

SHORT STORY

Lessons on bridging knowledge management with climate change adaptation: a story from southeastern British Columbia, Canada

Michelle Laurie

From 2007-2011, I coordinated a climate change adaptation planning process in southeastern British Columbia (B.C.), Canada. During this time, six local governments underwent yearlong climate change adaptation planning processes that resulted in community plans. Twenty-two local governments engaged in a learning network that met online and face-to-face to learn from the on-the-ground experience and share new knowledge. In 2011-2012, three more local governments have embarked on specific adaptation projects and several more are completing scans to see where they should focus their efforts. The planning focus of the initiative has shifted to one of action as communities look to implementation. The project is sponsored by Columbia Basin Trust (www.cbt.org) and has a funding commitment until May 2014.

Key questions related to knowledge management are shared below to help practitioners in the fields of Knowledge Management and Climate Change Adaptation better understand what all this jargon means in practice.

What does knowledge management have to do with community-based climate change adaptation?

Climate change adaptation at the community scale typically takes global and regional climate model projections and defines potential impacts at the local level. Communities then assess their ability to adapt and define strategies and actions to be more resilient to impacts and opportunities.

Knowledge translation, scaling knowledge to the appropriate level, and sense-making, are all aspects of knowledge management that play prominent roles in this process. Two critical questions that I came across in my experience included:

- How do we use such high level information at the community scale?
- What does the science mean in plain English?

To start the translation process, I always began my community based sessions by asking people, ‘What are you observing in your community that may be related to climate change?’ This question helped people to focus on their surroundings, engage in the question of change (many people are sceptical of climate change however admit to changes taking place), and start considering the different weather they have noticed over time. Once examples of change have been shared by everyone, including stories of the ‘good old days’, I introduce the climate science that has been modeled in the region. Often the climate science validates what local people have also been seeing. In southeastern B.C. this includes warmer, wetter winters and warmer, drier summers.

From the science, we then focus on areas of importance to the community. We define what is important to the community, for example, water availability, forest fire risk, municipal infrastructure and tourism. We then go through a mapping process in small groups with large pieces of paper, post-it notes and pens to visually map the potential environmental impacts of the science and what that means in terms of impacts to the community (see Picture 1.)



Picture 1. Impact Mapping in Castlegar, B.C. May, 2010 (Photo credit: M. Laurie)

With each particular theme I ask questions such as: ‘What do the projections mean for your rivers and streams, soils, snowpack, glaciers and reservoirs?’ This is followed by asking ‘What does this mean on the ground and in your community?’ As an example, higher than average winter temperatures (in a cold climate) can result in increases in freeze-thaw cycles which impacts roads with more potholes. It also results in the potential for flooding events caused by rain on frozen-ground. There are some potential benefits too such as less shovelling and snow removal.

After several years of meetings, a team of practitioners translated the information of climate science and potential impacts for local government staff working on the topic, in the form of a short review. We summarized the information collected over four years and created images with icons and key words. An example of an image for municipal infrastructure is below (Figure 1).

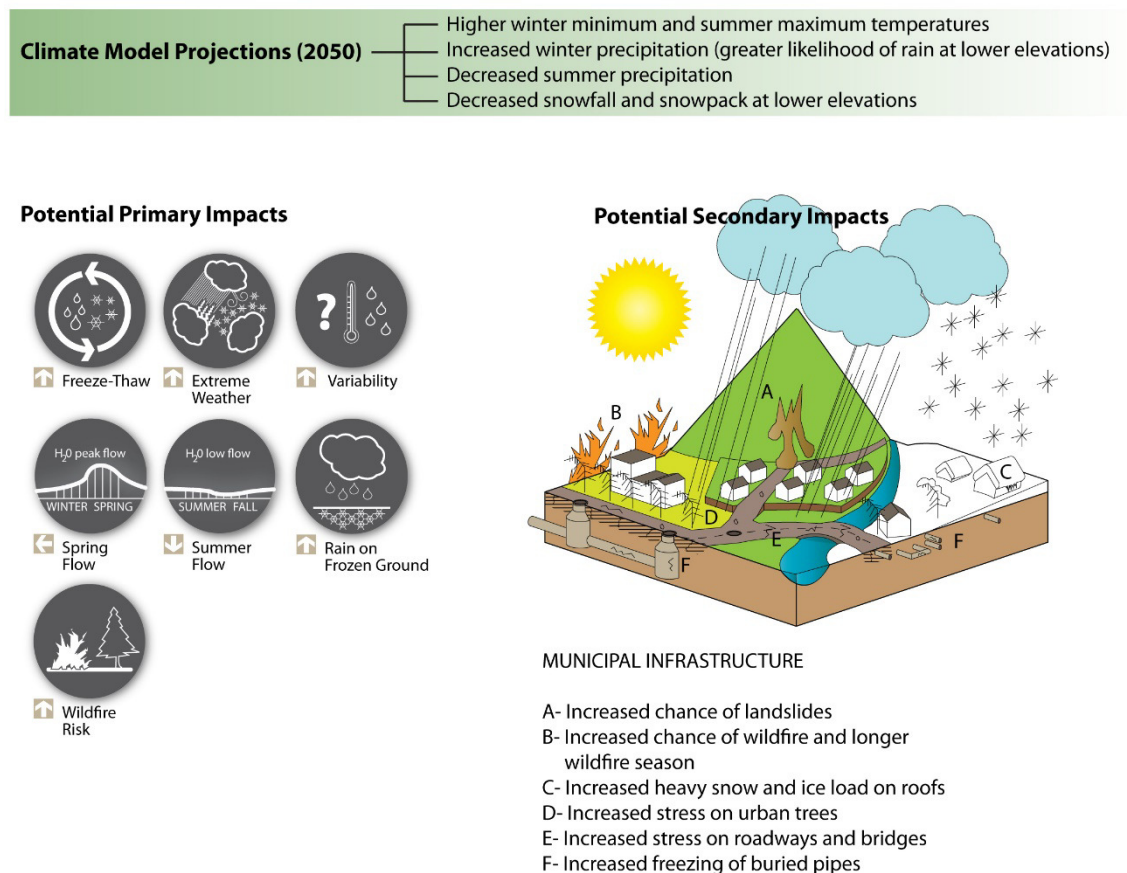


Figure 1: Summary of climate change impacts

In summary, while typical knowledge management techniques including creating systems for data collection, telling stories, and sharing among communities are all important, my experience is that the greatest knowledge management challenge is bridging knowledge generated at the global level to that at the local level.

What makes bridging knowledge in the climate change domain different from other domains?

Bridging knowledge across scales is a challenge for all knowledge management practitioners. This could be working across policy and practice, science and policy or any divide that needs a 'bridge'. My opinion is that the climate change domain is not

unique in this respect. In the climate change example, the critical point to overcome is using global and regional information at local levels. This means making sense of high level studies or far-away information with real people on the ground so that it is useful in their day to day lives. It also means helping people talk to each other across different sectors, professional groups or localities. I have learned that scientists analyze information differently than engineers who do it differently than government leaders. Helping bridge the communication barrier so that people realize the main outcomes they are looking to achieve is enabled through facilitation skills, engagement skills and bridging skills – all useful for those working in knowledge management.

Still, the climate change domain is different from other domains in the simple fact that climate change will impact everyone no matter where you live. The impacts will be different in each location thus local knowledge is critical. However, the systems of analyzing the science and making it real to people is something that can be shared and scaled to many locations.

What is unique about the experience in southeastern British Columbia, Canada that knowledge management or climate change practitioners can learn from?

The experience in southeastern British Columbia is unique in that it is well documented from start to finish. Each community has a plan to share as well as their process. A compilation of the first five community projects resulted in a method to fast-track communities through adaptation planning in the future. That was a knowledge management feat in itself as the lessons and experience were brought together to form a starting point for neighbouring communities.

Many of the resources are available online and people are encouraged to use it for your own community based adaptation planning processes. Please visit: www.cbt.org/adaptationresourcekit for more information.

About the author

Michelle Laurie is a consultant based in Western Canada working with national and international clients in the areas of strategy, assessment, engagement and collaboration. Her passion and experience are rooted in the field of sustainable development including climate change, forests, water and community sustainability. She holds a Master's of Science in Environment and Development from the London School of Economics and Political Science. She is an Associate with the Impact Centre of the International Institute for Sustainable Development. She blogs occasionally at:

www.michellelaurie.com. She was the lead consultant in the initiative described above from 2007-2011.

Email: michelle.k.laurie@gmail.com