

Summary Report Rural Community Workshops on Getting Started with Climate Change

“What I learned at this workshop: the need for greater community cohesion, planning and resilience.” – *Harrop workshop*

Summary report overview

In the spring of 2010, seven workshops were held in communities in the Canadian Columbia Basin introducing local governments and the public to information on climate change adaptation.

The Communities Adapting to Climate Change Initiative (CACCI) responded to Learning Network (LN) members’ requests for local workshops in order to increase communities’ awareness and understanding of potential local impacts from climate change as well as ways to prepare for those changes.



LN members hosted the workshops in a variety of ways. Some requested a public event to engage their community while others hosted a small meeting at City Hall with staff and elected officials or with a specific segment of the population such as the Chamber of Commerce. The CACCI also visited Blewett Elementary school to provide the grade 4 and 5 classes with a presentation on climate change upon request from the school’s teachers. The CACCI tailored the workshops to meet the diverse audiences and needs of the LN members.

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Workshop objectives, locations and agenda

Objectives

1. To provide LN members with information on the climate science, local impacts and planning tools available for preparing for climate change.
2. To provide an engaging format that ensured participants enjoyed the meeting and internalized the content.
3. To assist the CACCI in finding out what communities are working on and where their interests lie in relation to working on climate change adaptation in the future.

Community workshop locations and dates

A total of 130 people were engaged through the rural community workshops. Approximately 100 people from rural areas participated via the public community workshops and 15 local government elected officials and staff participated in the round table discussions in Golden and Creston. Approximately 15 people participated in the City/Chamber of Commerce workshop in Nelson where local business owners, elected officials and staff attended. There were approximately 30 elementary school students at the elementary school presentation.

Community	Date	Type of workshop
RDCK Area E - Blewett	May 25	Community workshop
Blewett Elementary School	May 25	School presentation grades 4-5
RDCK Area E - Harrop	May 26	Community workshop
Golden	May 27	Local government workshop
Nelson	June 3	Local government/Chamber of Commerce workshop
Creston	June 7	Local government workshop
RDCK Area A – Crawford Bay	June 7	Community workshop
Montrose and Fruitvale	June 15	Community workshop with local government

Agenda overview (approximately 2.5 hours)

- ❖ Welcome and introductions (15 min)
- ❖ Local observations (20 min)
 - What changes are you observing locally that may be related to climate change? (Participants drew observations and shared in small groups and plenary).
- ❖ Climate science (30 min)
 - Climate Change Science 101 for the Columbia Basin
 - 5 minute DVD

- Presentation from Mel Reasoner, Climate Scientist and member of the Technical Support Team
- Plenary Q&A
- ❖ Snack break (15 min)
- ❖ Understanding local impacts of climate change (30 min)
 - Impact mapping in small groups to help community members make sense of global and regional information at the local level. This exercise engages people to think of the chain of community level impacts.
 - Group sharing about local impacts on key themes such as water, forests, food and transportation.
- ❖ Planning for impacts (30 min)
 - Group discussion on planning tools that a community can use to take action
- ❖ Closing words (10min)

Workshop overview and highlights

Local observations – What are you observing in your community that *may* be related to climate change...



The facilitators asked participants to illustrate their local climate observations that may be related to climate change. This made for a fun session and let people get creative. Participants responded positively and enjoyed letting their creative side out. Participants illustrated in a variety of ways the changes that are already happening in their community.

The most common local observations were drawings of melting glaciers, unpredictable weather, pine beetle, forest fire, and lack of snow at lower elevations (such as on local ski hills).



Climate Change Science 101 for the Columbia Basin (DVD)

This DVD was created for the workshop series as a way to communicate key concepts and baseline information around climate change. Having the DVD climate scientist avatar present in person (Mel Reasoner), provided substantive follow up of more in-depth conversations post DVD. The workshop comment form indicated that overall participants liked the DVD and felt it should be accessible to more people, particularly online. Some participants noted that the video would be better suited for younger audiences and schools.

Climate science presentation by Mel Reasoner, former Climate Scientist and member of the Technical Support Team

“What I liked: breaking down the science into local small pieces.” – *Blewett workshop*



The presentation focused on climate change impacts at the local and regional level. The PowerPoint slides were kept to a minimum to provide maximum time for questions. Workshop participants appreciated and enjoyed interacting with the climate scientist as part of the workshop (noted from the feedback survey). Residents were very receptive and interested in this as most people only hear about global climate change through the media. At the workshop in Crawford Bay, participants were so keen to talk about the science with Mel that the workshop agenda was modified to allow more time for participants to talk with Mel. See pages 8-9 for a list of the questions posed by participants.

Climate skeptics

Several participants at the workshops identified themselves as climate skeptics. A series of question and answers with Mel took place in the discussion period however the focus remained on moving forward in terms of preparing for change. The Mayor of Fruitvale, a self proclaimed climate skeptic, had a new understanding of climate change after the workshop.

Feedback

Participants noted in the comment form that this workshop gave them a better perspective of climate change and that they realized they needed to start

planning ahead. See the appendix for a complete list of questions regarding climate change.



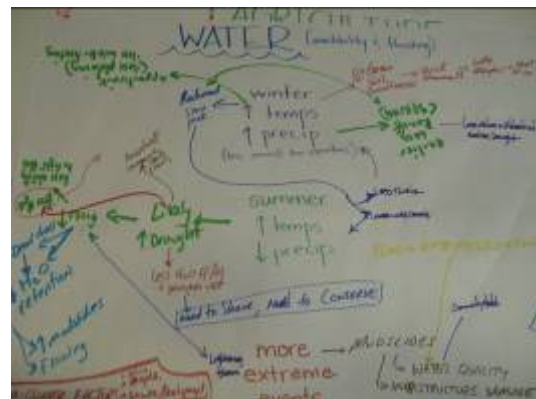
“The presenters were good, personable and professional” – *Harrop workshop*

Local impacts of climate change

“What I liked: Coming together as a community to hear the changes people are seeing.” – *Blewett workshop*

In order to help participants understand what some of the local impacts of climate change could be in their community, an interactive exercise called impact mapping was used. Impact mapping (i.e. mind mapping or influence diagrams) is a brain storming session to form a list of ideas that are interconnected.

Participants gathered at tables that had different topics: Water, Forest Ecosystems, Agriculture, Tourism and Recreation, or Transportation. The topics varied depending on the community. Each table had a member of the facilitation team to guide them through the process.



At the workshops, the centre of the impact maps had a list of climate change projections for the Basin and they were divided into winter and summer projections.

The impact mapping helped to keep the climate change conversation focused at the local level. Feedback from the workshop showed that participants thought

this session was useful for them to understand how climate change will impact them and their community. They also appreciated this opportunity to talk about climate change with their fellow community members.

Comment highlights from participants: what did you like about the workshop?

- Group brain storming session which brought out many insightful ideas
- The fact that this meeting was held and that community awareness was raised
- The effort put into adapting and finding solutions
- Neighbours sharing ideas - the best
- The talk about this region. It felt active and tangible.



Importance of local knowledge

The impact mapping session brought out local knowledge which helps ground truth the climate science and focuses the conversation on areas that need adaptation actions. Local people are already noticing that an increase in winter temperatures and summer temperatures are affecting their environment and community:

- Freeze thaw cycles are resulting in more flooding and also impact food growing.
- Lack of snow has already been affecting local crops (as a result of no insulating layer).
- Water resources: this impact mapping session brought people's attention to the need to conserve and manage water resources differently.
- Most of the issues came back to water regardless of the topic area.
- Vulnerability to forest fire: people's awareness was heightened around the need to think about increased severity and quantity of forest fires.



Planning for impacts



“What I learned at this workshop: that our little water systems need long term planning!”
– *Harrop workshop*

A group discussion on community planning tools that can help a community prepare for the impacts of climate change was the final session of the workshops.

Laurie Cordell from the Fraser Basin Council, Smart Planning for Communities facilitator, led this discussion at three workshops; Meredith Hamstead, coordinator of CBT’s Watersmart Initiative led one workshop and Michelle Laurie, CACCI coordinator, led the planning discussion at the other workshops. Most of these workshops took place in rural communities where there were not many planning tools available to the local community; however, the discussions were still valuable and helpful to participants in identifying household actions as well as informal institutional actions such as working with other water license holders drawing from the same stream.

The planning discussions generally focused on fire smarting, interface fire management, emergency preparedness and potential water issues for the future. Participants also talked about working together as a community to prepare for future climate changes.

In general, participants at all workshops were very keen to learn about how climate change will affect their water systems and how they could deal with water issues, especially because many of the participants were not on municipal water supply. Neighbourhood communications and small working groups for local water systems were solutions brought up by the community members.

Key points that emerged from the discussions regarding community needs included:

In **Crawford Bay**, they would like to plan for flooding of a creek at Kokanee Springs and Crawford Creek. They were also very interested to learn about FireSmarting properties and homes.

In **Harrop**, key questions arose such as: “Where does my water come from?”

In **Fruitvale and Montrose** where they are noticing more flooding as a result of freeze thaw cycles, they started asking questions such as: “What will happen to our waste water treatment plant with more intense flooding?”

In **Golden and Creston**, round table discussions were held with local government staff and elected officials. As with rural discussions, some key areas for potential impacts and opportunities were highlighted such as the aquifer in Golden and emergency planning in Creston. Creston is also interested in learning more about integration of adaptation planning with their future OCP process.

Some of the comments suggested by Golden and Creston municipal staff included:

- A desire to see the action items from other communities
- More information on how to incorporate climate change adaptation into future and existing projects.
- A request that reports from project communities and CBT should be relevant to as many communities as possible and have transferability
- Advice that information needs to be articulated in bite size pieces for staff to use it
- Look to Emergency Act – they already mandate plans for preparedness
 - o Hazard Risk Assessment, PEP
- Request for a delegation to council to provide an overview of the primer workshop information so it’s on council’s radar (Creston).
- Build on commonalities between communities, not differences, in order to make the most of limited resources.

Almost all communities are interested to hear what actions other communities are taking locally and beyond.

Adaptation headlines

“Nelson population anticipated to double in 10 years!” – *Nelson workshop*

At the Nelson Workshop with the Chamber and City, the focus of the discussion was on how business could mitigate the risks and harness the opportunities from climate change. The final activity asked participants to create a news headline based on the information discussed regarding a future climate and potential impacts. Here is a list of some of the headlines the group came up with by economic sector:

Retail

- Consume less/produce better and local
- Encourage landlords to make improvements and renovation

Tourism

- Diversify tourism products
- Kootenays gets a second life

Real estate development

- Nelson population anticipated to double in 10 years
- Waste water for surf park
- City snow removal budget slashed by climate change

Media/entertainment

- Back to basics in extreme weather
- Nelson wakes up to forest fire - and they are ready

Discussion points

The following section highlights some of the ideas that arose during the planning discussions from all the workshops.

Wildfires

- FireSmarting
- Emergency preparedness plans
- Biomass energy from community
- Planting different types of trees
- OCP: standard guidelines to reduce risk
- Controlled burns strategy



Transport

- Road conditions with freeze thaw
- Decrease in snow clearing – save money
- Maintenance of storm drains
- Mud slides

Agriculture

- We need water for crops – big issue
- Different irrigation methods are needed: mulching, capturing water, permaculture, shade planting

- Stresses to Agriculture: insects, lack of pollinators, ground freezing, less insulation, drier ground, intense weather events such as hail and wind
- Agriculture planning: relationships with ministries
- Greenhouse opportunities in the winter

Water

- Ground vs. surface water – we need to understand these better
- Erosion, flooding and blow down – how does this affect water quality?
- Surface water reductions
- Impacts to sport fishing
- Drinking water supply for small water systems: storing, using less, building relationships, community monitoring programs

Questions about climate change from participants

Drawings from Blewett Elementary School presentation

- How do global targets reduce emissions?
- Date for treaty renewal?
- Impacts of 'positive' feedback loops – what does this mean?
- Impacts on cedar in the future
- How in a small community can we influence 'big players'?
- Forest changes: impact of flora and fauna?
- Replacements of pine beetle species?
- Is it detrimental for the oceans to suck up excess Co₂?
- Local precipitation impacts on lake levels and hydro power?
- Severe weather?
- Why are some places warming faster than others?
- Peak oil and Site C dam?
- Modeling – how much have sun spots been taken into consideration?
- Tar sands, Canadian government, federal government actions?
- Should we install snow pillow gauges at lower elevations?



- Forest fuel and small trees – what to take out?

Reflections on workshop invitations and advertising

Several methods were used to publicize the workshops and invite local participants.

- CBT provided graphic design and advertising via local news papers and posters.
- CBT requested that each community send group emails and use telephone trees.

The feedback by participants and turnout indicated that most people responded to the community group email best. For example, the workshop in Harrop had a substantive turnout as the director of Area E, Ramona Faust, had sent out several notices though the community email list. In Crawford Bay, the community email list was down due to power outages, and this affected turnout.

Initial conclusions to draw from this experience are that newspapers and posters don't have the best response. Using local contacts and social networks are the best methods to get people out. Regardless of the support provided for professional communications, workshop turnout is dependant on the community representatives' ability to contact and access their community.

Appendix 1 Comment form

Comment forms were distributed at each workshop for participants to fill out at the end of the session. Dark bullets indicate comments from the workshop co-hosted with the Chamber in Nelson.

What did you like?

- Provides a sound platform for local action
- Presentation by Mel on the science (many feedback forms said this)
- Group brain storming session which brought out many insightful ideas
- Coming together as a community to hear the changes people are seeing
- Ideas and planning for adapting as individuals and as a community
- Interactive science based approach
- Community member involvement
- Breaks, short topics helped engage participants
- The broad age range of participants
- The presenters: good, personable and professional
- The table discussions and sharing afterwards
- Focus groups and practical ideas

- That some action is taking place
- I had not really though how CC would affect me personally. I am thinking about it now.
- Breaking down the science into local small pieces
- The fact that this meeting was held and that community awareness was raised
- The effort put into adapting and finding solutions
- Neighbours sharing ideas - the best
- The talk about this region. It felt active and tangible.
- That CBT is concerned and doing something about it. Informing and listening to the public.
- Interactive and direct
- Getting together
- CBT video
- The info presented on where we were , were we're going and where we could be
- The presentation from Mel
- Climate Data
- Good to see different sector ideas regarding climate change
- Meeting others and finding out about their situations
- Diverse group of people coming together
- Coverage of business risks and opportunities
- Good energy, organization and clarity – good job

What could have been done better?

- More drawing!
- More emphasis on the changes in water levels on the lake and less water in creeks dues to run off
- Capping discussions would have been nice as some went a little too long
- More focus on solutions and ideas to reduce CO2
- Clarify more terminologies
- Getting more key player and local residents here. So many groups doing the same thing.
- Focus on one specific issue that is of importance to the community
- I felt as though we were covering a huge amount of material rather superficially
- Less apathetic community and better interest from community
- Follow up events
- Advertise on Facebook

- A series of meeting leading to action rather than one offs. We need to build momentum to action on climate change.
- The global conversations - too much sadness
- Advertise on community notice board and speak louder
- Use local network and contact to get more people out
- Let the group talk more. We have many more solutions to share.
- Meeting was too short
- Longer group session and more focus on solutions for businesses in climate adaptation
- Fewer handouts and less paper
- Next steps outlined and discussed
- Wording things as headlines was awkward to do

What have you learned in this workshop that you can use?

- Winter management of winter crops
- Looking at the big picture to improve and adapt to the changing rapid climate and working more together in the communities
- Reminds us that our little water systems need long term planning!
- The need to pass on the information to younger generations. How to get the younger people out?
- Motivated to start organizing and preparing for possible disasters, fire, slides, no water
- The need for greater community cohesion, planning and resilience
- Lots of ideas for change and preparation on the property
- Local science
- A new perspective on future infrastructure plans
- Measures to fire proof
- The need to be aware of water issues
- Practical ways to fire-proof forest areas surrounding our house and using irrigation water more wisely
- Begin to think about adaptations specifically severe weather incidents
- Better perspective of climate change
- Forest ecosystems
- The need to conserve water. Different ideas for growing food.
- Organize and prepare for future water restrictions
- Personal and local responsibility to protect and adapt. Interesting to see what the local impact of CC could mean.
- Using interface dead wood for community based greenhouse.
- Interface fire info
- Bio Char. Sounds like a good idea.
- Co-ops and future planning.

- The fact that there is a genuine concern and a desire to discuss ideas
- The need to conserve water. Different ideas for growing food
- Organize and prepare for future water restrictions
- Using interface dead wood for community based greenhouse
- Interface fire info
- Bio Char. Sounds like a good idea.
- We really need to plan ahead
- How businesses can adapt to climate change and actually improve as a result of the changes
- Adaptability and opportunity. Need to keep the work spreading through the community.
- We really need to plan ahead
- With adaptive changes, climate change is not all bad
- Seasonal weather planning for business
- How to make my membership aware of the situations
- How businesses can adapt to climate change and actually improve as a result of the changes
- That our radio station should look at other ways to communicate and sustain revenue in the event of major weather event
- Adaptability and opportunity. Need to keep the work spreading through the community.
- Have an emergency plan to relocate retail goods in case of fire or other disaster
- Quick facts about how climate change is impacting and will impact communities
- Ideas for community engagement
- Have an emergency plan to relocate retail goods in case of fire or other disaster