

Guidebook for forest-based communities on climate change adaptation ready for testing in selected locations

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A new guidebook—*Pathways to Climate Change Resilience: Guidebook for Canadian Forest-Based Communities*—is now ready for testing in pilot communities. This guide was prepared by **Cindy Pearce** (principal author) and **Christine Callihoo** (co-author) in partnership with the Canadian Model Forest Network, Natural Resources Canada, and FORREX.

Pathways to Climate Change Resilience emphasizes tools to facilitate community-based climate change adaptation in small communities (less than 15 000 population) located in Canadian forest environments. The guidebook will now be pilot-tested in three to four selected Canadian Model Forests. Pilot communities will use the guidebook to support climate change adaptations, and the learning from this testing will be used to increase the usefulness of the guide for forest-based communities.

Rural forest-based communities are particularly susceptible to climate change because their economic, social, and cultural quality of life is closely linked to the local environment and climate. Most rural forest-based communities are now experiencing climate change impacts such as the following: increased frequency and intensity of wildfires and flooding; disruptions to transportation; shortages of water; and changes in forestry, tourism, mining, energy, or agriculture sectors. Community safety is often destabilized by extreme weather events. Furthermore, rural communities may not have financial, organizational, or human resources to recover from short-term climate change impacts or to adapt to longer-term and slower changes.

The guidebook provides a framework called the “Climate Resilience Trail” that identifies a generic route for climate change adaptation that all forest-based communities can follow. It then supports the

development of localized “pathways” between the destinations on the trail, tailored to the local needs and specific circumstances of different communities. Not all communities will need to complete the entire trail or have the resources to do so. Users are guided to approaches and resources that are specifically tailored for rural forest-based communities. In addition, the guidebook highlights experiences of and advice from communities that are early climate change adapters.

The intent of the “Climate Resilience Trail” is to encourage ongoing adaptations throughout the community by incorporating climate change information into everyday decisions. The introductory chapter of the guidebook articulates the challenges and opportunities that climate change creates for rural forest-based communities, the main steps along the “Climate Resilience Trail.” Subsequent chapters then describe the steps along the “Climate Resilience Trail,” as outlined below.

1. Prepare for the journey

- Alternative ways to add climate resilience thinking and planning to decisions and actions regularly taken in a community
- Sources of local knowledge as well as external information and expertise that might be needed
- Community organizations and individuals who should be involved in the climate resilience journey
- Ideas from other communities for starting the discussion on climate change and then moving forward

2. Learn more about climate change

- Starting with local observations of recent climate conditions
- Climate language—the concepts and terms climate scientists use and what they mean
- Gathering historical climate data for a community
- Presenting future climate change projections
- How to mainstream climate change information to broaden community understanding

3. Chart impacts and scan priorities

- How climate change has already influenced, and might continue to influence, the local natural environment in Canadian forest-based communities
- How changes in climate and the natural environment might influence community safety, infrastructure, economy, and quality of life, creating negative consequences as well as potential opportunities
- Various approaches a community might take to identify the linkages between climate change and its impacts on communities
- Thinking beyond the community to broader climate change impacts that might affect the community
- Which climate change impacts a community can consider further through existing community organizations and processes, and which require detailed assessment in the community adaptation planning process

4. Explore climate change resilience

- The importance of community adaptive capacity in a changing climate
- The different ways a community can evaluate climate impacts, vulnerabilities, and risks to decide which are the most important actions to take
- A suggested approach to evaluate opportunities from climate change

5. Take action

- General advice about climate change adaptation actions to increase community resilience
- Approaches for setting community climate change resilience goals and selecting priority actions

- Creating a Climate Resilience Action Plan with goals, priority actions, leadership, and timelines

6. Watch, learn, and review

- Monitoring actions, the overall plan, and changes in the climate and the natural environment
- Updating plans and actions based on successes, new scientific information, and local knowledge

Climate change adaptation will be an ongoing activity needing constant attention as communities experience what a changing climate actually means to community life, as new projections of future climate conditions become available, as new adaptation options are tested, and as communities complete priority adaptation actions and consider lower-priority effects. The first time a community assesses climate change adaptation should clearly be emphasized as the start of an ongoing, evolving journey instead of as a one-time event.

The Pathways guidebook* will soon be available on the Canadian Model Forest Network website (<http://www.modelforest.net/>). Lessons learned from the community pilots will be incorporated into the guidebook after the testing period is over. For more information on the guidebook, please contact the authors or Mike Slivitzky (MSlivitz@NRCan.gc.ca). A recording of a FORREX webinar on the guidebook by Cindy Pearce in February 2011 can be viewed at <http://www.forrex.org/news/event.asp?status=Arch&pkey=512>.

* An excerpt of this guidebook appeared previously in *Plan Canada*, Volume 51, No. 1, published by the Canadian Institute of Planners.

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