



# Clyde River's Community Climate Change Adaptation Plan

## Planning in remote northern communities presents unique challenges



Canada's North is experiencing rapid changes in climate. Northern residents have noticed thinner sea ice, melting of ground ice, rising sea levels, increases in the frequency and intensity of storm events, and a change in coastal erosion rates due to reduced ice cover. The impact of these changes on communities spurred intergovernmental cooperation and engagement of a professional organization to undertake climate change adaptation planning in Nunavut.

In 2006, a three-day workshop was held in Iqaluit, the territorial capital, to launch a new intergovernmental / interagency climate change adaptation planning initiative for Nunavut. One key recommendation of the workshop was to pilot small-scale, integrated adaptation planning processes in two Nunavut communities. Representatives from the hamlets of Clyde River and Hall Beach offered to be part of the initiative. These pilot projects were designed to be iterative, collaborative processes involving community members (including school students and local decision-makers), scientists and professional planners. Local and traditional knowledge and expertise were recognized to be of paramount importance.

One outcome of the Clyde River pilot project was an action-oriented climate change community adaptation plan. Its development involved the Canadian Institute of Planners, which provided two volunteer professionals to help coordinate the planning process, a science team led by Natural Resources Canada (NRCan) researchers, Ittaq Heritage and Research Centre (an Inuit-run research centre in Clyde River) and the Government of Nunavut. As with all new collaborations, there were a number of challenges to be overcome in achieving an effective working process.

### CLIMATE CHANGE IMPACTS

Clyde River is a hamlet of 900 people on the north coast of Clyde Inlet on northeast Baffin Island, Nunavut. The community is surrounded by mountains, dramatic cliffs, deep fjords and rolling tundra. The rapidly warming arctic climate has residents concerned about their safety. Two impacts of particular concern are melting permafrost, which is threatening the integrity of the town's roads, buildings and other critical infrastructure, and unpredictable sea ice, which is making traditional hunting and travelling routes more dangerous.

The planning involved community workshops and in-person interviews, with the Ittaq Heritage and Research Centre playing a key coordination role. The final product was a concise plan listing 38 distinct actions for adapting to specific risks identified by the community. The actions were organized on the basis of which partner (e.g. Hamlet Council, Ittaq Heritage and Research Centre, the Hunters and Trappers Association or other organizations) would be best positioned to implement the action.



PHOTO COURTESY OF BEATE BOWRON

### SCIENTIFIC FIELDWORK

NRCan is undertaking scientific research in Nunavut that is relevant at the regional and local levels. It includes work on permafrost degradation, landscape hazards, sea-level rise, coastal erosion and freshwater supply. The findings are being integrated with traditional knowledge to improve community planning capacity in Nunavut. This research is being conducted in collaboration with several Canadian universities, the Ittaq Heritage and Research Centre and the Nunavut Research Institute.

The work in Clyde River represents the first attempt at adaptation planning in this small northern community. Many valuable lessons were learned and are being applied to planning processes in other remote northern communities. A summary of these lessons learned can be found on the Canadian Institute of Planners Web site ([www.planningforclimatechange.ca](http://www.planningforclimatechange.ca)). Examples include

- acquiring formal recognition of the project from the Hamlet Council, as well as assigning a senior staff person to the planning work to ensure project continuity and accountability at the local level
- improving the coordination between the science and planning work to allow for better integration
- lengthening the planning cycle to enable the planning teams to spend more time in the community to build relationships and trust
- establishing priorities for recommended actions to help in the implementation phase
- translating all public notification and planning documents into local languages (in this case Inuktitut) before they are released
- enhancing community participation through local culturally appropriate methods, including regular public phone-ins on community radio for contacting local residents and receiving feedback

### ADAPTATION ACTION PLAN

A succinct community adaptation plan identified 38 actions, the climate change issue that each addresses, the intended result of the action, and the resources the community could utilize to complete each action. The following is one example.

<b>ACTION</b>	Provide broader coverage of communication equipment outside of town for FRS, CB and HF radio.
<b>ISSUE</b>	Uncertain ice and travel conditions. Increased risk to personal safety. Need for quicker and better sharing of information.
<b>RESULTS</b>	Residents able to obtain and pass on information on travel and ice conditions as well as emergency situations. Extend the range of current communication equipment.
<b>RESOURCES</b>	Hamlet with HTA and Search and Rescue Committee

Source: [www.planningforclimatechange.ca](http://www.planningforclimatechange.ca)

The lessons learned from the Clyde River pilot project, combined with similar work in Hall Beach, helped lead to the establishment of the Nunavut Climate Change Partnership. This multi-year collaborative effort, funded by Indian and Northern Affairs Canada, will develop community-based adaptation action plans in five additional communities (Iqaluit, Arviat, Whale Cove, Kugluktuk and Cambridge Bay); prepare a planning workbook/tool for use by other Nunavut communities; produce new scientific information on sea-level change, permafrost landscape hazards and freshwater supply; and create tools to collect, publish, share and communicate knowledge about climate change adaptation.

The Clyde River Adaptation Action Plan, the first of its kind in the Canadian Arctic, provides a useful starting point. The Clyde River Council supports continued efforts for working together to address climate change issues.

#### Contact:

Nick Illauq  
 Deputy Mayor, Hamlet of Clyde River  
 Tel.: 867-924-6220  
 E-mail: [nick\\_illauq@hotmail.com](mailto:nick_illauq@hotmail.com)