The Prairie and Northern Region includes Manitoba, Saskatchewan, Alberta, the Northwest Territories, and Nunavut, and encompasses over half of Canada's landmass. With its prairie expanses, rolling hills, mountain peaks, glaciers and thousands of kilometres of northern coastline, it is the most diverse region in Canada. It features nine distinct ecological zones, including the grasslands and boreal forest in the south, and the subarctic and arctic regions in the north. Our region is home to more than 5 million people, over 200 First Nations communities, and the largest Aboriginal population in Canada.

# Who we are

The size and diversity of our region, combined with a strong economy and ongoing demand for our natural resources, place significant demands on our environment. That is why we have more than 800 employees at 16 locations across the region. They include scientists, meteorologists, enforcement officers, biologists, hydrologists, environmental emergency officers, support staff and others. Our region operates a number of specialized centres that develop and share scientific knowledge so that we can take action on environmental issues that are important to Canadians.



# **Our team**

"Because of the size and ecological diversity of the Prairie and Northern Region, we have to work closely with our partners to resolve many of the environmental challenges we face. Our staff are experts at building relationships and bring their scientific knowledge to the table to help resolve environmental challenges. Our work is recognized and emulated worldwide. I am privileged to work with so many dedicated and talented people."

Regional Director General, Prairie and Northern Region



### What we do

With such a diverse region, there is a wide range of major projects that have an impact on our environment, including the Mackenzie Valley Gas Pipeline Project, oilsands developments, and numerous oil and gas, mining, hydro, forestry and agriculture projects.

We conduct numerous environmental and regulatory reviews to ensure that the region's oilsands are developed in a sustainable manner. These include environmental assessments and consultations with First Nations and many other groups. We cooperate with all stakeholders to develop recommendations to reduce environmental impacts. Because of the complexity of the oilsands

development, independent scientific advice was sought to advise the Minister of the Environment. The scientific panel came back with recommendations and, as a result, Environment Canada is working with the Province of Alberta to develop a new monitoring system for water.

We operate three weather centres to ensure that residents in our region receive accurate and timely warnings and alerts. The Prairie and Arctic Storm Prediction Centre, with offices in Edmonton and Winnipeg, provides weather forecasting and storm prediction services. Residents depend on the centres, since the region leads the country in the number of severe thunderstorms. blizzards and extreme wind chill events. Edmonton's Canadian

Meteorological Aviation Centre supplies specialized weather and meteorological information to airlines, allowing the aviation industry in Canada to operate more efficiently and safely. Finally, scientists at the National Laboratory for Hydrometeorology and Arctic Meteorology in Edmonton work to better understand and predict highimpact weather, primarily in northern locations.

Our wildlife enforcement staff work with other departmental programs as well as with provincial, national and international partners to ensure that businesses and individuals comply with environmental and wildlife Acts and regulations. 

Scientists at the Prairie and Northern Laboratory for Environmental Testing in Edmonton conduct a broad range of environmental testing to support various environmental projects and enforcement of environmental laws.

In a region that includes Lake

Winnipeg, the Mackenzie River Basin, the Athabasca River, the Beaufort Sea, and the St. Mary and Milk rivers, we face ongoing challenges related to both water quality and water quantity. Water-related issues are the focus of the staff at the National Hydrology Research Centre in Saskatoon, where our scientists conduct research to sustain our natural resources and freshwater ecosystems.

**Environment Canada has** committed \$17.7 million over four years to clean up Lake Winnipeg. We partner with provincial and community partners through the Lake Winnipeg Basin Initiative. We have also signed an agreement that will provide the foundation for a long-term, collaborative and coordinated approach with the Manitoba government to ensure the sustainability and health of Lake Winnipeg and its watershed. The Lake Winnipeg Basin Stewardship Fund supports this work through community projects that help to restore the ecological integrity of

Our region is home to many species at risk, including polar bears, piping plovers, burrowing owls, swift foxes and caribou. Canadian Wildlife Service staff

the lake.

work with our partners to protect and conserve habitats so that wildlife can continue to thrive. Biologists at the Prairie and Northern Wildlife Research Centre in Saskatoon focus primarily on migratory birds in their efforts to conserve and protect wildlife in the region.



# Over the years

Environment Canada's employees in the Prairie and Northern Region have made a difference over the years.

- ▶ In 1987, the Warning Preparedness Meteorologist program started in our region. It has served as the model for the national program. Warning Preparedness Meteorologists work with emergency officials to ensure that Canadians are prepared for severe weather.
- ► The Lake Winnipeg Basin Initiative was established in 2007 to clean up the lake. The initiative is improving water quality and reducing the number of blue-green algae blooms and beach closings, ensuring that residents have access to a clean lake for recreational purposes.
- ► Scientists from around the world use our Arctic research facility in Eureka, Nunavut, which was completed in 2005. Environment Canada staff are always happy to welcome the many groups who use the facility as a stop-over while exploring Canada's northern region.





#### ► Some staff in Igaluit travel to work on snowmobiles.

- ► The weather station in Alert, Nunavut, is the most northerly land-based research facility in the world. Research and monitoring at the site
- led to the discovery of Arctic haze. Research stations in Alert and Eureka help Canada assert its sovereignty in the High Arctic. ► The Water Survey of Canada measures the water
- flow of the Ruggles River in Nunavut. It is the most northerly stream-gauging station in the world, and one of over 2500 active water-level and streamflow stations in Canada.

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