regulations such as:

- environmental flows and wetland protection to retain ecological integrity
- water objectives to set priorities for water quantity, quality, and aquatic resources
- Area-based regulations to address cumulative effects on water and create local conditions for drought strategy and enhance resilience for key watershed features
- fair allocation of surface and groundwater
- drinking water source protection as required in the Hullcar Aquifer, Shawnigan Lake, Peachland and Comox and other regions where high-risk community water supply areas have been identified.

The government must ensure that the proposed Land and Resources Operations Ministry has the structure to integrate delivery of these priorities with an eye to meaningful improvements in climate adaptation in all watersheds.

What would successful implementation of the actions look like?

First, the Climate Adaptation and Preparedness Strategy needs to be rewritten by December 2021 should contain: an integrated list of priority actions with clear milestones and dates and a budget attached; staff resources; timelines for delivery; delivery responsibilities including accountability; monitoring and data support requirements; and critical success factors identified to ensure accountability for delivering over the period 2022 -2025. Existing watershed governance pilots in the Koksilah/Cowichan, Nicola, and Skeena should explicitly integrate a climate resilience and watershed security approach looking to test new tools in the *Water Sustainability Act* and other policy and legislation as model and example of integrated multi-benefit approach.

The project descriptions under the Healthy Watersheds Initiative provides a template for such a Project Charter. What gets measured gets done!



Second, a priority for the government is a significant update of the provincial Drought Response Plan including clear accountability and the ability to trigger and deploy necessary tools under the *Water Sustainability Act* such as critical flows and fish protection orders (s. 87/88) and ensuring water sustainability plans include customized local drought and flood response provisions.

Successful local plans must be adaptive and change as conditions change over the coming decades. The Climate Adaptation and Preparedness Strategy cannot prevent floods, droughts, wildfires, and extreme heat events, but they can greatly reduce the severity of the impact and the costs (both financial and ecological) to ecosystem and communities. The reduction in impacts should be tracked, monitored, and continuously improved.

Third, the component strategies outlined in the question above would be developed by lead ministries in Victoria but through a climate adaptation lens so they contribute to the strategy as well as address other policy matters. Delivery of the component plans should be by a newly minted regional delivery agency with full integration of reconciliation, environmental stewardship, and economic recovery goals of government.

Fourth, drought response plans must be anticipatory with clearly defined triggers for action to reduce water demands rather than reactive. Watershed-specific triggers should be developed in conjunction with communities and Indigenous nations to ensure timely action.

Finally, the Strategy must have support in the 2022 budget, be linked with the completed organization of the regional delivery contemplated under the FLNRORD reorganization (future LNRO), and contain a clear set of priorities for each year of the three year implementation phase 2022-2025. As part of this Ministry reorganization, the government should consider a strong (well funded) stand-alone Ministry/body set up explicitly to address emergency response and climate-driven challenges. Currently, much of May-September is either underwater, excessively dry, or on fire—drawing the attention of the resource Ministries to chase crises rather than plan, implement, and respond. A standalone body focused on emergency and crisis response in an ongoing way will help prepare for the inevitable future emergency, save costs, streamline activities as other Ministries can then focus on their longer-term mandates and preparing for change and transition.

Do you have any other comments on the draft strategy?

The Climate Adaptation and Preparedness strategy must be directly linked with the proposed Carbon Neutral Legislation promised to be passed in this current term of government. This will require more attention to low carbon resiliency projects which combine measures to reduce carbon emissions while increasing nature's capacity to store carbon. To achieve carbon neutrality, carbon emissions will have to be reduced by 60-80% from today's levels and nature's carbon storage increased by up to 50%. This will require regenerative projects such as cover crops in agriculture, a new carbon management strategy for forests protecting critical old growth areas and regenerating second growth, retention of wetlands and natural flood control infrastructure to reduce carbon-intensive concrete, and water conservation based on water objectives and pricing strategies that reduce water use significantly to avoid new storage structures.



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The Strategy lacks urgency. There are no calls for action before 2022 and much of the three-year strategy appears to be developing concepts not specific projects. With the rapid increase in climate impacts, the Strategy needs teeth so that it can hit the ground running in 2022—supported by a budget, staff resources, an integrated delivery agency, and a clear set of priorities spanning three years.

The draft guiding principles are intended to help ensure we're taking into consideration key areas of focus, existing social conditions and challenges. Do you have any comments on the guiding principles?

We generally support the six principles. However, as mentioned before there is a lack of urgency to address high risks in watersheds and no attention to the need for continuous improvement. The IPCC clearly indicates that global temperatures will increase continuously till at least mid-Century and that risks to water security will greatly increase across the province. The Strategy cannot be static. It must gear up every five years to aggressively mitigate increasing risk so that outcomes are managed and the guiding principles are indeed met. There should be a seventh principle supporting continuous improvement.

On behalf of the POLIS Water Sustainability Project team,

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