

# climate

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Whale-watching tours are drawn to Churchill where thousands of belugas spend their summers to feed, molt and raise their young.

## CLIMATE CHANGE IMPACTS SEA ICE, BRINGS IN MORE PREDATORS

Though the whales are in good health today, climate change has had a visible impact on the Hudson Bay region.

"There's a lot less consistency in terms of what we can expect each year," Taggart says. "We see summers with absolutely more rain and winters with no snow, and others that are completely the opposite — those things impact our ability to hunt."

Most notably, over the last 20 years sea ice in Hudson Bay has "changed dramatically," Westdal explains. Owing perhaps to the bay's southern latitude or the influx of freshwater from Manitoba's major river estuaries (Westdal says scientists still haven't reached a consensus on the exact cause), Hudson Bay has seen a faster rate of sea ice decline than other parts of the Arctic. Regardless of the cause, that loss has significant implications for wildlife in the bay.

Polar bears, for example, typically rely on the winter ice for hunting, but have become more prominent along the coastal shorelines later and later in the year.

"They're coming into communities and seeing what they can live off of," Taggart says. "That's not healthy for them to stay on the land as long as they are when winter should allow them to live off the seals, fish and so forth."

On the whole, the shrinking ice cover has opened the bay to new visitors. Shipping in and out of the Arctic has increased as seafarers, and discussion over the economic future of Churchill suggests more ship traffic could be part of the bay's future.

But humans aren't the only creatures moving more frequently through Hudson Bay. The bay's most fearsome predator, orcas, also known as killer whales, have seized the opportunity, too.

"Killer whales have been around the Arctic for generations," Westdal says, reflecting on her years spent interviewing Elders and hunters around the Arctic region. "But in Hudson Bay it appears they've only been around for 100 years or so — and that's because of Hudson Strait opening up the habitat to them."

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With longer periods of open water in the channel connecting the Atlantic Ocean to Hudson Bay, orcas have spent the last few years exploring the newly available habitat. Researchers like Westdal are trying to try and understand what more predation from orcas might mean for the belugas.

Manitoba's beluga population also faces threats caused by human activity. Hydroelectric development — like the Churchill river diversion that feeds generators on the Nelson and Berthold rivers — alters the water flow in the belugas' nursery habitat. The animals are also susceptible to spills from industrial activities anywhere in the man-made or river watersheds, and pollutants from activity at hydroelectric dams, ocean vessels or Churchill's Arctic port.

Establishing a marine conservation area in the region wouldn't eliminate these threats, but would establish guidelines to mitigate the impact of human activities on the ecosystem.



Tourists snap photos of belugas as they surface in the Churchill River estuary.

### BY LOOKING AT THE SCIENCE, GATHERING THE INDIGENOUS KNOWLEDGE, GETTING A BETTER UNDERSTANDING OF THE ECONOMIC INTERESTS AND FUTURE IMPACTS, AND PUTTING THAT ALL ON THE TABLE ... THERE'S A GREAT OPPORTUNITY TO ENSURE THAT A SUCCESSFUL BALANCE IS ACHIEVED.

Brendan McEwan wears many hats in his community: he's president of the Churchill Chamber of Commerce, he helps manage tour company Frontiers North Adventures and, like many locals, he has a strong personal connection to the water.

"I'm one of the people you see on the water generally. As much as I can be," McEwan says in an interview. "The accessibility of nature is something people who live here cherish. I can drive for two minutes, jump in my boat and go out to an offshore dairy separator that's pretty awesome."

The good news is the political winds right now are in strong favour of conservation, especially at the federal level," Thiesen says.

Together, stakeholders will share input on the boundaries of the protected area, the scale of infrastructure investments needed, the local tourism market and guidelines for future development in the region. What the conservation area will fully entail is still a long way off.

"The good news is the political winds right now are in strong favour of conservation, especially at the federal level," Thiesen says.

Marine conservation areas have been key to helping Canada achieve its biodiversity and conservation targets. So far, nearly 24 per cent of the country's oceans are protected, but doubling that figure by 2030 will take significantly more federal investment.

Regardless of the business case or economic opportunity, McEwan stresses the rich, interesting ecosystems of Hudson Bay are inherently deserving of conservation.

"Churchill has a rich marine ecosystem; it's unique in the world and deserves protection," he says. "It's very special what we have, and we support the protection of this area."

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## PROTECTING BELUGAS CAN BOOST LOCAL ECONOMY

Finding a delicate balance between industry, economic development and environmental protection is at the heart of the conservation campaign for Western Hudson Bay.

When the federal government first identified the Churchill and Nelson River region as a potential marine conservation area in the 2017 budget, Oceans North started hosting conversations with coastal communities to determine the best approach to protecting the region.

Churchill is a small and evolving community, as McEwan says he frequently tells the chamber. "We need all the economic opportunities we can get."

Churchill's Arctic port — the only such port in Canada — has been in the spotlight recently as a combination of new ownership, new federal investment and warmer summer waters have prompted renewed interest in the port as a key link for international trade.

As the community evolves, striking a balance between "protection of the economic stability of the area as well as the protection of the species and uniqueness of the environment" is crucial, McEwan says. Marine conservation legislation creates room where development, industrial activity, shipping, fishing and other human activities are carefully managed, while bolstering resources to study and monitor local wildlife.

As a "born-and-raised local Churchillian,"

"Taking a proactive approach is important here. With the continued economic development of Churchill, the proactive approach is going to be key in keeping it protected," McEwan adds, noting economic growth and environmental protection should go hand-in-hand.

Establishing a marine conservation area in Hudson Bay also has the potential to be a boon for local business. Conservation requires staff, including a potential Indigenous watchtower program, staff for a marine visitor centre, program planners and wildlife monitors. It could also lead to new research facilities, infrastructure investments and tourism attention. For Churchill, that economic expansion is good news.

## 'POLITICAL WINDS' SEEM FAVOURABLE TO PROTECT WHALES

The idea for a marine conservation area in Western Hudson Bay has been around for more than half a decade. Oceans North and the Canadian Parks and Wilderness Society's Manitoba chapter are urging the government to move forward with a feasibility assessment that would move the planning into the next stage.

Thiesen says dialogue with communities — including Inuit, First Nations, commercial stakeholders, industry experts and Manitoba-at-Large — is what the feasibility study is all about, and he hopes the federal government takes action sooner rather than later.

"Typically they would come over to my boat first, and bash my boat around a little," says McEwan, lifting his boat out of the water. "Kristin [Westdal] would take her kayak into the Arctic waters and join the throngs of locals and tourists taking advantage of the coastline. Every day, as she bobbed into the waters, she would be greeted by the same three young beluga males."

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