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CLIMATE
LEADERSHIP
SYMPOSIUM

Public Sector and Local
Government Action



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our nature. our power. **our future.**

Breakout

Risk Assessment 101 – setting the stage for
conducting local risk assessments

RISK ASSESSMENT 101

Basics of risk assessment

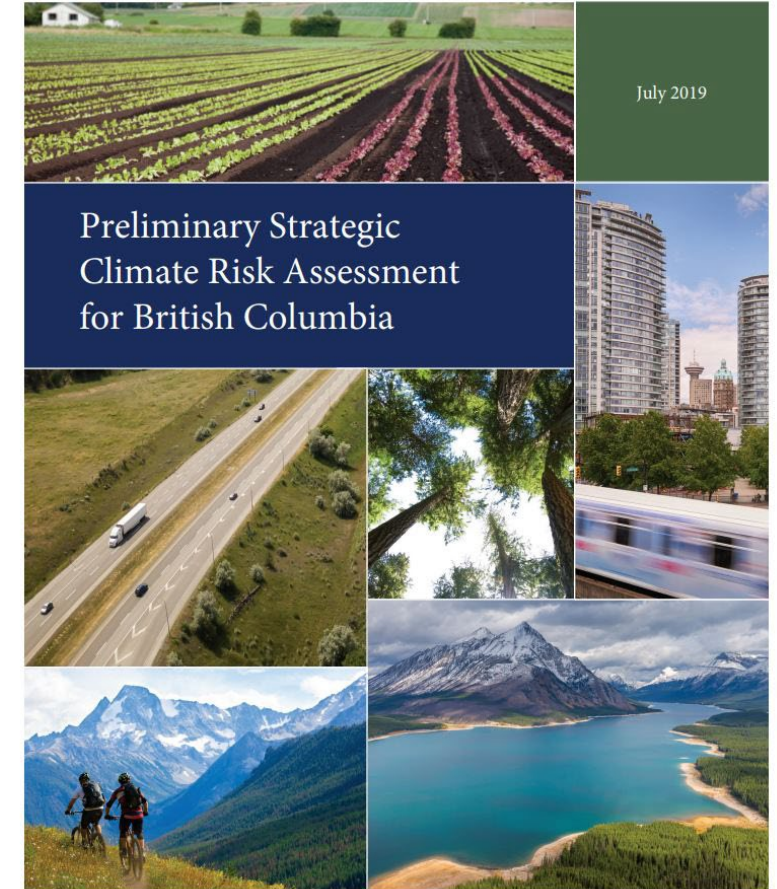
Key questions to ask

How to prepare



WHAT IS A CLIMATE RISK ASSESSMENT?

- A framework for assessing risks and developing adaptation strategies
- Includes the identification of hazards, their likelihood and consequences
- Results can be used to identify the appropriate courses of action



IMPORTANCE OF CLIMATE RISK ASSESSMENT



- Adaptation to climate change is characterized by uncertainty and complexity
- Adaptation involves multiple decision-makers, partners and stakeholders, often with conflicting values and competing interests
- Climate change risk assessments are an integral part of any climate change adaptation effort

RISK ASSESSMENT REQUIREMENTS

(a) A risk assessment **must identify all reasonably foreseeable hazards** and assess all the following:

- The extent of the risks the hazard presents including:
 - The **likelihood** of occurrence
 - The potential scale and scope



RISK ASSESSMENT REQUIREMENTS

(b) the potential **consequences** for persons or property, or for objects or sites of heritage value giving special consideration to

- Individuals who may experience intersectional disadvantage
- Vulnerable individuals, animals, places or things

(c) any prescribed matters



RISK ASSESSMENT REQUIREMENTS

A risk assessment must be based on following:

- Studies and surveys
- Indigenous and local knowledge, if available
- Local climate changes or extreme weather events that can reasonably be expected to result from a changing global climate
- Other relevant information that is reasonably available
- Results of actions required under sections 54 and 55



ELEMENTS OF CLIMATE RISK ASSESSMENT



- Identification of climate impacts
- Vulnerability assessment
- Determining the probability and potential consequences of events arising from climate change impacts or hazards
- Engagement with partners and stakeholders
- Inclusion of Indigenous knowledge and Indigenous ways of knowing, doing and being

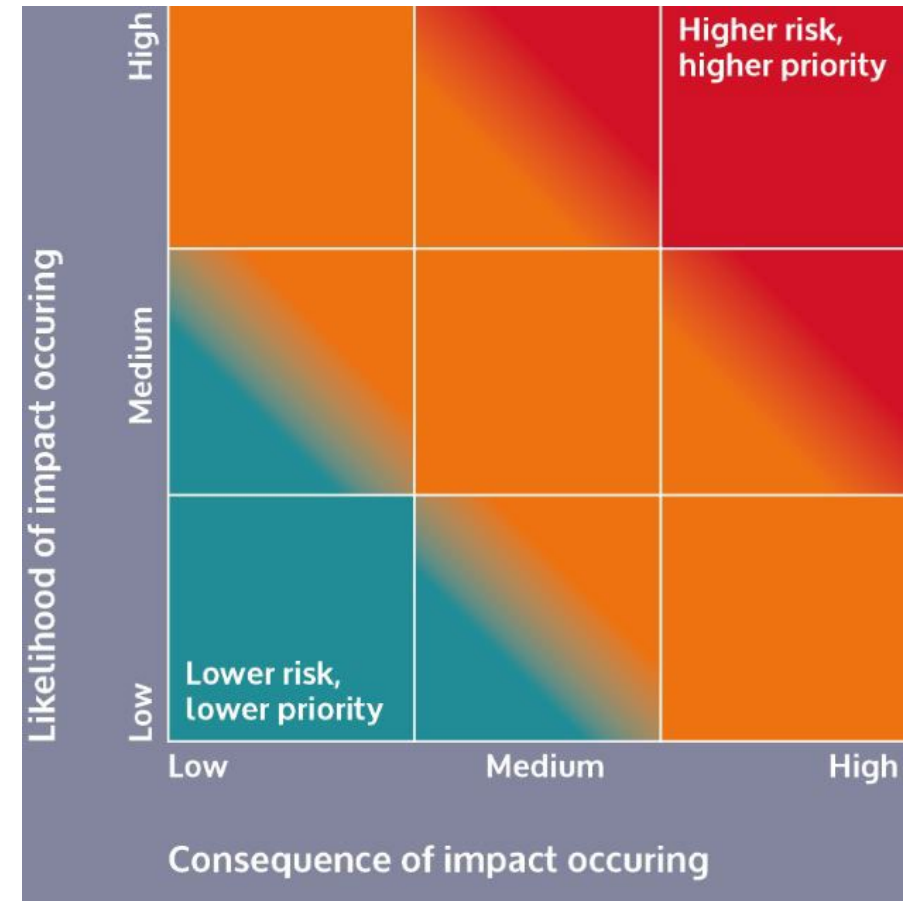
RISK ASSESSMENT – KEY CONSIDERATIONS



- Users should:
 - Include the elements that are best suited to their needs, objectives and capacities
 - Document each step of the process to support replicability
- Objectives, capacities and scope will influence overall structure of an assessment
- Context will define scope of assessment
- Assessing climate change risks should be an iterative process

HAZARD AND IMPACT ASSESSMENT

- A hazard is a biophysical event
- An impact is what occurs because of a specific hazard
- Risk associated with a hazard can be assessed by evaluating the **likelihood** of occurrence and the **consequence** of the occurrence
- **Compounding** and **cascading** impacts can be very significant and must be considered



VULNERABILITY ASSESSMENT

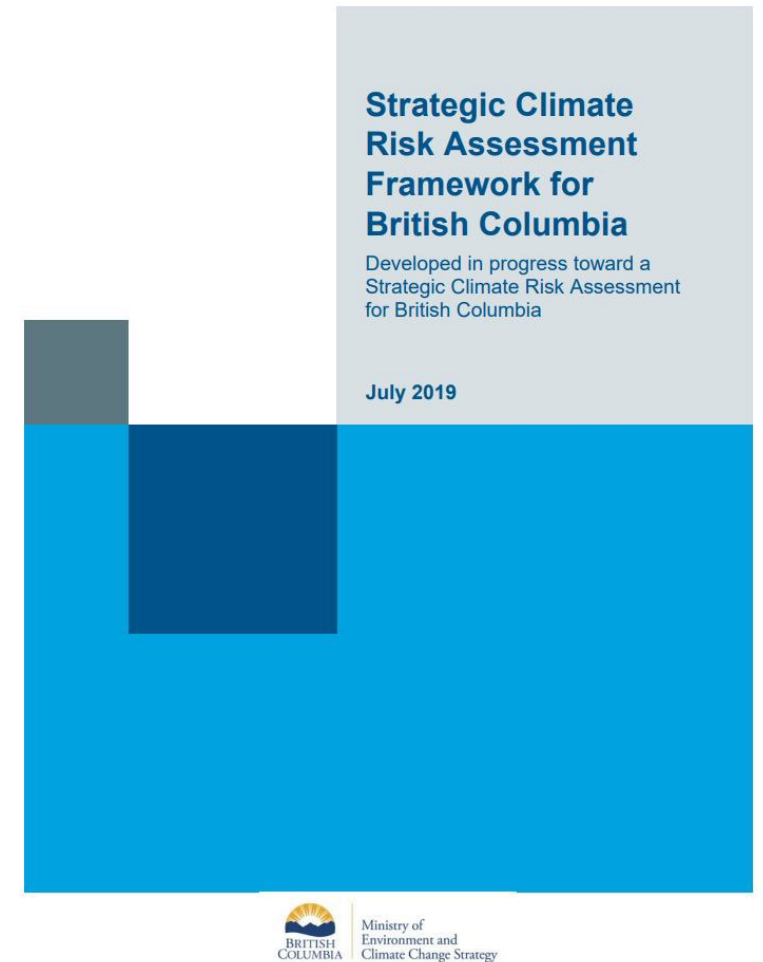
- Vulnerability assessment looks at current or past experience and the ability to cope with climate change and adverse weather-related impacts:
 - **Sensitivity**
 - **Exposure**
 - **Adaptive capacity**



RISK ASSESSMENT 101

Questions prior to beginning a risk assessment:

1. What is the goal of the risk assessment?
2. What are the organizational capacities and constraints?
3. What is the scale and focus area of the risk assessment (scope)?
4. What types of data will be used to inform the risk assessment?
5. How participatory and inclusive does the risk assessment need to be?
6. How will we measure and track risk over time?



Operational Questions:

- What are the appropriate future climate projections to use?
- What are the key climate (and seismic) hazards/risks?
- Is there neighbourhood/local resilience to the hazards?
- What are the resident/public/equity needs given the hazards identified?
- What strategies can be set to address the risks/hazards?
- Do the strategies contradict and/or support each other?

RISK ASSESSMENT OUTCOMES

- Understanding of low/medium/high risks
- Understanding who may be most affected
- Understanding of where to prioritize action/planning



RISK ASSESSMENT 101

Key Considerations:

- Data/projections – which climate scenarios to use? Where to find data?
- Who can do the assessment? Is there internal capacity or knowledge?
- How can LGCAP/Province best support?



[Meeting the Need for Practical Climate Information | Pacific Climate Impacts Consortium](#)



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Climate Action Secretariat

Thank you



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Roadmap to 2030