



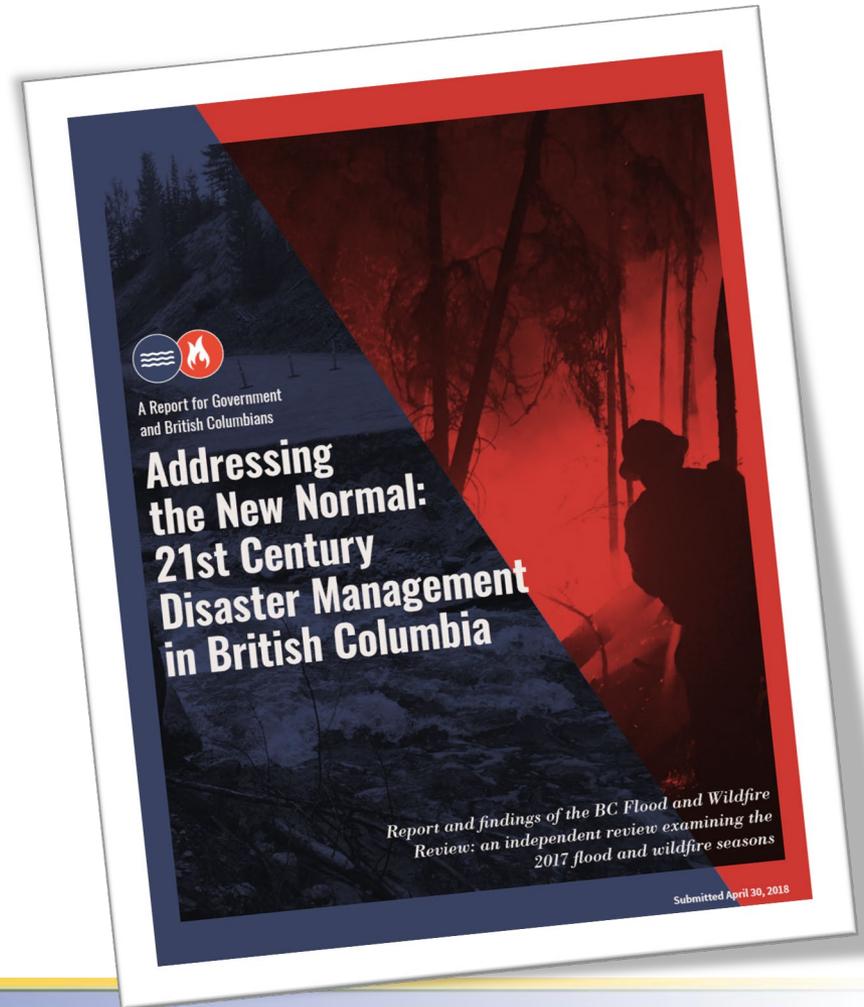
Climate Ready BC: Preparing Together

Developing a Climate Adaptation and Preparedness Strategy for British Columbia through engagement

Chapman/Abbott Report

“It’s important to have an independent team look at this year’s flooding and wildfire seasons (2017) with fresh eyes, the goal is to learn from those experiences and improve the government’s procedures for dealing with these kinds of events”

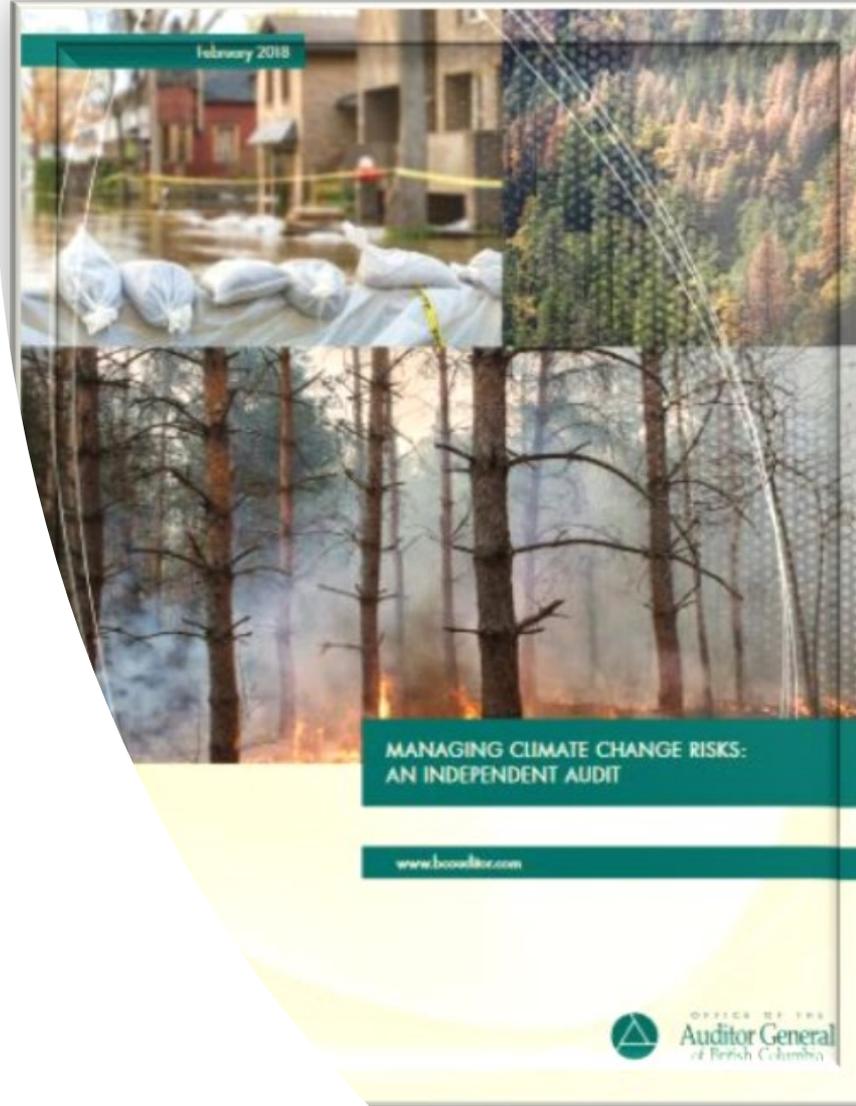
- Chief Maureen Chapman



“GOVERNMENT IS NOT ADEQUATELY MANAGING THE RISKS POSED BY CLIMATE CHANGE”

BC Auditor General’s Independent Audit “Managing Climate Change Risks”

- **Recommendation #1:** province-wide risk assessment
- **Recommendation #2:** new climate adaptation plan
- **Recommendation #5:** consider adaptation in legislation, regulations, approvals, permits



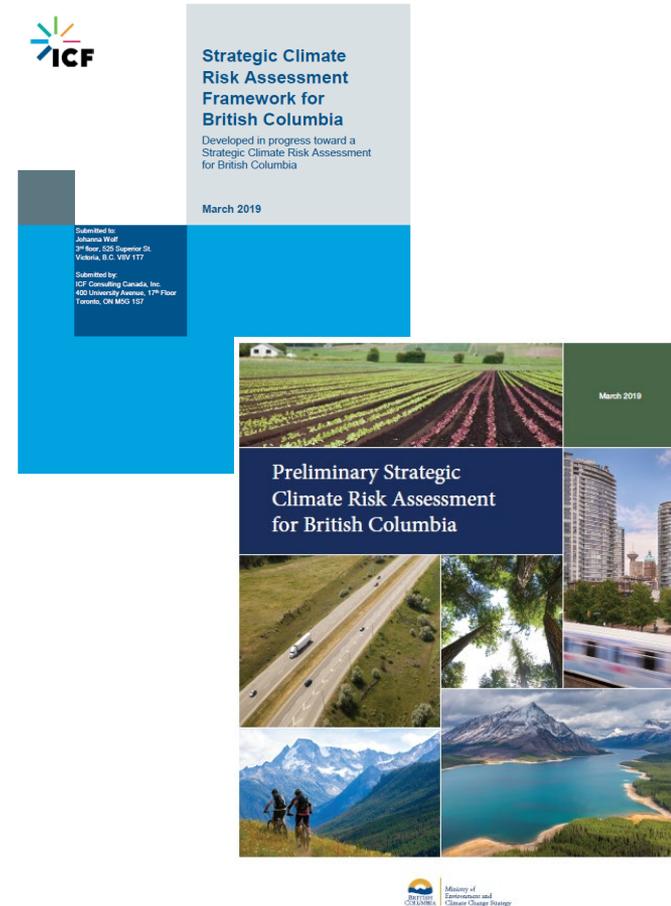
Climate Risk Assessment Overview

Objective

- Assess, compare, and prioritize potential climate-related risks with significant provincial impacts on fundamental qualities of life in the province
 - <https://www2.gov.bc.ca/gov/content/environment/climate-change/adaptation/risk-assessment>

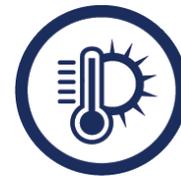
Components

- *Strategic Climate Risk Assessment Framework for British Columbia*
- *Preliminary Strategic Climate Risk Assessment for British Columbia*



Risk Events and Scenarios: Discrete Events

1. **Severe Riverine Flooding:** 500-year flood on the Fraser River
2. **Moderate Flooding:** Moderate flood in a single community
3. **Extreme Precipitation and Landslide:** Significant landslide in Hope triggered by extreme precipitation
4. **Seasonal Water Shortage:** Months-long summer water shortage affecting two or more regions
5. **Severe Coastal Storm Surge:** 3.9 m storm surge during a king tide along the B.C. coast
6. **Heat Wave:** Heat wave of at least three days that affects human health
7. **Severe Wildfire Season:** At least one million hectares burned that affect human settlements

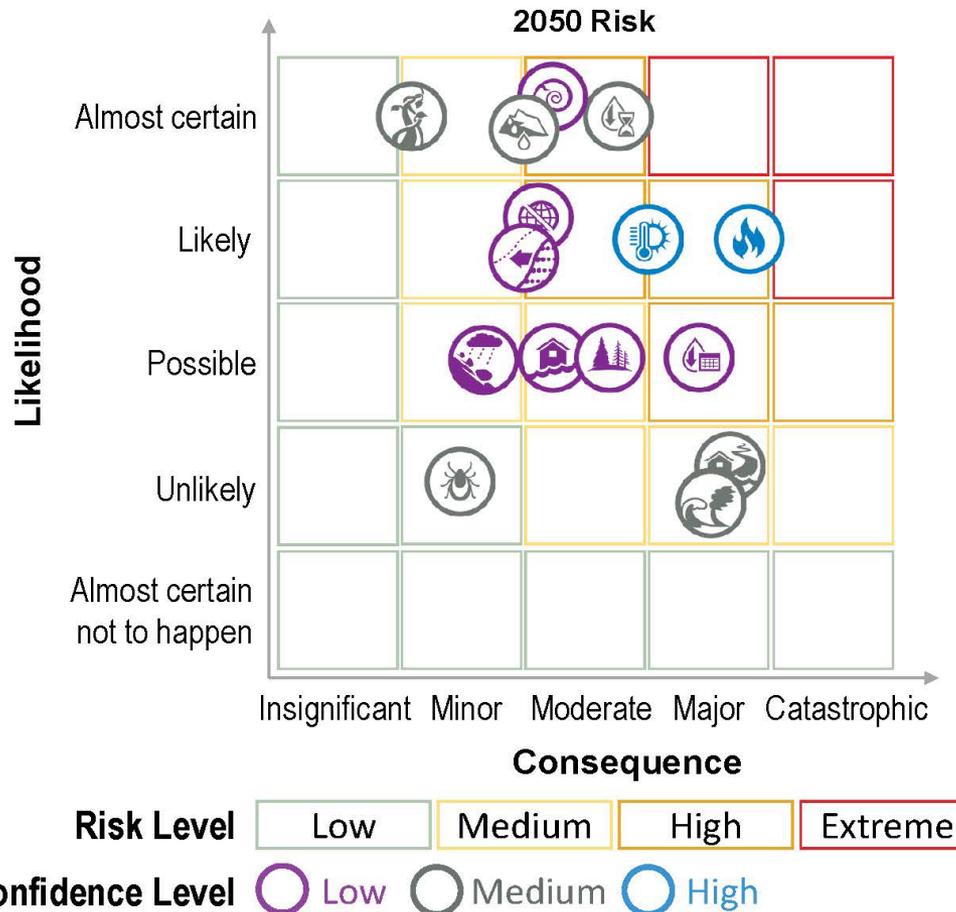


Risk Events and Scenarios: Slow-onset Risks

8. **Long-term Water Shortage:** Multi-year water shortage in at least one region
9. **Glacier Mass Loss:** 25% decline in glacier area by 2050
10. **Ocean Acidification:** 0.15 reduction in pH by 2050
11. **Saltwater Intrusion:** At least seasonal saltwater intrusion into the Fraser River delta and surrounding communities by 2050
12. **Loss of Forest Resources:** 25% decline in timber growing stock by 2050
13. **Reduction in Ecosystem Connectivity:** Reduction in ecosystem connectivity in the Okanagan-Kettle region by 2050
14. **Increase in Invasive Species:** Expansion of knotweed by 2050
15. **Increased Incidence of Vector-borne Disease:** At least a doubling of Lyme disease cases



Overall Results



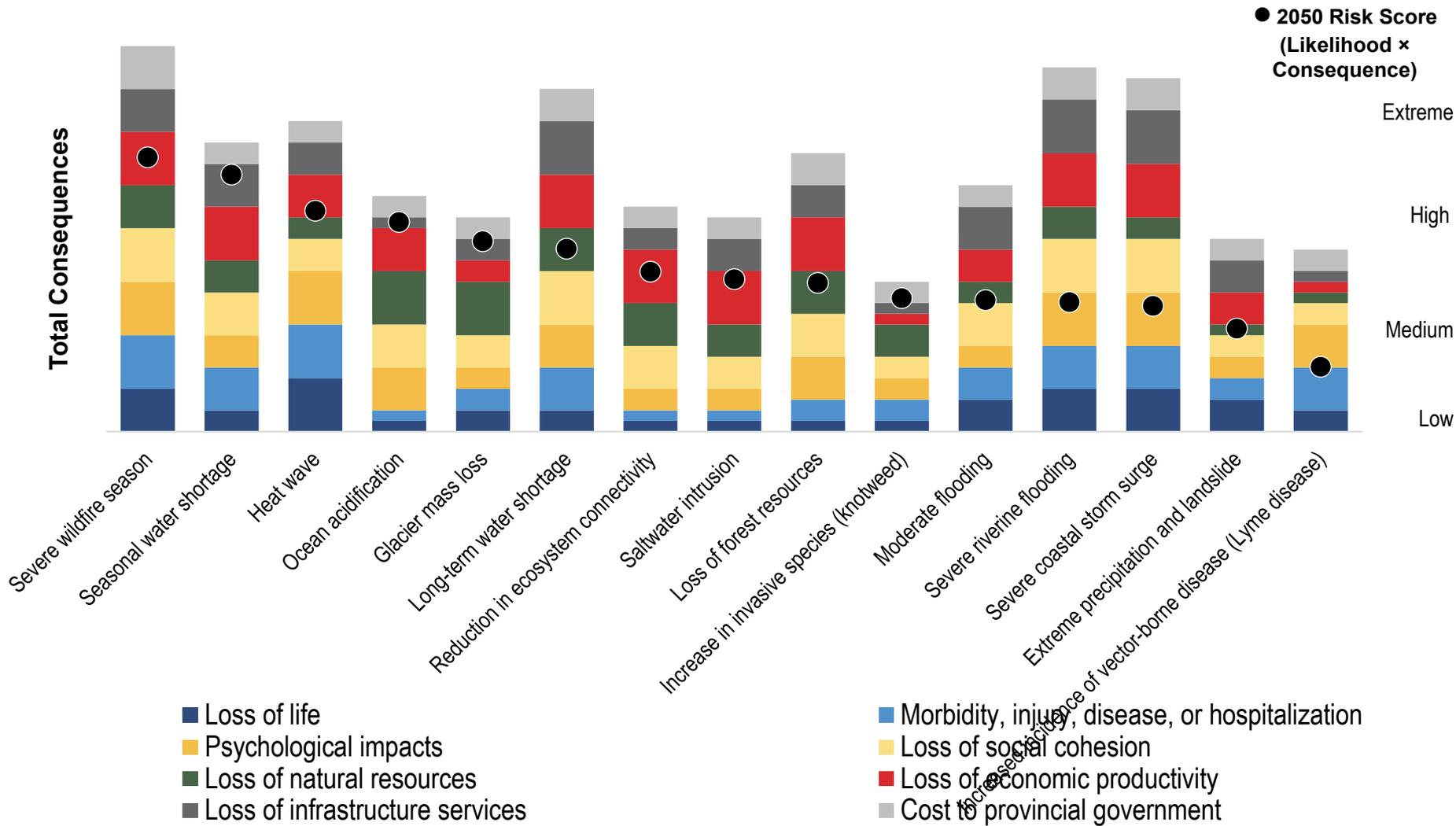
Highest-ranked Risks

- Severe wildfire season – High
- Seasonal water shortage – High
- Heat wave – High
- Ocean acidification – High
- Glacier mass loss – High
- Long-term water shortage – High

Lowest-ranked Risks

- Increased incidence of vector-borne disease (Lyme disease) – Low

Overall Results - Consequences



Key Findings

- **Greatest risks:** Severe wildfire season, seasonal water shortage, heat wave, ocean acidification, glacier mass loss, and long-term water shortage.
- **Highest consequences:** Severe riverine flooding and severe coastal storm surge. Relatively low likelihood reduces their overall risk.
- Nearly all risk events would have at least “major” consequences in at least one category.
- The majority of risk events would have “catastrophic” economic consequences.
- High risk events include both discrete events (such as wildfires, water shortage, and heat waves), as well as slower-onset, gradual climate changes (such as ocean acidification and glacier mass loss).
- Of all risk events assessed, climate change most influences the likelihood of glacier mass loss.

Next steps underway

- Engage with Indigenous perspectives to develop culturally appropriate approaches to climate risk assessment
 - Begin to gain an understanding of how to assess risks to cultural resources
- Develop and pilot Strategic Climate Risk Assessment Framework for ministry/program, sectoral, and regional scales



By 2020, the Province will develop, in collaboration with Indigenous Peoples, a new adaptation strategy to manage climate-related risks

Indigenous Engagement

- CleanBC Regional Sessions
- One-on-One Meetings
- Federal Workshops
- Elders Gathering
- First Nation Leadership Gathering
- EMBC Partnership Tables

Next steps

- Provincial Forum (January)
- Gathering Our Voices (March)
- Discussion Paper (Spring)

What We've Heard



Knowledge

- Indigenous knowledge paired with western science
- Community-led data collection and monitoring
- Climate change and adaptation resources in one central location
- Youth, Elder and community engagement, and community champions are important

Funding

- Funding needs to be community-driven with simplified applications and open intakes

Collaboration

- Stronger collaboration is needed with federal, provincial, and local governments
- Any formal strategies need to be collaboratively developed with communities.

Regional Focus

- Acknowledging and working with different regions and communities based on concerns and resources available

ClimateReadyBC: Preparing Together



#ClimateReadyBC

#MyClimateStoryBC

- **Posters, Leaflets and Hard Copy Surveys (with return envelopes)**
 - BC Aboriginal Friendship Centres, Indigenous communities, and public libraries
- **Questionnaire**
 - Focused on regional perceptions of risk and climate preparedness
- **Discussion Forum**
 - Begins a public dialogue on climate change impacts and adaptation
 - New question every couple of weeks
- **Written Submissions**

engage.gov.bc.ca/ClimateReadyBC; Open until Jan 10, 2020.

Working Group Collaboration



First Nation Leadership Council Technical Working Group on Climate Change

- Technical venue to engage in regular, constructive dialogue regarding climate change issues of mutual concern;
- Strategic advice and review progress related to climate change initiatives to ensure that First Nations perspectives and feedback are included.

Indigenous Climate Adaptation Technical Working Group

- focused and time-bound
- technical advice on matters related to preparing for and adapting to climate change, including Inspiring Climate Action program and the preliminary strategic climate risk assessment
- Opportunity to have input brought back to the FNLC Working Group

Ongoing Learning and Iteration



Climate Change Accountability Act

- Annual report:
 - Actions, progress and plans to manage climate risks,
 - Understanding of climate risks
- Re-determine climate risks every 5 years

Declaration on the Rights of Indigenous Peoples Act

Questions and Learning

- How can we better reflect Indigenous values and needs in our approach to understanding and preparing for climate change?
- What can the province do to support Indigenous climate resilience?
- Do you have stories you can share that we can learn from?