

Executive Summary A1220: Community Planning Tools and Approaches for Protecting Freshwater Shorelines in the Thompson-Nicola-Shuswap Region of the BC Interior in Response to Climate Change

The planning decisions we make today will influence the resiliency of our communities to adapt to future climate change impacts. How we handle development along shorelines is of particular interest due to the potential impacts of climate change projections. These include increased frequency of floods with higher magnitudes than previously, and more intense precipitation events, with associated runoff. If we protect shorelines from development, we may be able to reduce some of the risks for damages associated with floods, runoff and erosion, and protect water quality.

The value of riparian areas. Naturally vegetated riparian areas have many values which have tended to be underplayed with the focus on their role in contributing to habitat for fish, through the Federal Fisheries Act, the Fish Protection Act of BC and associated Riparian Areas Regulations. Their value as an asset under a changing climate needs to be recognized. They can reduce the impacts of floods, help filter polluting runoff to protect water quality, and help hold soil together to prevent erosion.

Climate change adaptation tools. This project employed a community-based consultative process to explore some of the questions around climate change adaptation in the Thompson – Nicola – Shuswap area of the British Columbia interior. The focus of the project was on shorelines and water resources, and the range of tools available to help communities adapt to climate change and protect their natural capital assets

Study approach. The approach used in the project included a variety of tools, including a literature review, analysis of selected Official Community Plans from the region, interviews with community representatives, community focus groups and a highly successful (as rated by many participants) community forum in September 2006, “If We Snooze, Do We Lose? A Forum on Adapting to the Impacts of Climate Change”.

Vulnerabilities identified. Several vulnerabilities were identified during the process related to potential climate change impacts. Two principal ones were the potential for impacts associated with storm events, and the concern for water supply availability at particular times of the year. The question of the impact of the Mountain Pine beetle was also a topic raised frequently during the project. The beetle is killing massive areas of trees in the British Columbia interior. As well as impacting the area’s forest ecosystems, and community economies, it will also have a direct impact on hydrology and runoff flows. Another potential impact raised during the project was that of the spectre of “eco-refugee” migration into the area as a result of climate change impacts elsewhere, and the need to consider this possibility in long range planning and identification of potential growth areas.

An underlying premise of this project is that because impacts are felt locally, solutions and programs to adapt to climate change also need to be developed at the community level.

Perceptions of study participants. A number of themes emerged from an interpretation of the input from community representatives, focus group participants, and those who discussed climate change at the forum. A brief summary of these perceptions follows:

Nature of climate change. There was a perception among some participants that climate change is something in the future, and that it will occur slowly and incrementally. This slow rate of change will give communities adequate time to develop capacity to respond.

Others do not feel adequately prepared for the degree of challenges which could be posed by climate change. While they have learned from events such as recent forest fires in various parts of the study area, they still feel vulnerable. There is also some concern that a sense of complacency may be developing to think “that it won’t happen again”.

A sense of disconnect from the decision-making processes – that decisions being made at local and provincial levels do not reflect their views, and that their input is not heard. At the same time, a frequently mentioned theme, from both local government and citizen perspective, was that the “push” of citizens calling on local governments for action is a force that is listened to.

Need for significant changes in attitudes and behaviour. Part of climate change adaptation, and mitigation, will involve significant changes in attitudes and behaviour around lifestyles. In particular, our consumptive-oriented society needs significant changes towards a more conservation-oriented society.

The link to natural systems. In responding to climate change and developing ways of dealing with it, the complexity of ecosystems needs to be understood before reacting; “integrated ecosystems need integrated approaches”.

Data needs. Adapting to climate change requires scientific data to monitor the nature and degree of that change. There was concern expressed that some of the sources of this data are being cut back for cost-savings purposes, at the very time when such data is critical.

Education. The need for education and communication materials and strategies were common themes, aimed at various target audiences.

Limits on capacity of local governments and communities. The capacities of both local governments and community-based organizations are currently (2006) stretched; this will be an added challenge in developing strategies to adapt to climate change.

Role of professional interest organizations. Community-based groups and local government representatives are looking to their professional organizations for some of the leadership that is required for climate change adaptation.

The costs of adapting to climate change. The economic costs associated with adding climate change adaptation to building and development standards was noted; however, the cost of not doing anything was also noted, and the risks associated with such a course of “non-action”.

Need for a “proactive” approach. With climate change, they suggest that a “proactive” approach is required. The support of “early adopters” or champions would help gain political profile.

Political will and leadership, roles and responsibilities. The need for leadership and political “will” was identified, or phrased, in a variety of ways. One participant phrased it as “we know what we should be doing; however, we have never set a precedent to say ‘no’ to developing in vulnerable areas like floodplain or close to shorelines.”

Decision-making in the face of uncertainty. Community decision-makers may feel uncomfortable with the level of uncertainty that decision-making in the face of unknown changes to climate requires.

Need for a climate change partnership or round table. Dialogue amongst a partnership of regional representatives, across all sectors of the region, is the way to move forward on adapting to climate change. The main requirement now is for communities to take action and identify centres of responsibility within each community for climate change adaptation. One of the topics to be discussed will be that of who will take the leadership role for moving climate change adaptation forward in this region? With the release of this final report, it is anticipated that community groups will continue the dialogue carried out during the project and explore ways to work together to deal with climate change impacts.

Questions explored during this project included what tools are available to minimize risks from climate change impacts on shorelines and water resources, what role community planning plays in implementing these tools, how planners can incorporate the potential impacts of potential climate change into planning practice, and, are there “no regrets” actions – measures worth doing anyway. The focus of the project was on adapting to climate change impacts (as distinct from actions to mitigate, or reduce, greenhouse gas emissions.)

A limited review of selected planning documents from the study area (specifically with reference to shorelines and water resources) identified a number of existing policies with climate change adaptation implications. Some of these policies could be strengthened; others need reviewing

Recommendations have been developed for senior and local governments, and the community. Key recommendations relate to: principles to recognize with respect to climate change adaptation (such as the adaptation values of natural ecosystems, the importance of diversity, replicating the natural “water balance” in carrying out storm water management planning); actions for local governments to take with respect to incorporating climate change adaptation into the decision matrix; and ways that senior governments can support local governments. Other recommendations relate to education, and the need for further information to support climate change adaptation planning.