



Regional Climate Adaptation Advisory Group Meeting
January 30, 2024 1 pm
175 Ingram Street and WebEx

Participants:

Keith Lawrence, Senior Environmental Analyst, CVRD (Host)
Jennifer Aldcroft, Climate Specialist, Municipality of North Cowichan
Melissa Tokarek, Director of Lands and Environment, Malahat Nation
Lauren Wright, Senior Planner, Community Planning
James Van Hemert, Planner, Town of Lake Cowichan
Paivi Abernethy, Climate Change and Health Lead, Island Health
Neil Forrest, Asset Management Coordinator, CVRD
Alison Garnett, Planning Coordinator, Strategic Planning Initiatives, CVRD
Jake Belobaba, Director of Development Services, Town of Ladysmith
Yaheli Klein, Senior Policy Analyst, BC Climate Partnerships & Engagement
Mary Vasey, Project Manager, Barkley Power Group
Clayton Postings, General Manager Strategic Services, CVRD
Coralie Breen, Manager Strategic Initiatives, CVRD
Ryan Wainwright, Senior Manager, Emergency Management Cowichan
April Diver, Manager of Operations and Planning, Emergency Management Cowichan
Barry O'Riordan, Manager Economic Development Cowichan, CVRD
Ann Kerjulf, General Manager Land Use Services, CVRD
Larissa Barry-Thibodeau, City Planner, City of Duncan
Mary Storzer, Senior Policy Advisor, Islands Trust
Linus Shaw, Referrals Coordinator, Malahat Nation
Jeff Moore, Senior Environmental Analyst, CVRD
Katie Mosewich, Environmental Services Administrative Assistant, CVRD
Nancy Clements, Regional Healthy Built Environment Consultant, Island Health

Agenda:

- 1. Welcome and Acknowledgements**
- 2. Roundtable Introductions**

Each participant introduced themselves and had an opportunity to provide a spoken summary of the adaptation activities they are engaged in.

- 3. Review Terms of Reference and Approach, Adaptation Strategy and Risk Assessment**
 - Keith Lawrence provided a PowerPoint Presentation overview of the purpose section of the advisory group as noted in the terms of reference. There has been an edit to the terms of reference since the draft that was presented to the group in June 2023 to include support for community-led reconciliation and relationship building through engagement with First Nations. There was an opportunity for

questions and comments on the terms of reference which were circulated to the group.

Over time we can establish simple rules for working together. For now, the following from BC Healthy Communities can serve as a guide to the practices and patterns we seek to foster:

- Reaffirming Trust – establish a sense of safety
 - Transparency – share information so that we can see the whole systems, the parts and the greater whole
 - Learning by Doing – Pushing capabilities in the space to new levels, failing forward
- Jeff Moore provided a PowerPoint presentation on Risk Assessments that have been done in the CVRD. The presentation included:
 - Flooding – Regional floodplain risk assessment, floodplain mapping for lower Cowichan/Koksilah, Cowichan River (Riverbottom Road area), Chemainus River and Shawnigan Lake
 - Landslide – Youbou torrent flow analysis, regional landslide risk assessment and coastal slope stability in Saltair
 - Sea level rise – Coastal sea level rise risk assessment

4. Drought Planning

Nancy Clements provided a PowerPoint Presentation on Drought Planning and Seawater Intrusion. The presentation included:

- Population public health – Climate risk assessment (drought) and seawater intrusion.
 - Through the new program, 58% of community water systems on Vancouver Island have drought emergency response plans established. The goal is to have 100% of systems with plans established
 - Two sea water pilot studies have been funded on Vancouver Island. Funding to do further studies is uncertain.
- Cowichan Hospital – BC's first fully electric hospital
 - All new hospitals in BC are planned to a LEED gold standard
 - BC's first fully electric hospital
 - 30% more energy efficient
 - 60% more water efficient
 - 75% reduction in GHG emissions from the current hospital
- Island Health as a corporate citizen – Climate change accountability report, energy efficiency and conservation, climate change adaptation, compost and recycling, and green buildings

5. Sea Level Rise Assessment

Melissa Tokarek from Malahat Nation provided a PowerPoint Presentation on Sea Level Rise and Coastal Vulnerability. The presentation included:

- Sea level rise and coastal vulnerability assessment – Develop coastal flood mapping, assess vulnerability of infrastructure to flooding, risk assessment and to create a flood impacts action plan
- Shoreline and cultural site protection project – Phase 1: Build an armour stone crest. Phase 2: Bring in vegetative materials, restoration work to be able to facilitate cultural events, removing of invasive species and bring back natural species
- Next steps – Flood impacts action plan will include mapping/model updates, biological assessment of shoreline, cultural site assessment, integrated vulnerability assessment, coastal climate change adaptation plan and flood adaptation feasibility investigations for infrastructure at risk

6. Climate Risk Assessment

Jennifer Aldcroft provided a PowerPoint presentation on the Municipality of North Cowichan's Climate Risk Assessment. The presentation included:

- Climate Risk and Vulnerability Assessment – Adaptation, understanding and building on strengths, identifying and addressing gaps, focusing on efforts that balance effort and impact, and collaborating with others in the region
- Phase 1: Engagement activities
 - Indigenous Engagement
 - Community Online Survey
 - Interviews with Interested Parties
- Phase 2: Risk and vulnerability assessment
 - Environmental Stewardship and Recreation Service areas generated the most risks and highest rated risks. Vulnerable based on their exposure and sensitivity to climate hazards.
 - Infrastructure-heavy service areas (water, wastewater, storm/flood, roads) generated some high risks, with the majority rated as medium.
- Phase 3: Adaptation strategy
 - To consider tools including: regulation, incentive, advocate, capacity building, capital projects, funding, O&M, Policy

7. Hazard Risk and Vulnerability Assessment (HVRA)

April Diver provided a PowerPoint presentation on the Hazard Risk and Vulnerability Assessment completed by Emergency Management Cowichan. The presentation included:

- Why a Regional HRVA?
 - legislated requirement under the Emergency and Disaster Management Act
 - Informs and prioritizes elements within the emergency management program (planning/policy, preparedness, mitigation, response, recovery, program improvement/adaptation)
- The 15 hazards assessed include drought, human disease, coastal storm flooding, stormwater flooding, landslide/debris flow, extreme heat,

storm/high-wind event, earthquake, severe winter conditions, wildfire, critical infrastructure interruption, security incident, hazardous material release, and dam and spillway failure

- Areas of risk reduction
 - Understand & Plan
 - Mitigate Risk
 - Build Resilience
 - Respond
 - Recover
- Key steps towards all-hazard risk reduction
 - Regional Collaboration
 - Develop/Enhance Community Resilience Hubs
 - Prioritize Planning and Development Activities
 - Understand and Include Priority Populations

8. Roundtable updates from those who did not present:

- Jake Belobaba: Removing chicken ladders from Holland creek as they were deemed a hazard by the Province, dam upgrades need to be done.
- Mary Vasey: Working with Penelakut tribe to ensure they have appropriate gathering spaces during emergency scenarios, ensuring access to telecommunications, electricity back up for basic services and food preservation.
- Neil Forrest: Will not be able to complete sustainable service delivery plans for all Divisions this year, will be in touch with folks to highlight the risks and what work can be done to mitigate any impacts on service delivery. Hoping to start Q3.
- Ali Garnett: Working with Coralie on MOCP - high level policy and objectives approach to climate adaptation.
- Ryan Wainwright: Understanding the introduction of climate change mitigation and response into the Emergency Disaster Management Act. Bringing in a Mitigation Specialist late Q1 to early Q2.
- Ann Kjerulf: Supporting work of Ali and Coralie with MOCP, working on creating comprehensive zoning bylaw moving from 9-10 zoning bylaws to 1, updating DPAs which include DPAs that look at environmental preservation and purposes of energy and water conservation, as well as the Board approved the Building bylaw to include EL4 of the zero-carbon step code, coming into effect in July.
- Larissa Barry-Thibodeau: Concluding OCP update, increased strength around climate change, adaptation and mitigation with development permit guidelines. Infrastructure management continually being challenged by different infill projects in the City, in particular stormwater management.
- Paivi Abernethy: No update on top of presentation
- Barry O'Riordan: Renewal of Economic Development strategy in 2024, including prioritization and integration of the work with Climate Adaptation Strategy and other work around climate change, working with North Cowichan around circular economy and other communities on the Vancouver Island scale. FYI - Foresight Canada has four areas of focus, one is around water and they

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are interested in a Vancouver Island drought project and looking at what technologies and projects could be implemented in Cowichan and Vancouver Island.

- James Van Hemert: Citizens of Lake Cowichan reaffirmed Climate Mitigation and Adaptation Plan targets during the latest public engagement for updating the OCP, will be receiving funding for climate adaptation work.
- Lauren Wright: New comprehensive zoning bylaw main focus, looking into removing density from some areas based on water conservation and the resources that are available.
- Katie Mosewich: No update on top of presentation

9.

The next meeting of the advisory group will be scheduled for Q3 2024.

Resources:

- [Presentations](#) – including Adaptation Strategy and Risk Assessment, Drought Planning and Seawater Intrusion, Sea Level Rise and Coastal Vulnerability, Climate Risk Assessment, and Hazard Risk and Vulnerability Assessment
- [Cowichan Adapts Implementation Plan](#)
- [Climate Adaptation Implementation Framework 2022-2023](#)
- Climate adaptation fold overs:
 - [Heat and drought](#)
 - [Flood and sea level rise](#)
 - [Slope failure](#)
 - [Wind and storms](#)
 - [Strategy](#)