ClimateWest 2024 Forum Audience Q&A

Questions for Dr. Heather Morrison on her presentation *Climate change in the Prairie Provinces: Observed change and future projections*

1. **How are you making this data accessible for all Canadians? (Climate data is complicated and scary – often scaring people away)**
   A. The CCCS supports ClimateData.ca, a collaborative climate information portal that enables people across Canada to access, visualize and analyze climate data. Part of ClimateData.ca's goal is to provide the most up to date climate data in easy to use formats and visualizations. There are also many resources available to support the use of climate data, including the Learning Zone which provides articles and videos to help users understand climate data and climate science concepts. The CCCS Support Desk is also available for anyone with questions on how to find, access, and use climate data and information.

2. **For the rapid event attribution system – is there a mechanism to request data for certain weather events?**
   A. Environment and Climate Change Canada is still validating results from its prototype rapid event attribution system, but the department plans to make data available following extreme events in the future.

3. **Has there been any modeling of the costs of not responding to climate change?**
   A. ClimateWest commissioned All One Sky Foundation to review existing studies that investigated the costs of climate change on the Prairies in Canada. The report synthesizes this literature into a single compendium of the costs of inaction for the Prairies reflecting the current state-of-knowledge. The report outlines the potential financial impact of our changing climate, across five climate-sensitive sectors in Alberta, Saskatchewan, and Manitoba. Report accessible here.

   The Canadian Climate Institute also conducted a series of reports focused on the costs of climate change in Canada. The series of five research reports explores the costs, impacts, and consequences of accelerating climate change, and what must be done to avoid the worst impacts and build a safer, more affordable, and more prosperous future. Reports accessible here.

4. **In terms of flooding. 1:100 event is 1% chance/year. When you're saying the heatwave is 1 in 4 years, is that a 25% chance each year or more of a guaranteed cycle every 4 years (or less) until net zero?**

   The answer below assumes that this question refers to slide 16 of Dr. Morrison's presentation.

   A. The simplest answer would be that it's referring to a 1 in 4 return period, meaning approximately 25% chance per year of a similar heat event occurring, not a guaranteed cyclical occurrence once every four years. A 1 in 4 year return period indicates that the event has a 1 in 4 chance of occurring every year. Because it's a probability rather than a cycle, an event like this could happen 3 times within a 4 year period, or not at all within the 4 year period. It is important to note that this specific projection is for the end of the century following the SSP2-4.5 (moderate emissions) scenario. If we hit net zero at the end of the century, the probability of heatwaves is projected to stabilize, but at a higher level than the present day.

5. **Achieving net zero emissions is a combination of global efforts, which means it's not only dependent on individual countries' goals. What step is ECCC taking to ensure unified global effort?**

   A. Building on Canada's long history of stepping up to tackle global challenges, Canada has been active through the G7, G20, United Nations, and other international fora and bilateral relationships to push for increased global ambition and concrete actions to address climate change. For example:
      - Under the United Nations Framework Convention on Climate Change (UNFCCC), Canada is committed to working with the international community to meet the objectives of the Paris Agreement and to scale up climate finance to support developing countries in their climate mitigation efforts, as well as to foster resilience among those most at-risk from the effects of climate change.
      - In 2021, Canada doubled its international climate finance commitment to $5.3 billion over five years. This commitment helps developing countries address the interconnected crises of climate change and biodiversity loss and supports their transitions to sustainable, low-carbon, climate-resilient development.
      - Canada's work to support ambitious mitigation globally includes leadership of complementary initiatives and efforts, such as the Powering Past Coal Alliance, the Prime Minister's Global Carbon

Pricing Challenge, the Global Methane Pledge to reduce methane emissions, and through the delivery of climate finance via the Climate Investment Funds and in the replenishment of the Green Climate Fund. Canada's active participation in such initiatives and multilateral efforts and partnerships contributes to building consensus and finding solutions with other countries and partners on a range of issues.

Canada will continue to advocate for increasing global ambition and climate action from all countries to keep 1.5˚C of warming by the end of the century within reach. Canada will deliver on its international climate finance commitments, work to continuously increase the effectiveness of investments and to mobilize private resources to meet the global financing goals.

More information on Canada's actions can be found in the 2023 Progress Report on the 2030 Emissions Reduction Plan.

Additional information on climate change action in Canada:

While the Canadian Centre for Climate Services (CCCS) provides Canadians, across regions and sectors, with locally relevant data, information, training, tools and support to integrate climate change into decision-making, the National Adaptation Strategy (NAS) presents a comprehensive blueprint to strategically reduce the risks that come with climate change impacts. The NAS sets long-term transformational goals, medium-term objectives and near-term targets to advance climate change resilience in the country. Included in the NAS is an Annex (Annex B: Climate Change Adaptation in Provinces and Territories) with information and reports on provincial and territorial climate change adaptation initiatives. As provincial and territorial governments in Canada are responsible for and set the direction for climate change adaptation measures in their respective jurisdictions, this is a key resource for understanding adaptation priorities for your region.

Canada's commitments under the Paris Agreement, and the goal of a net-zero emissions future by 2050, are supported by our climate and emissions reduction plans, including the NAS. To learn more about Canada's national plans within the global effort to reach net-zero, visit this website.

Questions for Dr. Richard Schneider on his presentation *Prairies Region Ecosystem and Biodiversity Changes as a Result of a Warming Climate*

1. How do we plan for protected areas and biodiversity corridors as we experience these changes?

2. Where do we find more information about ecological shifts in Alberta?

A. For more information about ecological shifts as well as protected area planning under climate change, see Chapter 9 in Biodiversity Conservation in Canada -- From Theory to Practice. It is available for free at: https://openeducationalberta.ca/schneider/chapter/canadas-changing-climate/

3. Have there become more innovative ways to grow food (agriculture), that can mitigate the climate or be more adapted to the changes?

Response below provided by attendee Angele Vickers, Agriculture Climate Change Analyst, Alberta Agriculture and Irrigation

There are several beneficial management practices (BMPs) in agriculture which contribute to climate change mitigation as well as reducing the impacts of climate change. Manuals outlining BMPs for environmental risks, not just related to climate change, can be found here: https://www.alberta.ca/beneficial-management-practices

Alberta Agriculture and Irrigation, under the Sustainable Canadian Agricultural Partnership, is currently offering the Resilient Agricultural Landscape Program. This program supports producers to conserve and enhance the environmental resiliency of their agricultural landscapes through the adoption of Beneficial Management Practices (BMPs) that maximize provision of Ecological Goods & Services (EG&S), particularly increased carbon sequestration and enhanced climate resilience. The funding list contains the types of BMP projects that are eligible for Program funding and outlines the impact of those BMPs

Questions for Heather Wheeliker on her presentation *Change for Climate*

1. **Have you considered collaborating with local libraries for these initiatives, to disseminate info and develop programming?**

   A. We talked about it briefly, as the library already lends kits out on our behalf, including the Home Energy Toolkit and the AirBeam Air Monitoring Kit. We are considering ways they might be involved in the Neighbouring for Climate kit.

2. **Are the Neighbouring For Climate kits available for purchase? I want one!**

   A. No, the kits are not for sale. They are available to residents of Edmonton who commit to leading climate action in their community or building. Indicate your interest in participating by registering for the program at edmonton.ca/climateneighbours and we will connect you with a kit. Alternatively, all materials are publicly available on the website for use. Any municipality that wishes to adapt the kits for their own use are asked to request permission by emailing changeforclimate@edmonton.ca

3. **Do the kits have funding available with them to support people who may not have the resources to participate?**

   A. No, at this time there is no funding available with the kits. However, the City does offer grants for many different purposes and it may be possible to apply to the City and/or other organizations for project funding. Many of the actions in the toolkit are tagged as low to no cost.

4. **I'm curious about the uptake on the Neighbouring for Climate toolkits, are there any numbers and/or stories about how it's been used?**

   A. The program was formally launched one month ago (April 20) to 40 enthusiastic residents, and about a dozen more since then. We will be working over the summer to evaluate its impact and gather stories. During the pilot program, a whole community began using the kit to guide its actions, read more here. Since then, they host monthly workshops on a Tuesday and repeated Saturday, to socialize, share information and learn together.

5. **Did your group develop a logic model or theory of change to guide your creation of impact? What indicators are you using to track your impact?**

   A. The program fits into a larger logic model used to guide efforts under Change

for Climate, energy transition and climate adaptation goals. Some of the indicators we are using to track impact of the Neighbouring program include:

- Number of toolkits printed vs. number delivered
- Where toolkits were delivered / to whom (map)
- Number of events hosted
- Number of participants at events
- Metrics noted in participant feedback form:
    - Number of actions completed
    - Increased knowledge about climate change actions
    - Increased feeling of connectedness with neighbours

Metrics will be revisited after this first year of roll-out.