

PRAIRIE CLIMATE CENTRE - BACKGROUNDER - May 2016

The reality of climate change is increasingly evident in the Prairie Provinces and Canada as a whole, and climate models clearly indicate that very substantial—if not dramatic—changes will occur in the coming decades, even if global carbon emissions are reduced. Given that communities, cultural and traditional landscapes, and economic activities across the Prairie region may be particularly susceptible to the negative impacts of climate change—including droughts, floods, heat waves and other extreme events—it is imperative that potential stakeholders be aware of and prepared for the anticipated changes. To date, adaptation planning and implementation has been limited, thereby increasing the vulnerability of our economy, infrastructure, social systems and natural environments to the adverse consequences of a changing climate. This situation is largely the result of a lack of resources and expertise available to citizens, planners and policymakers.

The Prairie Climate Centre addresses this gap. Our interdisciplinary team and approach, combined with our network of partners, provides stakeholders across the Prairies with up-to-date and high quality data, maps and toolkits depicting the nature of climate changes that are expected to occur. Our flagship product thus far is the Prairie Climate Atlas that takes technical output from global climate models and translates these data into highly accessible interactive maps that will allow users to explore how the climate of the Prairies is projected to change throughout the remainder of the century. In the coming months this climate modelling and mapping project will be combined with a comprehensive public outreach and participatory digital media strategy which will invite citizens to co-produce knowledge and associated video-based outputs regarding anticipated impacts and opportunities for risk reduction. By innovatively linking climate, cartography and cinema we will help tell the story of how climate change will affect the Prairie region and inspire citizen engagement, community level adaptation, and long-term social, cultural and economic stability. This work acknowledges that the more local, visual and connected we make research with people's lives and experiences the more likely we will be able to shift societal perspectives towards positive action.

Although only recently established, the Prairie Climate Centre has already been able to provide substantive advice and policy guidance to governments, Indigenous organizations, businesses and community members, and interest in our work continues to grow. Our primary goal is to continue to build an innovative and stakeholder-driven initiative that will collaborate with Manitobans and Canadians who will be affected by climate change on how they might position themselves to take advantage of new opportunities, identify and rank risks, build capacity, and enhance community, economic and environmental resilience. The Centre's efforts will ensure that people have the information they need to see the value of adaptation as well as the need for reductions of our collective greenhouse gas emissions.

The University of Winnipeg and the International Institute for Sustainable Development (IISD) are the founding collaborators in this joint initiative. Great-West Life (\$250,000) and the Province of Manitoba (\$400,000) have helped provide initial funding for the Centre. The Prairie Climate Centre is hosted by the Richardson College for the Environment at The University of Winnipeg.

BIOS

Dr. Danny Blair, Director of Science, Prairie Climate Centre - is the Associate Dean of the Faculty of Science at the University of Winnipeg, where he is also a Professor of Geography, and Principal of the Richardson College for the Environment. His main research interests are climate variability and change in Canada's western interior. He was a contributing author of Canada's National Assessment of Climate Change released in 2008, and is a frequent presenter and participant in workshops about climate change in the prairies. Current research projects include: a climate change atlas for Manitoba and the Prairies, the identification of Prairie climate change impacts, and an assessment of the potential for trans-boundary water conflicts in a changing Prairie climate. He obtained his BSc and MSc degrees from the University of Regina and a PhD from the University of Manitoba.

Dr. Ian Mauro, Director of Communications, Prairie Climate Centre – is an Associate Professor and filmmaker in the Department of Geography at the University of Winnipeg. He specializes in climate change, food security and resource development issues, and in addition to academic articles and expert panels he has published many documentaries and interactive media projects. He directed three climate change documentaries, including *Qapirangajuq: Inuit Knowledge and Climate Change* (with renowned Inuk filmmaker Zacharias Kunuk) as well as films about the Atlantic and Pacific regions of Canada that he has toured extensively with Dr. David Suzuki. Mauro's projects have been featured at the United Nations, National Geographic, Smithsonian Institution, Royal Ontario Museum, Berlin International Film Festival and other venues. He has a BSc in Environmental Sciences and PhD in Geography.

Dr. Hank Venema, Director of Planning, Prairie Climate Centre - is a professional engineer with a diverse natural resource background spanning water resources, agriculture, energy, climate change mitigation and adaptation, rural development, ecosystem management, environmental economics and environmental finance. From 2004 to 2013, Dr. Venema has led IISD's research on water and agricultural issues in pioneering the application of natural capital principles to water management challenges in Western Canada. Dr. Venema has collaborated with the United Nations Environment Programme (UNEP), the Global Water Systems Project, the Inter-governmental Panel on Climate Change (IPCC), the International Development Research Centre (IDRC), the Netherlands Environmental Assessment Agency, and the Canadian International Development Agency (CIDA). In Canada, he has worked with the federal departments of Environment, Agriculture and Natural Resources, and within Manitoba, for the provincial departments of Water Stewardship and Conservation.

FIND OUT MORE

climateatlas.ca