

# Report

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Date	September 4, 2024	File:
Subject	Adoption of the Climate Change Risk Assessment and Adaptation Strategy	

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## PURPOSE

To present the Climate Change Risk Assessment and Adaptation Strategy prepared by Urban Systems Ltd. for approval by Council. A staff presentation will be provided at the meeting.

## BACKGROUND

Council's Strategic Plan (2019-2022+) outlines the priority to "develop a comprehensive climate change risk and vulnerability assessment," and the Official Community Plan integrates a comprehensive climate action framework with a specific goal to "prioritize climate action by reducing energy consumption and emissions and adapting to climate change."

North Cowichan is an implementation partner of the Cowichan Valley Regional District (CVRD)'s [Regional Climate Change Adaptation Strategy](#) adopted by the Board in 2021. This strategy includes climate projections and impacts analysis, vulnerability and risk assessments, a climate change adaptation and risk management strategy, a greenhouse gas mitigation strategy, and an implementation plan. North Cowichan's Climate Change Risk Assessment and Adaptation Strategy builds from CVRD's regional work by tailoring strategies specific to our Municipality with focused attention to the ongoing delivery of services and works for the community (service delivery).

The Climate Change Risk Assessment and Adaptation Strategy was initiated in 2023 with the receipt of a \$150,000 grant from the Disaster Risk Reduction-Climate Adaptation Program administered by the Union of BC Municipalities. The grant is reimbursed once an approved final report is submitted to the funder within two years of the grant award (February 2025).

North Cowichan's process for climate adaptation has been guided by the following principles:

- Build on our strengths and use them as a foundation to advance action
- Focus attention where effort and impact is balanced
- Grounded in climate science and local lived experience of climate change
- Collaborate with others

Project work has been completed in three phases, guided by a cross-departmental Steering Committee (including representation of CVRD staff):

- 1) Phase 1: Understand the local context and primary concerns (summary presented to [Committee of the Whole on October 10, 2023](#))
- 2) Phase 2: Conduct a vulnerability/risk assessment (summary presented to [Committee of the Whole on January 9, 2024](#))
- 3) Phase 3: Develop a climate adaptation strategy (draft presented to [Council on June 19, 2024](#))

The data collection process in Phase 1 developed a foundation of regional and local climate change knowledge by documenting key areas of concern and compiling a comprehensive list of climate hazards and community elements that require consideration. This first phase included engagement strategies that included an online public survey, targeted interviews with interested parties, and proactive outreach and involvement of local First Nations communities. The “Connect North Cowichan” website also enabled continuous public engagement throughout the project phases. A “What We Heard” Report was provided to Council in October 2023 and circulated to the Environmental Advisory Committee for feedback. A “What We Heard” Report from a First Nations workshop was provided to Council in January 2024.

The risk and vulnerability assessment in Phase 2 evaluated the projected climate impacts against municipal service areas, and a risk rating was assigned. This assessment tool prioritized the action areas that would mitigate risk to the Municipality. There were 80 risk statements generated through this process. This phase of work was summarised to Council in January 2024 and circulated to the Environmental Advisory Committee for feedback.

Phase 3 of this project generated adaptation actions for the highest identified risks identified in the previous phase of work and identified the areas of ongoing engagement with First Nations, CVRD, and the Province. As climate adaptation is a continuous learning process that requires flexibility and responsiveness to changing circumstances, a plan/act cycle was proposed that involved understanding and assessing risks, exploring options, with implementation and continuous monitoring critical in evaluating progress so necessary adjustments can be made. The strategy utilizes the annual business planning cycle to advance implementation. A draft Climate Adaptation Strategy was presented to Council in June 2024 and was circulated to the Environmental and Agricultural Advisory Committees for feedback.

## **DISCUSSION**

The Environmental and Agricultural Advisory Committee's feedback was presented to [Council on August 21, 2024](#), and edits were incorporated into the Climate Change Risk Assessment and Adaptation Strategy (Attachment 1). These modifications are summarized as follows:

1. Additional commentary on regional responsibilities to provide framing on the scope of the Climate Change Risk Assessment and Adaptation Strategy.
  - a. North Cowichan is an implementation partner of the CVRD’s Regional Climate Change Adaptation Strategy. The regional strategy has implementation actions for CVRD and partners to improve built infrastructure, enhance health and emergency preparedness systems, enable green economic growth, and preserve local biodiversity. The scope of North Cowichan’s assessment and strategy supplements this regional strategy by focusing on the necessary work required across municipal service areas.
  - b. Emergency Management Cowichan provides the governance structure for the region and all partners in emergency management to achieve mitigation, preparedness, response, and recovery objectives.
  - c. Additional emphasis has been placed on the coordination needs of both CVRD and the Province to ensure consideration in adaptation and emergency management planning processes.

2. Additional commentary and edits to some actions reflect a broader ecosystem framework.
  - a. The adaptation pathway #2 provides actions that involve stewardship, preservation, protection, and enhancement of the region's ecosystems. A parallel process to develop work on biodiversity (action 6.1) and natural assets (action 7.1) would offer Council's direction on an ecosystem framework. This content supplements the Regional Climate Change Adaptation Strategy.
  - b. Action wording has been reviewed to confirm if the benefits of the action are specific or more broad.
  - c. Recent direction from Council has been incorporated to reflect the motions to direct an update to the Parks and Trails Master Plan (action 1.1) and explore the feasibility of an urban forest strategy (new action 1.6).
  - d. The commentary included reflects the impacts wind events can have on cascading climate hazard impacts and food security.
3. Additional commentary and edits to acknowledge agriculture's role in North Cowichan.
  - a. This content supplements the Regional Climate Change Adaptation Strategy and the work of Emergency Management Cowichan on emergency preparedness.
  - b. Commentary included on the importance of the agricultural sector and climate impacts on food security.
  - c. An additional action 10.4 to improve information on available resources.
4. Budget figures would be brought forward during the business planning cycle to reflect amounts that are better scoped and less susceptible to change over time. A high-level, order of magnitude cost estimate for future actions has been provided as guidance. This uses a scale of minor (\$500K or less), medium (500K-5M) or major (5M+).
5. The outcomes from the climate risk assessment are included.

The recommended option (Option 1) is to approve the Climate Change Risk Assessment and Adaptation Strategy and direct staff to research and propose projects for implementation through the business planning process. This enables the strategy to be implemented through existing planning and decision-making processes, allowing flexibility to adjust based on current priorities, pursue available grant opportunities, and learn from implementation. The strategy reinforces ongoing engagement and collaboration goals, especially with First Nations and the CVRD.

Option two allows Council to direct additional revisions to the strategy document before bringing the strategy back to Council for adoption.

## OPTIONS

1. **(Recommended Option)** THAT Council:
  - (1) approves the September 2024 Climate Change Risk Assessment and Adaptation Strategy prepared by Urban Systems Ltd, as attached to the Climate Change Specialist's report dated September 4, 2024; and,
  - (2) directs staff to include recommendations for implementation in the annual business planning process.
    - The Climate Change Risk Assessment and Adaptation Strategy completes one of Council's Strategic Plan objectives and provides staff with a roadmap for implementation.

- Council directs staff to bring forward projects through the business planning process and can adjust implementation timelines to suit priorities of the time.
  - Approval of the strategy enables staff to submit final documentation to the grant funder for project cost reimbursement.
2. THAT Council directs staff to work with the consultant, Urban Systems Ltd, to include the following revisions to the draft Climate Change Risk Assessment and Adaptation Strategy:
- a. *[Council to identify areas to be revised]*

## IMPLICATIONS

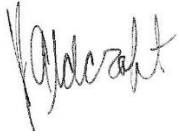
Implications	Impacts to North Cowichan
Social	<ul style="list-style-type: none"> <li>• Adaptation planning builds local capacity to avoid and reduce the impacts of climate change on the community.</li> </ul>
Environmental	<ul style="list-style-type: none"> <li>• Adaptation planning addresses the climate hazards associated with climate change through a range of actions, some of which offer implementation co-benefits for the Climate Action and Energy Plan.</li> </ul>
Financial	<ul style="list-style-type: none"> <li>• Implementation costs depend on the pace of implementation and how Council wishes to spend taxpayers' money and/or pursue grants.</li> <li>• A prepared community will have less severe event impacts that result in a more cost-efficient recovery to a restored level of service.</li> <li>• Approval of the strategy enables grant funding reimbursement from the Disaster Risk Reduction-Climate Adaptation Program without requesting an extension.</li> </ul>
Policy/Legislation	<ul style="list-style-type: none"> <li>• No significant impacts or concerns.</li> </ul>
Strategic Priority	<ul style="list-style-type: none"> <li>• Achieves Council's Strategic Plan priority to "develop a comprehensive climate change risk and vulnerability assessment" and provides direction on Official Community Plan implementation</li> </ul>
Communication	<ul style="list-style-type: none"> <li>• Actions highlight the areas for additional collaboration and awareness building. The strategy provides materials that can be repurposed for general messaging on adaptation and climate hazards.</li> </ul>
Staffing Implications	<ul style="list-style-type: none"> <li>• Provides staff with direction on implementation and provides a starting point to research and propose works consistent with the strategy.</li> </ul>

## RECOMMENDATION

THAT Council:

- (1) approves the September 2024 Climate Change Risk Assessment and Adaptation Strategy prepared by Urban Systems Ltd, as attached to the Climate Change Specialist's report dated September 4, 2024; and,
- (2) directs staff to include recommendations for implementation in the annual business planning process.

Report prepared by:



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Jennifer Aldcroft  
Climate Change Specialist

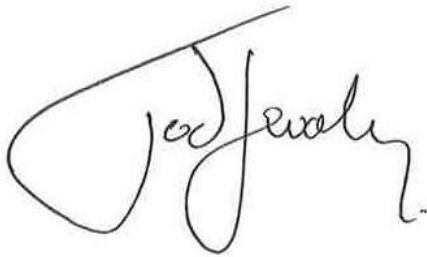
Report reviewed by:



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David Conway  
Director, Subdivision and Environmental Services

**Approved to be forwarded to Council:**



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Ted Swabey  
Chief Administrative Officer

Attachment:

- (1) Climate Change Risk Assessment and Adaptation Strategy