



LEGAL IMPLICATIONS OF CLIMATE CHANGE FOR PROFESSIONALS

On February 22, 2018, Fraser Basin Council (FBC) and Engineers and Geoscientists BC hosted the “Legal Implications of Climate Change for Professionals” workshop in Vancouver. This workshop was part of FBC’s BC Regional Adaptation Collaborative (BC RAC) program and was supported by Natural Resources Canada, the BC Ministry of Environment and Climate Change Strategy, and Engineers and Geoscientists BC.

The purpose of the workshop was to highlight how climate change can impact professional roles and responsibilities as well as to encourage professionals to integrate climate change considerations into their analyses and decision-making and to make the case for adaptation within their organizations. Zizzo Strategy presented on the legal framework for climate change adaptation and negligence and professional responsibility. In addition, West Coast Environmental Law spoke to the context of BC-specific legislation, relevant regulations and case law.

This report is a summary of the key issues and ideas that the workshop participants identified and discussed.

GAPS IN SKILLS AND KNOWLEDGE

For the first exercise, participants discussed their gaps in skills and knowledge. The following are the main themes of their discussion.

Communications

A major priority is education on how to communicate risk and uncertainty with decision-makers, planners and the public. We need to work to change societal expectations of level of service to allow for anticipated failure. Storytelling would be a useful skill to gain.

Legal Considerations

Legal implications are currently in a “grey zone”, with much interpretation left to professionals. There is currently no provincial guidance in weather changes such as winds, waves or tsunamis. Professionals would like to see updates to zoning bylaws to include flood construction levels and learn how to incorporate climate change considerations to meet legal requirements (eg. environmental assessments).

Climate Information

Canada needs to improve its open data sharing to allow better sharing of free, good quality data. Professionals are looking for

data on local, specific impacts of climate change, knowledge on which climate change scenario is realistic (eg. RCP 8.5, 4.5, etc), and watershed modelling that includes climate change considerations, especially in snow-driven freshet. It is challenging to update climate assumptions as they change over time.

Professional Practice Standards and Guides

Professionals want to see standards and codes updated to allow for a design that is adaptable to climate change. They are receiving conflicting guidance on projected flood levels, which presents difficulties in planning. Professionals are looking for more guidance on integrating natural ecosystem services into adaptation, how to measure success, and how to translate ideas into a business case.



AVAILABLE RESOURCES, TOOLS & INFORMATION

Participants identified the following resources, tools and information to help plan and implement climate change adaptation.

Frameworks and Guidelines

- PIEVC vulnerability and risk assessment.
- BC Flood Hazard Land Use Management Guidelines.
- WHO climate resilient health systems framework.
- Federal Adaptation Policy Framework.
- EGBC professional practice guidelines for resilient highway infrastructure.
- ICLEI Canada BARC tool.
- Preparing for Climate Change: An Implementation Guide for Local Governments.

Organizations

- Pacific Climate Impacts Consortium (PCIC).

- Forest Enhancement Society of British Columbia (FESBC).
- Canadian Institute of Planners climate change resources webpage.
- Climate Action Toolkit funding resources.

Climate Information

- Plan2Adapt.
- Metro Vancouver adjusted IDF curves.
- Lower Mainland Flood Management Strategy – Phase 1 data.
- Computerized Tool for the Development of IDF Curves under Climate Change.

Strategies

- Federal Sustainable Development Strategy.
- Pan Canadian Framework on Clean Growth and Climate Change.

Case Studies

- BC Adapts video series.
- Fraser Basin Council's ReTooling website.



CHALLENGES IN IMPLEMENTING ADAPTATION

Workshop participants highlighted several challenges they face in planning or implementing for adaptation. The first is working in uncertainty and with the lack of a clear mandate. There are also political barriers, with an overemphasis on political foresight or the perception that climate change is a small issue. Lack of financial resources create an obstacle, as there is the tendency to go for the lowest bid that does not incorporate adaptation. Lastly, there are difficulties in process: various disciplines collaborating on a project have different priorities and may not agree on one design, relevant materials are not online and easily accessible, and municipal staff are getting cut out of decision-making processes at more senior levels or by elected officials.

LESSONS ON INTEGRATING ADAPTATION AT DIFFERENT DECISION-MAKING STAGES

Participants agreed that consideration of climate change should come into play at every decision-making stage, as it is a shared legal responsibility. Sustainability and adaptation need to become a mindset across city departments and not limited to the Sustainability office. In terms of specific departments, finance staff can be

better educated about the financial risk of negligence and staff who maintain and operate assets and facilities need to be trained on climate change and extreme weather.

APPROACHES FOR INTEGRATING ADAPTATION FOR CONSULTANTS RESPONDING TO AN RFP

There are multiple strategies that consultants applying for an RFP can take to encourage the integration of adaptation into the project. Below are some recommendations:

- Point out gaps in the RFP on climate change and offer services as an added value.
- Explain your firm's experience in dealing with climate change and offer to include a risk assessment or life cycle assessment.
- Incorporate life cycle costs to show future savings in operating costs.
- Cite the sources of data you have access to and existing relationships. Take advantage of available free data (eg. Plan2Adapt).
- Draw from case studies/projects in other municipalities.
- Emphasize the multiple benefits of adaptation and where possible, identify solutions that integrate adaptation and mitigation.
- Recommend a range of options and scopes for the client to allow for incremental steps.



- Determine the sources of available funding and highlight opportunities to seek funding to align with project requirements.
- Demonstrate that adaptation is fundamental to your corporate culture.
- Mention award schemes to aim for.

climate considerations.

- Show previous research on adaptation from the community.
- Leave room for value-added services for innovative solutions.
- Ask for a range of options and scopes.

APPROACHES ON INTEGRATING ADAPTATION INTO RFPs FOR MUNICIPAL STAFF

There are also many approaches that municipal staff can take to include adaptation while writing an RFP. Below are some strategies:

- Include the consideration of future climate as project criteria, which communicates the level of service required based on an assessment of risk tolerance.
- Identify the top investments in the community that are likely to be impacted by climate change and ensure that the relevant RFPs address the mitigation of those impacts.
- Provide context to which climate change impacts should be addressed.
- Include language from existing policies/plans or update policies/plans to include

FOR MORE INFORMATION

To learn more about the BC Regional Adaptation Collaborative (BC RAC) program, visit our [website](#). BC RAC is one of a number of similar collaborations across the country within Natural Resource Canada's national program. BC RAC aims to strengthen regional capacity and increase action to advance adaptation planning and implementation in First Nations, local governments, public sector organizations, and the natural resource sector. BC RAC works to create learning resources, build local community capacity, and facilitate the BC Climate Risk Network.

For more information about this event or the BC Regional Adaptation Collaborative program, please contact Eliana Chia at 604-488-5377 or echia@fraserbasin.bc.ca.

