PROJECT PROPOSAL

1. **Project name: Marine Protected Areas (MPAs) as Tools for Promoting Ocean Health**

2. **Two-year budget: C$350,000**

3. **Short statement on the need identified (including current status), the project objective and the outcomes (achievable by June 2019) to address it:**
   MPAs are key tools for fostering ocean health, but need to be effectively and adaptively managed to address threats such as ocean warming, species shifts and ocean acidification. Building on the 2015-2017 project focused on identifying vulnerabilities in coastal ecosystems and communities, this project will develop a coastal adaptation toolkit. It will address a key need of MPA practitioners for practical guidance and hands-on training in developing adaptation strategies in response to identified vulnerabilities and integrating them into management plans. It will develop MPA capacity for adaptation planning through the toolkit; training in its use for MPA practitioners; identifying trinational expert teams (scientists, MPA practitioners, Indigenous and local people, stakeholders) to advise on priority topics; and identifying actions across shared seascapes to support implementation of management strategies. Implementing adaptation strategies will help MPAs control the local impacts of global and regional changes and promote healthier, more resilient marine ecosystems.

4. **Select the strategic priority(ies) that the project addresses:**

2015–2020 Strategic Priorities	Priority Areas
☐ Climate Change Mitigation and Adaptation	☐ Trade and the Environment (e.g., environment and innovations; movement of environmental goods and services)
☐ Green Growth	☐ Methane emissions reduction
☒ Sustainable Communities and Ecosystems	☐ Reduce and recover food waste
	☐ Black carbon inventory
	☐ Priority species and ecosystems (e.g., transboundary invasive alien species)
	☒ Health of oceans (e.g., marine litter; ocean acidification; marine protected areas)
	☐ Syndromic surveillance systems
	☐ Mexican Emissions Control Area (ECA)
	☐ TEK case studies

5. **Explain how the project can achieve more impact by working trinationally, and why the CEC is the most effective vehicle to undertake this work:**
   CEC has a unique role in providing the framework to gather and share knowledge concerning MPA adaptation strategies across

North America; building on previous projects and collaborations (e.g., Channel Islands/ Guadalupe, Coastal BC/Olympic Coast) to support strategy implementation. The marine environment is inherently connected, and effective management of marine species requires cooperation across international boundaries. Climate impacts have increased this need for collaboration, as they affect the distribution and movement of species and habitats. Moreover, as information on coastal adaptation strategies is not readily available, there is an urgent need to pool and build our knowledge together to effectively manage our changing MPAs and minimize negative impacts to local communities.

6. **Describe how the project may capitalize on, or advance, the relationship between ecosystems, job creation, gender impacts, and income generation:**
Coastal ecosystems and communities are among those most affected by climate change, and require proactive planning to minimize negative impacts of change. Adaptation planning can help to build resilience of marine/coastal ecosystems, helping maintain the activities and uses that depend on the marine ecosystem (e.g., marine ecotourism, natural infrastructure), and contributes to the social, cultural and economic well-being of coastal communities. For example, the project can share across the three countries practices related to coastal habitat restoration, management of ocean acidification impacts, species movement, and invasive species—as well as engage stakeholders in discussing and prioritizing these issues in terms of their ecological, social and economic impacts.

7. **List the objectives and activities to be conducted to achieve measurable results:**

Objectives (must be SMART[1])	Main activities to achieve objectives (by 30 June 2019)	Measurable results
By 30 June 2019, communities are better able to address coastal vulnerabilities through a coastal adaptation toolkit integrating feedback from MPA managers, Indigenous and local community members, experts groups and other stakeholders.	• Hold a scoping workshop to identify key resources available on coastal adaptation, key gaps and remaining priorities. • Engage Indigenous and local people to identify relevant information on traditional practices and ecological knowledge (TEK), to adaptively manage coastal and marine environments. • Conduct research (literature review and interviews) to synthesize knowledge and case studies on adaptation options,	A coastal adaptation toolkit developed with stakeholders and experts is available to coastal MPA managers and communities in the three countries.

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[1] SMART: Specific, measurable, achievable, realistic and time-bound.

	focused on priority species and habitats (and the ecosystem services they provide). • Hold a workshop of MPA practitioners, experts and stakeholders to review draft Coastal Adaptation Toolkit and discuss regional/seascape priorities • Create a list of experts/groups across the three countries who will review the toolkit for specific species and/or habitats (e.g., whales, seagrasses).	
By 30 June 2019, adaptation management strategies have been integrated into MPA management planning in the three countries.	• Hold training for MPA managers on applying the toolkit to develop adaptation strategies, including integration into MPA management plans. • Develop a community of practice to share information on MPA adaptation management across North America (e.g., database of experts and areas of expertise).	MPA Managers have been trained on the use of the toolkit to develop and apply coastal adaptation strategies.
By 30 June 2019, collaboration across MPAs has been developed through memorandums of understanding (MOU) action plans* and informal partnerships, to support broader MPA and community resilience, engage new partners and seek additional sources of funds.	• Develop country-specific prioritized list of adaptation/resilience actions to target future partnerships and funding requests. • Develop at least one collaborative partnership in the shared seascapes to address a priority issue related to adaptation and management effectiveness (e.g., shared monitoring protocols; international adaptation plans for	• A prioritized list of adaptation/ resilience actions, by country, is available. • At least one collaborative partnership is in place and has a plan for sustaining the partnership over the 2019–2020 timeframe.

	shared species, such as whales; approaches for evaluating adaptation actions). • Share Coastal Adaptation Toolkit case studies with international audience through IUCN (e.g., Panorama database, etc.).	

*Note: The United States and Mexico have a formal partnership on MPAs through MOUs for sister sites in the Gulf of Mexico, and Canada and the United States have a formal partnership on MPAs through the Arctic Council. The United States, Canada and Mexico also have ongoing informal MPA collaborations in many areas that will be expanded.

8. **Describe how the project complements or avoids duplication with other national or international work:**
   This work builds on previous work by the CEC, published in *Scientific Guidelines for Developing Resilient Marine Protected Area Networks in a Changing Climate* (CEC 2012), and on the Rapid Vulnerability Assessment Tool developed and applied during the 2015–2017 project period. This was the first rapid vulnerability assessment tool developed and applied for marine protected areas in the three countries. The three countries have begun to identify vulnerabilities at their MPAs, but are still in the early stages of identifying and applying adaptation options for MPAs. The toolkit will compile existing guidance on coastal and marine adaptation in the three countries and fill gaps through the scientific literature and interviews with MPA practitioners. Training will build capacity to manage shared resources in a changing climate and provide opportunities for expanded managerial collaboration among the three countries. Coastal and marine adaptation strategies are also a significant priority and gap for MPAs globally, and there is potential for this project to make a major contribution at the international scale. CEC's earlier work on scientific guidelines for MPA networks has already made an important contribution to dialogue on MPA networks in the Arctic and other regions. The project will also build in long-term sustainability as MPA agencies incorporate the identified adaptation strategies into their MPA management plans, which will guide long-term (~10-year) management of these areas.

9. **Describe opportunities for inclusion of traditional ecological knowledge (TEK), if applicable, and how these opportunities are incorporated into the project:**
   Indigenous people have inhabited coastal areas in North America for thousands of years, and have a long history of adapting to changes in the marine and coastal environment. This work provides an opportunity to share and learn and potentially incorporate traditional practices and peoples in the management of MPA coastal environments. It also provides an opportunity for collaboration among Indigenous peoples involved in coastal management and adaptation, across the three countries.

10. **Describe opportunities for youth engagement, if applicable, and how these opportunities are incorporated into the project:**
    Youth are key stakeholders in MPA management, and are the focus of many education and citizen-science efforts at MPAs. The project would identify opportunities for youth engagement in adaptation strategies, including through volunteer work and community engagement. Organizations working with youth would be invited to participate in the project scoping, the stakeholder workshop and

training.

11. **List significant involvement of other levels of government, Indigenous groups, local communities, experts, private sector, civil society and others, as applicable:**
The three countries have laws, practices and cultures of strong stakeholder engagement in MPA management—including government agencies at all levels, scientists, ocean users, local communities, Indigenous people and others who care about our oceans. This project would continue that approach by involving a diverse group of stakeholders in project scoping, development and review of the Coastal Adaptation Toolkit, and in identifying opportunities for collaboration in implementing adaptation strategies. Many such stakeholder groups have already been engaged in the rapid vulnerability assessment process completed during the 2015–2017 project period, and are eager to be engaged in next steps (e.g., local business owners involved in ecotourism, MPA citizen advisory councils, tribal governments in Washington State and British Columbia, universities and nongovernmental organizations).

12. **Identify relevant committee members and their federal agencies in each country committed to developing this project, and implementing it, if approved:**

Canada: Chantal Vis, Marine ecosystem specialist, Parks Canada, Chantal.vis@pc.gc.ca.

Mexico: Fernando Camacho Rico, National Commission of Protected Areas, fernando.camacho@conanp.gob.mx
Pilar Jacobo Enciso, National Commission of Protected Areas, pilar.jacobo@conanp.gob.mx

United States: Lauren Wenzel, Director, National Marine Protected Areas Center, lauren.wenzel@noaa.gov.