Issue #1 – Spring 2010

newsletter

Climate Change Adaptation Research for Forest and Rangeland Ecosystems: Resiliency Implications at the Landscape Level

Message from the Principal Investigator

Welcome to our Spring 2010 South Selkirks Climate Change Research E-Newsletter.

I am pleased to be working with a diverse group of researchers and advisors – all of whom are committed to examining climate change at the landscape level in the South Selkirks Region of British Columbia (BC). Our research study is based on the need to use a holistic approach in addressing climate change - an approach that respects social, cultural, environmental and economic interests as a benchmark for forest management practices. The complementary strengths of western and indigenous sciences allow us to respectfully acknowledge, share and utilize our collective knowledge in understanding our changing climate.

Located in the Kootenays, the South Selkirks Region's mountainous landscapes, watersheds, forests and local Aboriginal and non-Aboriginal communities provide our team with a prime study area to explore climate change adaptation and resiliency (the ability for systems to adapt to change) in terms of relationships, patterns and cycles between forests, people, animals, water, air and land.

Quarterly e-newsletters will be utilized to actively communicate with the Ktunaxa/Kinbasket Nation communities, Métis Nation BC, Governments of BC and Canada, industry, non-governmental organizations and academia by showcasing and reporting on our milestones and progress to date.

-Dr. John Innes, Principal Investigator

"This study comes at an opportune time as the world accepts the grave reality of global climate change, and communities and nations collaborate to transform social, cultural, economic and environmental practices to adapt to this worldwide phenomenon."

-Dr. John Innes, Principal Investigator

Project Overview

Researchers built the project and its teams around three Resiliency Dimensions (RD)—Human, Ecology, and Economics.

Participating Organizations:

Aboriginal: Lower Kootenay Indian Band/Ktunaxa Nation, Métis Nation BC, St. Mary's Indian Band/Ktunaxa Nation

Academia: University of BC, University of Victoria

Industry: Kalesnikoff Lumber Co. Ltd.

Non-Governmental Organizations and Consultants: Columbia Basin Trust, FORREX, Nature Conservancy of Canada, New Direction Resource Management Ltd., Turtle Island Consulting Services Inc.

Provincial Government: BC Hydro, Ministry of Environment, Ministry of Forests and Range

The Ecological RD team will examine projected climate scenarios and recommend adaptation practices that encourage resiliency while maintaining ecosystems. The project leader is Dr. Walt Klenner. Other members provide knowledge in natural resource management from both Aboriginal and non-Aboriginal sources: Greg Arnold, Carmen Cadrin, Gary Ducommun, Stan Hadikin, Pierre Iachetti, Garry Merkel, Jim Ross, Dr. Dominique Sigg, Dr. Tory Stevens, Russ Walton and Curtis Wullum.

The Human RD team will determine which adaptation practices maintain or enhance existing social and cultural values. Co-leaders Dr. Natasha Caverley and Dr. Howie Harshaw are assisted by Mark Carlson, Pierre Iachetti, Dr. Ajit Krishnaswamy, Gerry Legare, Garry Merkel, Jim Ross, Sinclair Tedder and Curtis Wullum with experience ranging from community sustainability to traditional knowledge.

The Economics RD will analyze forest management practices to find those that both encourage resiliency and adapt to climate change. Leaders Dr. Innes and Dr. Harry Nelson are joined by George Edney,

Dr. Stevens, Sinclair Tedder and Curtis Wullum, providing expertise in economics, policy and planning.

The project is governed by a Holistic Policy Framework that ensures the three Resiliency Dimensions are balanced to provide the best answers to regional climate change adaptation. Dr. Bill Bourgeois, Chief Cheryl Casimer, Margie Eddington, Dr. Honore France-Rodriguez, Tavis McDonald, Joe Pierre, Ray Warden and Dan Wigle will advise the team on the integrative aspects of the study.

**Note. The listing of project team members was accurate at the time of publication.*

Valhalla Park (near the Slocan Valley)
Photo Credit: Howie Harshaw

Highlights

From January to March 2010, we engaged in the official kick-off of our study. Key activities included

- Collecting information on climate change that is gathered by multiple organizations in the study area and integrated for decision-making purposes;
- Defining the potential landscape modelling area in the South Selkirks Region and gathering forest cover, land use and other biodiversity information for the study area; and
- Developing interview guides for face-to-face interviews with members from the Ktunaxa/ Kinbasket Nation Communities and Kootenays Métis Nation BC Chartered Communities.

Collaboration Planning

In addition to our study, two other climate change-related projects are currently underway in the Kootenays: The West Kootenays (WK) Project and Nature Conservancy of Canada's (NCC) South Selkirks Natural Area Conservation Planning Project. Our research team is collaborating with the WK and NCC Project Teams to build on synergies and discuss local initiatives regarding climate change adaptation and resiliency.

The WK Project is an integrated vulnerability assessment intended to increase knowledge about climate change and ecological resilience, and to enhance the capacity of forest managers to adapt to climate change challenges. For more information, contact Dr. Rachel Holt at rholt@netidea.com

The NCC's South Selkirks Conservation Project focuses on land/site protection, land/area management, species management, education/ awareness, law and policy and capacity building. For more information, contact Pierre Iachetti at pierre.iachetti@natureconservancy.ca

Moving Forward

Over the coming months, the South Selkirks Project Team will be carrying out the following activities:

Community Interviews. In April and May 2010, face-to-face interviews will be conducted to examine human resiliency and coping characteristics to climate change-related effects of First Nations and Métis community members in the South Selkirks Region;

Ecological Modelling. The Ecological Resiliency Dimension will continue to prepare the South Selkirks data and landbase inventory and begin the Tools for Exploratory Landscape Scenario Analysis (TELSA) model revisions to incorporate climate change disturbances; and

Public Opinion Survey Design. The Human Resiliency Dimension will begin to draft questionnaire items for the Fall 2010 public opinion survey that assesses local citizens' attitudes, beliefs and perceptions of climate change and the adaptation practices required to maintain or enhance social and cultural values in the South Selkirks Region.