

NATURAL CLIMATE SOLUTIONS & BLUE CARBON

Canada's coastline stretches more than 200,000 km and holds an untapped potential to help fight climate change by sequestering and storing carbon. Coastal "blue carbon" is carbon stored in the plants and sediments of carbon-rich ecosystems such as seagrasses and saltmarshes. By protecting, sustainably managing and restoring blue carbon ecosystems in a way that respects Indigenous rights and responsibilities, natural climate solutions could meaningfully contribute to global climate change mitigation and adaptation.

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Natural Climate Solutions (NCS): actions that protect, sustainably manage and restore nature so it can sequester and store carbon and minimize greenhouse gas emissions through avoided emissions.

NATURAL CLIMATE SOLUTIONS

Hundreds of billions of tonnes of carbon are stored in natural ecosystems in Canada — from forests to wetlands to coastal habitats. When we disrupt or destroy these areas, we not only disturb wildlife, but also release stored carbon to the atmosphere, which contributes to climate change and even accelerates it. But nature can be an important ally in our fight against climate change if we allow it to sequester and store atmospheric carbon. This *ecosystem service* can be safeguarded and enhanced through ethical and equitable implementation of NCS — actions that may simultaneously deliver benefits for biodiversity and human well-being by, for example, supporting fisheries, stabilizing shorelines and mitigating the impacts of floods.

BLUE CARBON NCS

Evidence suggests that blue carbon NCS may deliver disproportionately large climate and biodiversity benefits per unit area compared to terrestrial and freshwater ecosystems, though they should be evaluated and managed collectively, recognizing that carbon flows within and among systems. While more research is needed to build a greater understanding of carbon stocks and sequestration along Canada's expansive coastline, knowledge gaps must not delay action. For instance, "no regret" actions, such as supporting Indigenous Marine Protected and Conserved Areas, may benefit global climate, support biodiversity and elevate Indigenous rights and responsibilities, regardless of scientific outcomes.

INDIGENOUS-LED CONSERVATION AND NCS

Blue carbon exists in the territories of coastal Indigenous Nations and communities throughout Canada, where Indigenous Peoples' legal, governance and knowledge systems have stewarded healthy and rich ecosystems for millennia. With this long-standing expertise rooted in place, Indigenous Peoples are well positioned to lead blue carbon conservation and are critical to the success of NCS. Restoring and protecting blue carbon and marine ecosystems presents opportunities not only to mitigate climate change, but also to support Indigenous self-determination and Indigenous-led conservation

efforts. By supporting Indigenous initiatives and co-developing new initiatives with Indigenous Nations and communities, blue carbon NCS are more likely to be just and effective. In addition, relationships and partnerships between Indigenous Nations and communities and non-Indigenous stakeholders must be treated with respect — by upholding and surpassing the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), including the right to Free, Prior and Informed (FPIC) consent.

RECOMMENDATIONS

- ✓ Adopt an equitable approach when designing and implementing NCS to respect Indigenous rights, responsibilities and self-determination, and work collaboratively with Indigenous Peoples from the outset to ensure their values, needs and consent are accounted for.
- ✓ Prioritize “no regret” actions such as the protection of blue carbon ecosystems to prevent further destruction of nature, the associated release of greenhouse gas emissions and the need for future restoration.
- ✓ Secure long-term funding to support local implementation of NCS, including by coastal and Indigenous communities from coast to coast to coast.



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