



Communities Adapting to Climate Change

Columbia Basin Case Studies Final Report

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Final Report
2010-2011

Regional Adaptation Collaborative (RAC)

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Adaptation Collaborative Program**



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Contacts:

Kindy Gosal, CBT Director of Water and Environment
Michelle Laurie, CACCI Coordinator

Tel: 1 800 505 8998

Email: adaptation@cbt.org

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1. Introduction

In 2009-2010, the Columbia Basin Trust's Communities Adapting to Climate Change Initiative commenced Phase 2 of its Adaptation Initiative with three project communities, Rossland, Castlegar, and the Regional District of Central Kootenay (RDCK) Area D in partnership with the Village of Kaslo. This final report provides key reflections and learning from the Communities Adapting to Climate Change Initiative (CACCI) and the communities that participated in the CACCI.

Deliverables as per contract

The outputs for this project as stated in CBT's contract with Fraser Basin Council are:

- City of Rossland will undertake and document its adaptation planning process including vulnerability assessment, adaptation strategies and lessons learned.
- City of Castlegar will undertake and document its adaptation planning process including vulnerability assessment, adaptation strategies and lessons learned.
- Village of Kaslo in collaboration with the Regional District of Central Kootenay Area D will undertake and document its adaptation planning process including vulnerability assessment, adaptation strategies and lessons learned.
- CBT will synthesize the process, findings and lessons of the projects in City of Rossland, City of Castlegar and Village of Kaslo/Regional District of Central Kootenay into easy to read case study documents for dissemination.

This report will summarize the adaptation strategies and lessons learned for the community projects and the CACCI as a whole.

A synthesis of the project findings are contained in three summary case studies that will be sent as attachments.



1 Member of CBT's Technical Support Team, David Lapp from Engineers Canada, participates in a workshop with the coordinator for the City of Castlegar's Adaptation Project

2. Background and Overview of the Communities Adapting to Climate Change Initiative (CACCI)

Project history

In late 2006, CBT, with the assistance of partner organizations, released a scientific public report detailing the expected Climate Change related impacts to the Canadian Columbia River Basin (*Preliminary Analysis of Climate Variability and Change in the Canadian Columbia River Basin: Focus on Water Resources – Pacific Climate Change Impacts Consortium, Columbia Basin Trust 2006*). The report was distributed widely throughout the basin and a series of public presentations were made by the scientists to explain to residents what the anticipated impacts are likely to be.

In 2007, a regional workshop on climate change adaptation was held in Cranbrook for local and First Nations governments. The focus was on education as well as soliciting interest in piloting a climate change adaptation planning process in Basin communities. Nine local governments applied and two were selected.

In 2008-2009, the City of Kimberley and the District of Elkford undertook year long processes using climate change scenarios to identify potential local impacts, vulnerabilities and risks. They then developed strategies and actions to implement. These two communities shared their process and learning throughout the year with interested communities in the learning network. The learning network in this first phase included five interested communities that did not get selected to undergo a project but wanted to stay involved, along with Kimberley and Elkford.



2 Local Government elected officials and City staff get together to talk about climate change adaptation at the Second Regional Workshop for Local Government in October 2009.

Throughout Phase 1, an advisory committee comprised of a host of academic, First Nations, governmental institutions and community development practitioners at the local and provincial levels provided advice on the initiative as well as on local projects. A six-

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step process emerged out of the first two projects that provided a framework for future communities.

In 2009-2010, CBT supported a second phase of this initiative with projects in three communities (Rossland, Castlegar, and RDCK/Area D in collaboration with Kaslo). During this phase, the CACCI also hosted a regional workshop with more than ninety local government representatives, supported a technical support team with fourteen active members and an eight-member advisory committee. In addition, the CACCI facilitated an expanded learning network for local governments in the Basin (18 municipalities and three regional districts) offering four webinars, four newsletters and eight community-based workshops including three rural regions, three municipalities, one elementary school and one business sector focused workshop.

Funding

Over the past three years, the total Communities Adapting to Climate Change Initiative budget has been \$593,250 (see table below). When CBT joined the BC Regional Adaptation Collaborative, this partnership resulted in an additional \$107,000, which was given to the Pacific Climate Impacts Consortium (PCIC) for their work to support the Basin communities with climate modeling needs.

	Columbia Basin Trust	BC Ministry of Environment	Natural Resources Canada (BC RAC)	Total
Phase 1 (18 months)	\$156,250	\$30,000		\$186,250
Phase 2 (18 months)	\$300,000		\$107,000	\$407,00
Total over three years	\$456,250	\$30,000	\$107,000	\$593,250

Items funded in Phase 1 and Phase 2 include:

- 5 community projects
- Part-time coordinator and assistant
- Technical and advisory support honorariums (applicable to Technical Support consultants) and travel to community projects and CBT meetings.
- Technical consultants
- PCIC climate science support and modeling

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- Communication consultants and products
- Workshops (regional and local)
- Learning network specific products, workshops and events

*In addition to the CACCI budget, CBT has contributed \$30,000 toward its own climate change website and DVDs. As well, each local government project partner contributes financial resources, staff time, in-kind community time and materials.

3. This Initiative is Successful Because...

Collaborating, learning and sharing

A questionnaire was carried out in the summer of 2010 that solicited input on the future from the variety of stakeholders involved in the CACCI. This included community coordinators, local government staff and elected officials, technical support team members and advisory team members. The diverse and engaged team of people collaborating at the community level was mentioned by almost everyone as very exciting. The experimental and flexible nature of the initiative - combined with active, willing and open learning and sharing, was also highly valued. People felt that ideas are a powerful force to invent together and the CACCI provides an incubator for many of the technical collaborators' ideas to develop. In particular, the learning network, which links local and technical knowledge, was seen to be an important outcome. The occasional reflection sessions with the learning network are appreciated by those who can't be part of the day-to-day work. These were also good opportunities for local coordinators to seek feedback, expertise and to learn about other projects.



3 This initiative brings high level science and technical support to the community level. In this photo four members of CBT's Technical Support Team visit the Village of Kaslo, a rural community in the Canadian Columbia Basin.

Changes taking place on the ground, evidence of uptake

There have been, and continue to be, many achievements taking place. Of key importance, the process is building local capacity as opposed to outsourcing to consultants in distant places. Furthermore, the project is incorporating an important global issue into local planning. The ability to initiate serious conversations with local government on climate change was not noticed in the region prior to the CACCI and is

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noticeably unique to the Basin. The increased awareness regarding adaptation and mitigation solutions is leading to more climate resilient communities in the Basin now and in the future.

4. The Six-Step Adaptation Planning Process

The Phase 2 community projects, Rossland, Castlegar and RDCK Area D/Kaslo followed this six-step adaptation planning process to create their adaptation action plans.

These steps were created by the CACCI team based on the experiences of the communities that underwent adaptation planning in Phase 1 of the CACCI.

6 Step Climate Change Adaptation Process

1. Get Started
2. Learn About Climate Change
3. Identify Priorities in Your Community
4. Assess Vulnerability, Risk & Opportunities
5. Develop Adaptation Strategies and Actions
6. Implementation & Monitoring of Plan

5. Feedback and Lessons from Community Projects

The following section highlights feedback from the community projects in terms of their experience to date, and potential avenues and barriers.

Key messages from project coordinators

Monitoring and Learning reports were filled out by community project coordinators at the mid term and final reporting stages. Some of the reporting was accountability focused whilst a large majority was reflection-based in order to share experiences and learning. Below are some key messages from the project coordinators:

- Revise and improve the online adaptation resource kit, its very useful
- Have more individual technical support team support and coaching
- Continue interaction with other communities doing the same thing as it is helpful
- A range of approaches are needed as communities are doing different things

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- It's useful to help integrate adaptation into what the community is already doing
- Create a one-off adaptation action planning database for future communities

Feedback from five community project local governments

Interviews were held with each of the five local governments that underwent an adaptation planning process between 2008 and 2010. The questions aimed to build, rather than repeat, on data collected from community coordinator monitoring reports. Each interview focused on three main areas:

1. Comments and feedback on the process and outcomes of the project based on first hand experience.
2. Implementation, next steps, barriers and potential support from CBT or others.
3. Ways to mainstream or integrate adaptation outcomes/work with other activities being worked on such as Carbon Neutral Kootenays, Water Smart, etc.

The following summarizes the main messages from the community project local governments:

Key message

Provide support whether it's a focused project or a broad scoping exercise. The key is that **process (broad or focused) crystallizes, legitimizes and prioritizes actions for council**. Understand and accept that action is happening in various forms however not all at once or immediate.

Future background information needed prior to engaging communities:

- Regional science and communicable narrative
- Simple VA/RA methodology
- Online resource kit

Ongoing coordination, networking and communication support needed:

- Engage the public and support local governments to engage their public
- Continue learning and sharing exchanges between communities
- Continue technical support team coaching and face to face advising



4 Community members show their impact map on transportation. Impact mapping is an exercise to help communities identify priorities in their community that may be impacted by climate change.

Research and Development

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- Create templates to help move people through the science, impacts and adaptations more quickly
- Have easily accessible best practice examples of policy, plans and local actions for adaptation (online and print)
- Address adaptation within the context of sustainable communities and the wider climate change context.
- Support pilot projects from action plans with funding and technical expertise
- Work toward a mandate by the Province so adaptation is easier to implement locally (AKBLG)

Outreach and Capacity Development

- Keep the climate change adaptation conversations going with regular exchange and education of new information (using a variety of print, online and face to face media) with local governments, their communities and the general public
- Engage and develop capacity within local government staff and councillors within their own roles (i.e. planners / engineers / CAO's / council / mayors)
 - o Use existing association meetings to ease time requirements
 - o Engage with newly elected officials in 2012 via UBCM and a welcome package to local government

Potential elements for future adaptation projects

The suggested best route for future CACCI projects is to allow communities to approach adaptation planning in their own way (which in general CBT already does) and recognize that sometimes it is easier for municipalities to just quietly incorporate climate change adaptations into policies or infrastructure upgrades without a big process and public engagement. In addition:

- o Have the science available at the outset or allow time in the project for delivery of the science from PCIC.
- o Host a kick-off workshop immediately upon project start-up with the local steering committee, media, and public. This will help create a buzz in the community as well as start the priority setting.
- o CBT should create a resource data base of climate change adaptations/actions that communities can adopt on a one-off basis and tailor to their own needs.
 - Focus on how to incorporate into future and existing projects and plans
 - Available in bite size pieces
 - A one-stop resource kit with climate information
- o CBT should continue with workshops, seminars and webinars specifically for City staff and the public that focus on action planning or vulnerability and risk

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assessment, however without the expectation that they will necessarily undertake a big planning process.

- Increase the opportunities for lower commitment forays into the world of climate change adaptation.

Challenges and barriers for community projects

Commitment by communities to the process in Phase 1 and 2 required significant work and dedication. Most coordinators felt “it can’t be done off the side of my desk”. In every interview, they noted that staff are already overwhelmed with the various initiatives taking place such as sustainability planning, infrastructure planning, fire protection plans, water conservation initiatives, corporate and community energy plans to name a few. Given the reality of most staff already working beyond their capacity, there are several potential barriers to undertaking climate change adaptation planning in small rural communities. The following are some barriers that project communities and potential project communities noted:

- The **volume of information** to sort through and understand
 - A synopsis of the information gathered, the process used by the various communities and how to get started ‘now’ would be helpful.
- Some people want to engage on their **sectoral focus only**.
 - Need opportunities to engage without drawing people into entire process.
- Local coordinators **don’t have climate change impacts and adaptation backgrounds** and are learning along with their steering committees and publics. They also need to be up to speed on most things in the project including the research taking place which requires significant commitment and skills.
- **Getting climate change on council’s agenda** and, in Elkford, **setting policy that will manage the change** was a challenge.
 - Ensure you have many strong champions on Council.
- CBT **work planning and reporting process** is challenging given so many unknowns. It’s also time consuming. Furthermore not all coordinators have capacity/experience in areas such as work planning, reporting, home office, etc. Coordinators suggest:
 - More detailed roadmaps, templates for terms of reference, contracts, meeting agendas, action plans, key pointers and resources.
 - Synthesized and updated resource kit
 - More coaching and less focus on understanding process in advance

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- Project manager/CBT should revisit human and office capacity issues to ensure skills will meet needs for remote project coordination.
- **Climate change topic is viewed as a barrier.** Communities have many skeptics and the severity of impacts is not immediate. This leads to less investment in the short term. There are usually more pressing and immediate needs.
- **Provincial barriers**
 - Restrictions on grey water use, or building code requirements that prevent the consideration of some innovative solutions.
- **The pace of this process is too fast.** There is too much push to do too much in too short of a time frame. It doesn't leave time for adequate research on the project communities' part of experiences beyond those in the Basin for example. It leads to communities rushing decisions under the pressure.
- **Geography.** The Village of Kaslo and Regional District of Central Kootenay Area D were the first rural area project of the CACCI. Geography presented challenges with communication as well as different cultural make ups.
- **Uncertainty of follow up and implementation.**
 - Communities would be more motivated to take part in the planning knowing that there is support for implementation.
 - Longer term coordination support from CBT is seen as important to ensuring ongoing momentum for implementation.
- **Not enough communication with citizens.**
 - Support in communicating with residents within the project community as coordinators and local government are already at capacity.

6. Next Steps for CBT

CBT is committed to supporting local governments and their communities with climate change adaptation in the Canadian Columbia Basin. A concept for Phase 3 of the CACCI (2 year commitment) has been developed and will be put into action in the spring of 2011. The concept is based on the lessons and feedback from the first three years of on the ground work. It will focus on:

1. Supporting implementation



5 Participants from the Phase 1 and 2 project communities come together with the Technical Support Team and the Advisory Committee to reflect on the last three years of Adaptation Planning in the Basin and to plan for the future.



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- and action of Phase 1 and 2 communities
- 2. Engaging with new Basin communities on climate change adaptation planning
- 3. Communicating climate change adaptation to wider audiences as well as the CACCI learning network.

In the meantime, several products are being developed to summarize and communicate the work of the CACCI including an updated and synthesized online resource kit, an easy to scan synthesis of potential impacts and adaptation actions for local governments and summary case studies from the community projects. Ongoing work with PCIC on developing projections for extremes and variability in the region will also continue.