



PRAC

Prairies Regional
Adaptation Collaborative

Newsletter

Issue 1
Fall/Winter 2014

Welcome to the inaugural issue of the Prairie Regional Adaptation Collaborative's newsletter, intended to keep you informed of activities being completed as part of this joint initiative of Alberta, Manitoba, Saskatchewan and Natural Resources Canada to advance adaptation planning across the Prairies.

Since the Prairie Regional Adaptation Collaborative (PRAC) was launched in 2010, this federal-provincial cost-share program has striven to increase the capacity of decision-makers to advance the integration of climate adaptation into policies, plans and programs. A new phase of the PRAC was initiated in 2013, with activities to be completed by March 2016. The aim of the current phase is to advance adaptive capacity within the Prairies by sharing and applying existing and new knowledge, information and tools. The University of Winnipeg was pleased to be selected to host the PRAC Secretariat in January 2014 and coordinate efforts in partnership with Alberta, Manitoba and Saskatchewan to build strong partnerships, enhance shared understanding of climate risks and support the mainstreaming of adaptation into decision-making.

Work in this phase will build on the success of the PRAC's activities completed between 2010 and 2012, which focused on addressing a shared concern regarding the potential impacts of climate change on the hydrological

regime of the Prairies. Research, capacity building, engagement and awareness raising activities were undertaken related to water resource management, planning for drought and excessive moisture conditions and assessing the vulnerability of grassland and forest ecosystems. Four forums were held to share knowledge from PRAC projects, promote interprovincial collaboration and increasing awareness about climate change adaptation in provincial ministries and departments.

This inaugural issue of the PRAC newsletter provides a summary of two main events undertaken by the PRAC earlier this year: an interprovincial workshop held in March that set the direction for the PRAC's work until March 2016; and a workshop held in Winnipeg that engaged members of the provincial government in discussion about improving the resiliency of infrastructure to extreme climatic events and longer-term climate change.

We look forward to sharing more about the PRAC's work in the months ahead.

Terry Duguid
PRAC Secretariat
University of Winnipeg

Interprovincial Workshop sets New Direction for the PRAC

Over one and a half days in mid-March, representatives of Alberta, Saskatchewan and Manitoba government departments as well as other external guests gathered in Winnipeg to refine the PRAC's planned program of work between April 2014 and March 2016. The Interprovincial Workshop aimed to cultivate a shared vision for advancing adaptation action across the Prairies, identify key priority areas for strategic work by the PRAC, and formulate an initial plan for managing interprovincial collaboration. Discussion in the workshop was informed by outcomes of provincial workshops held in the weeks immediately leading up to the Interprovincial Workshop.

The first day of the workshop was facilitated by Terry Duguid, PRAC Secretariat, and began by setting the context for development of the PRAC's work plan. An opening presentation was made on the PRAC's objectives, past activities and expectations for the new phase of work. Representatives from each of Alberta, Saskatchewan and Manitoba subsequently summarized the actions that their governments are taking to support climate change adaptation and priorities identified in their provincial workshops. Kendra Issacs, Alberta

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Interprovincial Workshop sets New Direction for the PRAC continued

Environment and Sustainable Resource Development, spoke of the need to better communicate how climate change relates to the work of provincial officials and other key groups, to engage champions within and outside of government and to undertake more work on the costs and benefits of different adaptation options. On behalf of Saskatchewan, Kim Graybiel and Anne Seguin, Saskatchewan Environment, emphasized a desire to increase engagement and communication with the public and stakeholders in priority sectors, such as energy, agriculture and municipalities. Randall Shymko, Manitoba Conservation and Water Stewardship, noted Manitoba's desire for the next phase of the PRAC to focus on awareness building, collaboration, integration with existing mandates and strategies, bridging of information gaps and establishment of performance measures.

To enrich discussion regarding the possible priorities of the PRAC going forward, two external guests with expertise related to the climate change engagement and communication were invited to participate in the workshop: Cara Pike and Ian Mauro. Cara Pike is Executive Director of Climate Access, an organization that provides advice to a global network of climate and clean energy communicators on how to improve their communications and better mobilize audiences to take action to address climate change. She spoke about the disconnect within the Canadian public regarding their awareness of climate change but limited understanding of its causes, concern about its potential impacts and sense of urgency for action. She also noted the need to provide the public with more than just information; to engage them in a manner that addresses their values, generates a sense of hope and communicates the implications of current trends for individual well-being, communities and economies.

Dr. Ian Mauro, Associate Professor in the Department of Geography at the University of Winnipeg, provided a complementary presentation on the use of visual media (film, photography) to engage Canadians on climate change. He spoke about his own work documenting the observations of Inuit Elders and creating a visual synthesis of the outputs of the Atlantic Regional Adaptation Collaborative. He observed that simulating public action on climate change requires bringing together experts from different disciplines and that creative use of visual media in conjunction with group meetings can enable outreach to all stakeholders and promote action.

Discussion of the future priorities of the PRAC continued during the second day of the workshop facilitated by Cara Pike. Participants further refined their ideas regarding the

objectives, focus area and audiences for the next phase of the PRAC through a series of group discussions. Ideas were shared regarding the general principles to guide determination of the PRAC's focus area, critical challenges to be overcome or accommodated, key audiences to be engaged in the work of the PRAC and possible thematic focus areas.

Emerging from the discussion was interest across the Prairies in engaging stakeholders outside of government on the issue of climate change, such as by translating existing adaptation research into decision-making tools and identifying and amplifying existing adaptation efforts that are delivering benefits. A desire to focus on an area of immediate concern, such as the need for infrastructure enhancement to build resilience to the impacts of climate change, was also shared.

Since March, the PRAC leadership team has focused on developing a detailed work plan for the PRAC's activities to March 2016. Thank you to everyone who participated in the workshop for their contributions to an enriching and informative discussion.

Interesting Reads

[Partners for Action: Priorities for Advancing Flood Resiliency in Canada.](#) Drawing on input from a wide range of stakeholders, this report identifies where to focus efforts to better protect Canadians and their property against overland flood damage, namely: create new flood plain maps, increase the preparedness of Canada's major cities, and include extreme weather and flood risk in new infrastructure design and retrofits. Commissioned by The Co-operators, the report was prepared by researchers at the University of Waterloo.

[Synthesis Report.](#) Launched on November 2, the capstone of the Intergovernmental Panel on Climate Change's Fifth Assessment Report synthesizes the main findings of the Working Groups on the physical science evidence of climate change, impacts, adaptation and vulnerability, and climate change mitigation. These reports were previously released in 2013 and 2014.

[Adaptation Gap Report 2014.](#) Launched by the United Nations Environment Programme during the Lima Climate Change Conference, the report aims to identify adaptation needs and realities on the ground in developing countries, and highlights gaps in funding, technology and knowledge.

Manitoba Workshop Raises Awareness of Infrastructure Resiliency

To advance the PRAC's focus on engaging government decision-makers on climate change adaptation, especially infrastructure resilience, a workshop was held on July 29 in Winnipeg focused on the potential implications of climate change for Manitoba's infrastructure. Bringing together officials from across the Manitoba Government, the meeting sought to highlight the benefits of adaptive planning processes and measures for limiting costs and increasing the resiliency of infrastructure. It also aimed to encourage discussion about the key challenges and opportunities for increasing infrastructure resiliency.

Following opening remarks by Terry Duguid, PRAC Secretariat, the session opened with two presentations by individuals from the Manitoba Climate Change Branch; Juliane Schaible provided an update on consultations with external stakeholders on Manitoba's new climate change and green economy plan and Randall Shymko gave an overview of adaptation planning progress in Manitoba.

The workshop's guest speaker, Roger Rempel, Senior Environmental Engineer and Climate Change Adaptation Specialist with Stantec Consulting, then spoke about how to build climate resiliency in the infrastructure sector. He provided an overview of risks posed by climate change for the built environment, the tool developed by the Public Infrastructure Engineering Vulnerability Committee (PIEVC) to assess the vulnerability of public infrastructure to climate change, and potential adaptation measures.

Active discussion amongst representatives from the departments of Agriculture, Food and Rural Development, Conservation and Water Stewardship, Housing and Community Development, Finance, Municipal Government and Infrastructure and Transportation followed. Participants spoke about how to improve access to climate data, including ensemble climate models, so that decision-making is no longer based only on historical information. The challenge of Manitoba acting alone to make this information available was noted, along with the potential benefits of entering into partnership with others, such as Alberta and Saskatchewan. A related issue raised was the potential need for common agreement on which model or ensemble model outputs are deemed acceptable to guide decision-making. Particularly from an engineering perspective, there is a need to be able to

stand by the projections selected to guide decision-making.

The cost associated with accessing climate information was also discussed. It was suggested that these costs might decline in the future as more data becomes available from different sources, reflecting the growing number of private sector firms active in this field. Additionally, the potential cost effectiveness of focusing on the generation of data specifically in those areas understood to be vulnerable to climate extremes and where a number of infrastructure improvement, renewal or creation projects are expected to take place was suggested.

Participants further noted the need for coordination with other jurisdictions when creating plans for improving resilience to climate change, such as through measures such as the development of common codes and standards. The Red River Basin Commission was mentioned as an example of a forum by which to increase coordination on a watershed basis.

As take away messages from the meeting it was noted that, given the absence of easy access to climate projection data and model outputs at present, it is good practice to demonstrate due diligence by using the best available and accepted science to inform engineering design. The need to be realistic about what is possible was also emphasized. In seeking to increase the resiliency of the province's infrastructure, the aim should be to strike a balance between how critical the infrastructure is to affected communities and the costs required to ensure a reasonable length of life for the asset involved.

In closing, participants noted the need to engage others across government on the necessity to ensure the resiliency of infrastructure to climate change, particularly senior management in the Ministry of Infrastructure and Transportation. It was also suggested that a deeper analysis take place of the provincial government's climate information needs, additional pilot applications of the PIEVC tool be undertaken in Manitoba, and a review be completed of best practices from other jurisdictions, such as B.C., where PIEVC is a requirement in government.

Acknowledgement

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