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NATURE CONSERVANCY CANADA

NATURE AND CLIMATE CHANGE

Overview

Climate change is a major threat to wildlife and ecosystems in Canada and around the world. Limiting the amount of warming and adapting to the negative impacts of climate change are critical, not only to protect biodiversity but also to support human health and well-being. In Canada, we are already observing the impacts of climate change:

- An increase of 1.7 C in the average annual temperature in Canada, about double the global rate.
- Increasingly intense and frequent extreme weather events, resulting in flooding, drought and forest fires.
- Rising sea levels and storm surges.
- Shifts in the distribution of plants and animals.

Why the Nature Conservancy of Canada cares

Climate change is happening now — in the communities and natural areas where we work and live. In turn, the habitats we care for and the species that depend on them are already impacted and having to adapt to a changing climate.

Nature can help us limit the worst-case climate change scenarios (climate mitigation) as part of the global effort to contain warming to 1.5 C to 2 C and reduce the negative impacts of climate change (climate adaptation). But nature can only do this if it is protected and thriving.

Conservation is, therefore, an important contribution to the Government of Canada's goal to become net zero (carbon neutral) by 2050. It also supports Canada's international commitment to protect 30 per cent of the country's lands and waters by 2030 under the High Ambition Coalition. Both goals contribute to a sustainable future for our planet and all life on it.

Nebo property, SK (Photo by Branimir Gjetvaj)

Kootenay River Ranch, BC (Photo by Richard Klafki/NCC staff)

5 FACTS ABOUT NATURE AND CLIMATE CHANGE

1. Through photosynthesis, plants capture and store carbon dioxide from the atmosphere, reducing the amount that contributes to global warming. Protecting and restoring habitats allows plant life to thrive and in doing so, we maintain and enhance natural carbon sinks.

2. Conservation is an essential tool in reducing the negative impacts of climate change, helping humans and wildlife adapt to a changing world. For example, wetlands provide flood control, which is important with the increased number of extreme rainfall events caused by climate change.

3. Conserving natural corridors helps wildlife populations be more resilient by allowing them to move in response to changing conditions.

4. When habitats are lost through land conversion, carbon that was once stored there may be released back into the atmosphere.

5. Climate change is one of the leading threats to biodiversity. By slowing the pace of climate change, we also support biodiversity conservation.

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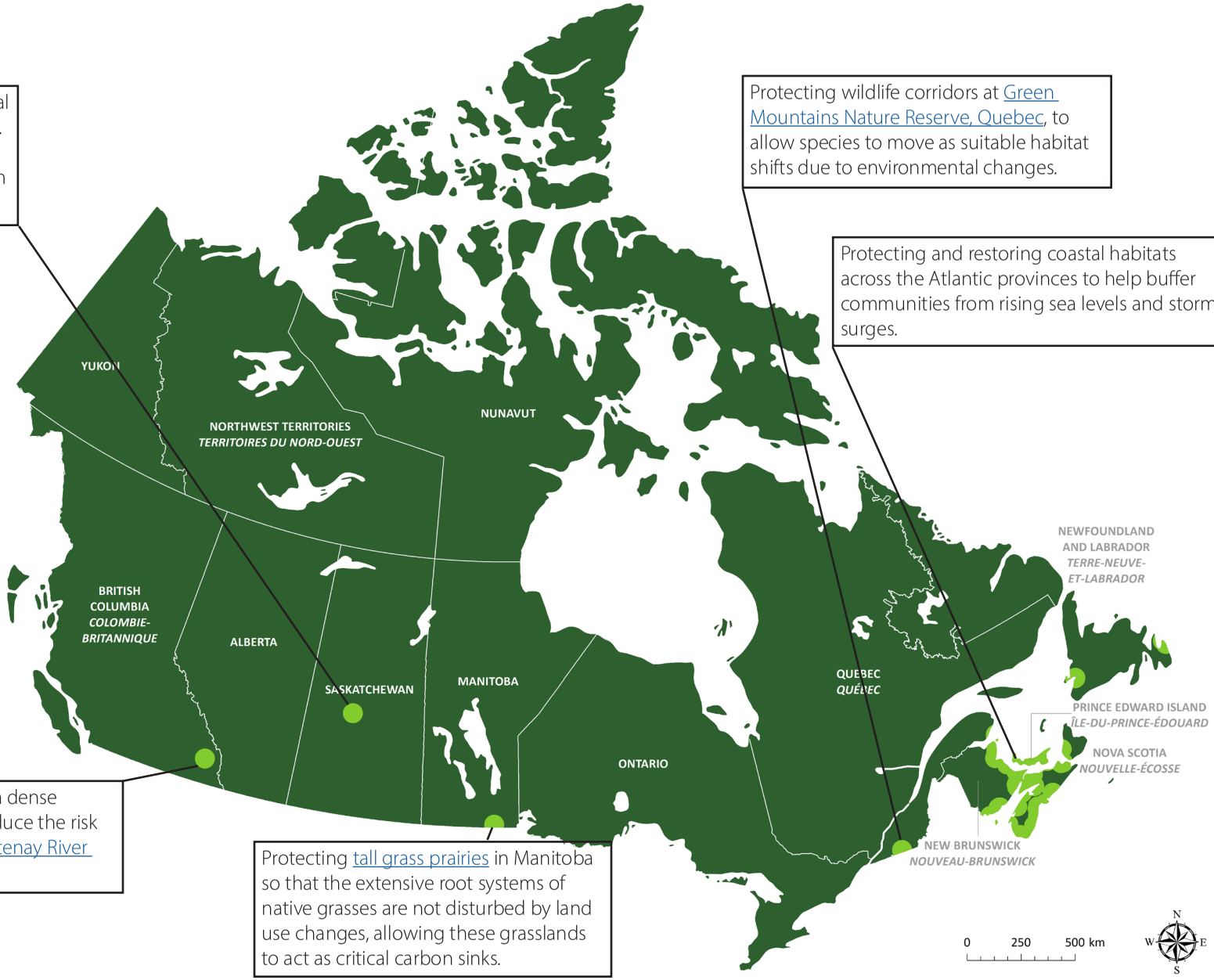
EXAMPLES OF OUR WORK

Conservation is an essential tool in reducing the negative impacts of climate change. The map below shows several examples of NCC-protected areas where restoration work is occuring.

Planting trees to restore boreal forest at Nebo, Saskatchewan. As trees grow, they sequester and store carbon dioxide from the atmosphere.

Protecting wildlife corridors at Green Mountains Nature Reserve, Quebec, to allow species to move as suitable habitat shifts due to environmental changes.

Protecting and restoring coastal habitats across the Atlantic provinces to help buffer communities from rising sea levels and storm surges.



Using thinning to restore a dense forest to open forest to reduce the risk of catastrophic fire, at Kootenay River Ranch, BC.

Protecting tall grass prairies in Manitoba so that the extensive root systems of native grasses are not disturbed by land use changes, allowing these grasslands to act as critical carbon sinks.