

Abstract Submission for 5th Canadian River Heritage Conference

Title of Presentation:

If We Snooze, Do We Lose? Adapting to the Impacts of Climate Change on Shorelines and
Water Resources

Category: River Conservation

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Abstract

Planning and stewardship decisions that we make today will influence the resiliency of river corridors to adapt to future climate change impacts. This presentation summarizes a 2006 community-based project which explored tools to adapt to potential impacts of climate change on shorelines and water resources in the Thompson – Nicola – Shuswap region of British Columbia. This region includes the Adams River (a BC Heritage River), for which a background study and draft nomination document have been recently prepared to propose this river as a candidate for the Canadian Heritage Rivers System. Presentation topics include the value of freshwater shorelines in relation to potential climate impacts, riparian protection, and links between planning practice and water resources.

This project identified some of the ways communities in this region are vulnerable to climate change, particularly with respect to shorelines and water resources. The focus of the project was on adapting to climate change impacts (as distinct from actions to mitigate climate change itself.)

Human disruption of the climate system is expected to lead to more extreme conditions, greater uncertainty and a rate of change that society has not had to face before. Historic rates of change and variability are no longer an accurate gauge for future climate conditions. **We cannot afford to carry out planning practice on the assumption that future climate will be the same as it has been in the past.**

Some potential impacts of climate change include increased frequency of floods with higher magnitudes than in past, and more intense precipitation, with associated runoff.

Potential impacts like these have implications for planning. Beneficial management practices for shorelines and water resources recognize the full range of values offered by healthy riparian areas – for example, for protecting shorelines from erosion, and protecting water quality. There are a number of “no regrets” options possible, while avoiding “mal-adaptive” practices.

Biographical sketches:

Sarah Weaver-Kipp, B.A., M.A.

A geographer by training, Sarah has over thirty years of planning and social research experience, including land use planning as senior planner with the City of Edmonton, and a variety of socio-economic and land use planning projects as a principal of Cal-Eco Consultants. She co-founded The Living by Water Project in 1997 and has helped develop this project into a nationally recognized and award-winning initiative. Living by Water is well-respected for its high quality work in bringing science to citizens and helping motivate them into action around the issues of shoreline protection, conservation and restoration. Sarah is lead author of The Living by Water Project's well-received publication *On the Living Edge, Your Handbook for Waterfront Living*.

Clive Callaway, M.E.Des.

As a waterfront resident, Clive and his partner Sarah co-founded the Living by Water Project, a unique national education program for shoreline residents and others who work with them. With Sarah, he co-authored the well-received publication *"On the Living Edge--Your Handbook for Waterfront Living"*.

In 2002, Sarah and Clive received the gold medallion award for the "Clean Water" category of Canada's Environment Awards Program. In 2004 they also received Canada's ten year National River Conservation Award.