

10 January 2020

BC Ministry of Environment and Climate Change Strategy
Climate Ready BC Consultations

*** BY EMAIL AT CLIMATEREADYBC@GOV.BC.CA ***

Dear Sirs/Mesdames:

Re: Climate Ready BC

Thank you for the opportunity to make submissions on the development of a climate adaptation strategy for British Columbia, in the current consultation period.

We would like to take this opportunity to make some specific recommendations, as well as some general comments about the approach to developing a climate adaptation strategy. Detailed discussion of our recommendations is set out in the latter part of this submission.

Summary of specific recommendations

Recommendation 1: The Climate Preparedness and Adaptation Strategy must commit the government to investments in quality information for the entire province, and at the appropriate scales, to guide climate adaptation.

Recommendation 2: The Climate Preparedness and Adaptation Strategy must be developed with BC's First Nations and be consistent with the United Nations Declaration on the Rights of Indigenous Peoples, and supported by appropriate levels of financial and other support for Indigenous communities.

Recommendation 3: The Climate Preparedness and Adaptation Strategy must provide for the development of regional climate adaptation plans that lay out who is going to do what, and when, and how they are going to communicate with the public.

Recommendation 4: The Climate Preparedness and Adaptation Strategy must require a systematic review and updating of BC laws and policies to mandate climate change adaptation across provincial ministries and agencies, with particular attention to considerations of ecosystem resilience and recovery, acknowledging the critical benefits provided for species and communities.

Recommendation 5: The Climate Preparedness and Adaptation Strategy must commit to robust assessment of climate costs and adaptive measures so that we can have informed public engagement around decision-making.

Recommendation 6: The Climate Preparedness and Adaptation Strategy must guarantee funding for applied research and on-the-ground implementation of nature-based adaptation.

Recommendation 7: The Climate Preparedness and Adaptation Strategy must acknowledge a leading role and responsibility of the provincial government in climate change adaptation, while providing for partnerships and capacity development with Indigenous nations and local governments.

General comments

We note that your consultation web pages, and particularly your consultation survey, ask British Columbians to describe how climate change is affecting them, now and in the future. While it is useful to collect this information, we note that across BC, many local governments have already developed – and are implementing – [climate adaptation plans](#), and are [engaging with their communities](#). The Ministry of Transportation and Infrastructure (MOTI) now [incorporates climate change modelling](#) into road projects. The Ministry of Health has started [identifying climate impacts](#) and suggesting how health authorities can prepare for them.

We need to build on the work that is already underway. A climate adaptation strategy should not start from ground-zero. What's needed is leadership from the Province to develop a coordinated, comprehensive, measurable and transparent strategy to help weave these different pieces together and identify and fill the gaps.

A provincial strategy should ensure that the legal mandates of provincial authorities include climate adaptation. The Province has many responsibilities that are clearly at the heart of adaptation, such as land, water, roads, bridges, terrestrial and aquatic species, energy, and housing.

In particular, the strategy should address how the Province will help our natural ecosystems remain resilient as the climate changes, especially our coastal and marine ecosystems, and inland aquatic ecosystems – a huge gap in the planning that has been done so far.

We understand that your current efforts to prepare a new climate adaptation strategy are at least partly the result of last February's [Managing Climate Change Risks](#) report from BC's then Auditor General, Carol Bellringer.

We agree with Ms. Bellringer: to be useful, BC's climate adaptation strategy needs to help government identify **who** will be addressing **which** risks, by **when**. We need to know **the costs** – including the social and environmental costs, which might not have a dollar value – that we are likely to face if adaptation does not occur, and the costs that we will incur making our communities more resilient.

There are already some large estimates on the table: [\\$6.7 billion](#) to treat the province's 800,000 hectares of high- and moderate- risk wildfire interface areas, and [\\$9.5 billion](#) to upgrade sea dikes and other coastal defences in Metro Vancouver alone, to protect against rising sea levels. How are these costs and needed actions going to be addressed, and over what timeline? When will implementation of the plan be completed?

And those are just two of the many climate adaptation costs that BC faces. BC's [Preliminary Climate Risk Assessment](#), released last July, identified 15 risk scenarios for their likelihood and consequences, a majority of which would have catastrophic economic consequences for the province. This Risk Assessment was intended

to “support development of the provincial climate adaptation and preparedness strategy,” but your consultation does not indicate when or how this assessment will influence the development of the strategy or explained how the Risk Assessment will be addressed at the local, community level.

Specific Recommendations – Detailed Discussion

We recommend that the Province’s climate preparedness and adaptation strategy commit the province to:

1. Ensure that BC has the information needed for effective climate adaptation planning and decision-making, with regular updates.

Good planning requires good information – about what our current vulnerabilities are and how those will change due to climate change. BC has made a strong start through the work of the Pacific Climate Impacts Consortium (PCIC) and other experts who have told us how the regions will change.

However, we still need more information about how this translates into vulnerabilities across BC. For the most part, the provincial government has left it up to local governments to assess risks, but this means there are gaps, and regional approaches are missing. This becomes particularly clear in the context of [flood](#) and wildfire risks, where resources and capacity vary among local governments.

Downloading responsibility to local governments also means that the vulnerabilities of Indigenous communities adjacent to municipalities and elsewhere are getting left out of assessments, and those vulnerabilities may even be exacerbated by local adaptation measures elsewhere in the region. At a broader scale, Indigenous peoples have deep knowledge about managing the land and water in their territories and how conditions are changing. This information is highly relevant for climate change adaptation, and it makes sense for the Province to work together with Indigenous nations to understand risks and develop solutions.

To date the Province has done relatively little to assess ecosystem vulnerability, as we have discussed elsewhere. It also isn’t clear how comprehensively the Province has assessed climate impacts and risks across different sectors. Are mines tailings ponds built to withstand extreme rains, for example?

Recommendation 1: The Climate Preparedness and Adaptation Strategy must commit the government to investments in quality information for the entire province, and at the appropriate scales, to guide climate adaptation.

2. Co-develop and implement the strategy with Indigenous peoples in a manner that meets BC’s legislated commitment to implement the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), including specific financial and other support to Indigenous communities for climate adaptation.

Adapting to climate change involves making changes to provincial management of land and water, to name just two areas where there is a clear intersection with the implementation of UNDRIP. While the Province is now [committed](#) to change its laws to become consistent with UNDRIP, this will take time. The Province can’t assume that existing provincial authorities (and delegated authorities, like local

governments) will act consistently with UNDRIP in developing adaptation policies and measures, because they are operating in legal and policy frameworks that reflect colonial values.

A new adaptation strategy should address Indigenous title, rights, priorities and objectives. A co-developed adaptation strategy – shaped with Indigenous perspectives and knowledge, and consistent with Indigenous laws about successful, long-term management of relationships with the land and water – would be a good thing for everyone in the province.

Recommendation 2: The Climate Preparedness and Adaptation Strategy must be developed with BC's First Nations and be consistent with the United Nations Declaration on the Rights of Indigenous Peoples, and supported by appropriate levels of financial and other support for Indigenous communities.

3. Set targets for climate adaptation actions, including regional climate adaptation planning, where appropriate, and report on progress.

As the Auditor-General noted, making progress on adaptation depends on having clear deliverables, and defined roles and responsibilities.

Each region of the province will face different climate impacts and will have different ideas about how adaptation should occur. Consultation and collaboration may be most effective at a regional level. The province must work in a government-to-government relationship with Indigenous nations, as well as in cooperation with local governments and other stakeholders, to develop regional climate adaptation plans.

Recommendation 3: The Climate Preparedness and Adaptation Strategy must provide for the development of regional climate adaptation plans that lay out who's going to do what, and when, and how they are going to communicate with the public.

4. Ensure that BC laws and policies mandate climate change adaptation and resilience across Ministries and agencies and across the province.

The Auditor-General also noted that a lack of mandate was a factor hindering climate adaptation action for government agencies, and stated that the Province should “consider climate change adaptation in its legislation, regulation, approvals and permitting processes.” This lack of mandate means that significant provincial decisionmaking about land and water management is occurring without adequate regard for future conditions, and without landscape level planning that would support effective actions. As a result, opportunities to adapt using efficient, nature-based solutions are being missed. For example, there is no mandate to address climate change impacts in Crown Land tenures under the *Land Act*. Nor does legislation or policy affecting more than 130 km of coastal dikes reflect current science and technical methodologies about the role of coastal vegetation in wave and flood regulation. Many more examples exist. In a separate brief, our organization has outlined how a new Coastal Protection law could address coastal adaptation in a comprehensive and coordinated way.

Recommendation 4: The Climate Preparedness and Adaptation Strategy should require a systematic review and updating of BC laws and policies to mandate climate change adaptation across provincial ministries and agencies, with particular attention to considerations of ecosystem resilience and recovery, acknowledging the critical benefits provided for species and communities.

5. Assess the costs of climate adaptation needs and choices in a transparent and credible way.

What gets measured gets managed. And when it comes to adaptation, we need to understand the costs, benefits and risks of different adaptation measures. Some of this work is being done at the local level, but the information is not necessarily being gathered in a consistent or transparent way.

Most economic modelling approaches have limitations, and these need to be clear. For example, in an assessment of potential impacts from extreme weather, the costs of physical damage may be included, but not economic and other losses from the time lag of recovery. Or modelling might consider the cost of raising a sea dike, but not the increased vulnerability that results from more intense land use nearby based on a false sense of security.

As well, there are social and environmental costs that are hard to capture in dollar terms, like the damage to coastal ecosystems from dikes. This is probably why, in part, we have seen less consideration of ecosystem and social vulnerability.

Recommendation 5: The Climate Preparedness and Adaptation Strategy must commit to robust assessment of climate costs and adaptive measures so that we can have informed public engagement around decision-making.

6. Make a commitment to support and fund innovation through research and pilot projects, including nature-based adaptation at infrastructure scales.

One of the reasons we are so vulnerable to climate change impact is because of where and how we have built our communities: along the coast, in floodplains, next to forested areas, on steep slopes. To protect ourselves, sometimes we rely on structural protection like dikes and sometime we rely on statistics (e.g. relatively rare flooding or drought events) and luck. Simply reinforcing these existing approaches may not be our best options, as we see more extreme weather events over time.

It's time to consider doing things differently, like working with nature instead of against it. There is a growing body of research and practice around "nature-based adaptation," such as relying on wetlands to absorb wave energy along the coast, or restoring natural river floodplains, and pulling development back to safer places. But these approaches need to be tried and tested – and that takes resources.

Existing mechanisms for funding infrastructure projects are usually not compatible with the different needs for collaborative design, active experimentation, adaptive management and longer monitoring periods for these types of projects – even if they can turn out to be more cost-effective over the long term and offer multiple benefits.

Recommendation 6: The Climate Preparedness and Adaptation Strategy must guarantee funding for applied research and on-the-ground implementation of nature-based adaptation.

7. Lead in implementation of climate adaptation measures.

Notwithstanding action at local and regional scales by other actors, the Province must ultimately accept its responsibility for ensuring that all British Columbians are kept safe from the impacts of climate change.

Recommendation 7: The Climate Preparedness and Adaptation Strategy must acknowledge a leading role and responsibility of the provincial government in climate change adaptation, while providing for partnerships and capacity development with Indigenous nations and local governments.

Conclusion

We applaud the BC government for preparing a *Climate Preparedness and Adaptation Strategy*. However, it is important that the Strategy be clear as to its principles, the role of the provincial government relative to other levels of government and to build on work that has already been done. It is also critical to build on work to implement UNDRIP in the province. Finally, we strongly recommend a review of provincial law and policy to develop adaptation strategies grounded in nature-based approaches to ensure long term resilience for ecosystems and communities.

Thank you in advance for your review and consideration of our submissions. We would be happy to respond to any questions you may have or to provide further information or clarification.

Sincerely,



Andrew Gage
Staff Lawyer



Deborah Carlson
Staff Lawyer