July 28, 2025

Re: Incorporating nature-based solutions in the Chignecto Isthmus Resiliency Project

Dear Honorable Dominic LeBlanc and Ms Megan Mitton,

We are writing in response to the governments of Canada, New Brunswick and Nova Scotia's recent commitment to protect the Chignecto Isthmus from the increasingly destructive impacts of climate change, and more specifically, extreme flooding and sea level rise in the Isthmus. Following the community engagement session led by the Chignecto Isthmus Resiliency Project leads from New Brunswick and Nova Scotia that took place in May 2025, in Amherst, NS, we are pleased to hear that nature-based solutions are being considered in this project and want to express our strong support for this approach.

Signatories to this letter include conservation organizations active in the climate and nature space in both NB and NS. We have worked with and seen first-hand the powerful benefits of nature-based climate approaches such as salt marsh restoration, living shorelines, and riparian restoration projects. We have been working on protection and conservation opportunities for the Chignecto Isthmus for many years and would like to provide the following recommendations to strengthen the project, and protections for the Chignecto Isthmus.

Importance of Chignecto Isthmus Ecosystems & Culture

The Chignecto Isthmus is a site of significant cultural and conservation value. The Mi'kmaq have lived, traded, hunted and stewarded this land since time immemorial. It is significant for Acadian history with two National Historic Sites.[i] Not only does it provide a land bridge for human communities, commerce and wildlife, but it also supports important ecosystems, ranging from extensive coastal and terrestrial wetlands to patches of intact Wabanaki/Acadian forest. Numerous species at risk including wood turtle, mainland moose, wood thrush, and inner Bay of Fundy populations of Atlantic salmon rely on the Isthmus to access their feeding, breeding and wintering habitats on the Isthmus and on each side of the provincial border.

The coastal ecosystems along the Chignecto Isthmus are highly dynamic and provide valuable ecosystem services that benefit the public at large. These significant coastal ecosystems include salt marshes, mudflats, beaches, barachois ponds, and coastal wetlands. Salt marshes are highly productive coastal ecosystems that support local biodiversity, carbon storage, and provide nursery

habitat for commercially important fish species. Extensive mudflats and beaches are vital feeding and resting habitats for tens of thousands of internationally protected migratory shorebirds.

Nature-based Solutions are Safe and Cost-Effective

Such a geographically, economically, culturally, and environmentally important piece of land deserves protection. Collaboration between the provincial governments of New Brunswick and Nova Scotia, along with federal departments, is essential for protecting the Chignecto Isthmus from the growing challenges posed by sea-level rise and the increased intensity and frequency of storms, which contribute to higher rates of erosion and flooding.

Dykes have traditionally been and continue to be a way of protecting land, communities, and infrastructure from the high tides of the Bay of Fundy. They are not, however, the only option. Nature-based solutions have proven to be a viable tool for protecting against sea-level rise and the consequent flooding and increased erosion that will occur. Studies have shown that coupling increased foreshore marsh area as buffer, combined with dykes, is a successful strategy for protection against sea-level rise[ii]. It ensures there is room for the salt marsh to flourish and allows the dyke to provide protection at a reduced height. Allowing salt marshes to flourish along the Isthmus provides several benefits: Wetlands and salt marshes offer protection through wave attenuation and stabilization of sediments; they also provide several co-benefits, including stormwater retention/filtration, habitat creation, migration corridors, carbon storage, and fish habitat[iii]. This in turn can help to meet emissions reduction targets, and support fisheries[iv], and, coupled with engineering solutions, protect critical infrastructure.

Facing new challenges posed by a changing climate requires innovative ideas and creative thinking. Leaders that embrace these approaches will produce alternative solutions that, whether used individually or in conjunction with engineering methods, can offer safe and cost-effective ways to protect land, communities, and infrastructure. Additionally, these solutions may provide co-benefits that were not considered in the original cost estimates. Funding is available for natural infrastructure projects that can help mitigate the impacts of climate change. This presents an excellent opportunity for government to partner with organizations working on climate adaptation solutions in the region, ultimately leading to positive outcomes for the Chignecto Isthmus.

As both provinces move forward with the federal government in protecting the Chignecto Isthmus, we strongly encourage you to continue exploring all solutions to this problem, not just those traditionally undertaken, to deliver a more integrated, holistic, and cost-effective approach to protecting the Isthmus.

Recommendations:

- Co-develop solutions with Indigenous Nations.
- Couple engineering solutions with nature-based solutions, such as salt marsh conservation and restoration, to better protect the Isthmus for the long term.
- Ensure that the critical functions of ecological connectivity and wildlife movement are incorporated into all planned and implemented climate change adaptation actions.

We hope you will take these recommendations into consideration. We would like to underscore the importance of consulting with Indigenous Nations on both sides of the provincial border. Decisions regarding land use on unceded territory are subject to the duty to consult and accommodate. Additionally, collaboration among governments, departments, municipalities, environmental organizations, and communities will be critical to protecting the Chignecto Isthmus and mitigating the impacts of the climate crisis, beyond simply protecting the transportation corridor.

We look forward to your response and would welcome the opportunity to meet with you to address any questions or further discuss our recommendations.

Sincerely,

Kelsey Butler

Kelsey Butler, Director, Atlantic-Québec Region
Birds Canada

Roberta Clowater

Roberta Clowater, Executive Director
Canadian Parks and Wilderness Society – New Brunswick Chapter

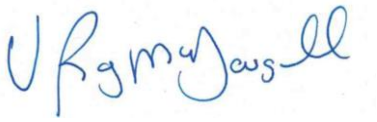
KDutta

Kal Dutta, Acting Executive Director
EOS Eco-Energy

Beverly Gingras

Beverly Gingras, Executive Director
Conservation Council of New Brunswick

Carli Le Roux, Acting Chief Executive Officer
Nature Trust of New Brunswick



Vanessa Roy-McDougall, Executive Director
Nature NB

Lyle Vicaire, President
Maqamigew Anqotumeg Inc.

c.c: Hon. Chuck Chiasson, Minister of Transportation and Infrastructure (NB)
Hon. Gilles LePage, Minister of Environment and Climate Change (NB)
Mayor Andrew Black (Tantramar)
Glen MacDonald and Pam Davidson (NB/NS Chignecto Isthmus Resiliency Project)

[i] Jonah, A. M. L. (2022). Revealing the history of the Isthmus of Chignecto: Toward truth and reconciliation. Journal of New Brunswick Studies / Revue d'études sur le Nouveau-Brunswick, 14(1), 119–143. Retrieved from https://journals.lib.unb.ca/index.php/JNBS/article/view/32890

[ii] Van Proosdij, D., Page, S., (2012). Best Management Practices for Climate Change Adaptation in Dykelands: Recommendations for Fundy ACAS sites. Atlantic Climate Adaptations Solutions Association. https://research.fit.edu/media/site-specific/researchfitedu/coast-climate-adaptation-library/canada-amp-arctic/canada---atlantic/Van-Proosdij--Page.--2012.--Best-Practices-for-CC-Adaptation-in-Dykelands,-Fundy-ACAS-Sites.pdf

[iii] Sherren, K., Ellis, K., Guimond, J. A., et al. (2021). Understanding multifunctional Bay of Fundy dykelands and tidal wetlands using ecosystem services—a baseline. FACETS. 6: 1446-1473. https://doi.org/10.1139/facets-2020-0073

[iv] Drever, C. R., Cook-Patton, S. C., Akhter, F., et al. (2021). Natural Climate Solutions for Canada. Science Advances, 7(23). https://doi.org/10.1126/sciadv.abd6034