Project 16: Marine Protected Areas: Strengthening Management Effectiveness and Supporting Coastal Community Resilience	**Operating Year(s): 2015–2016**
Planned Budget for Two Years: C$300,000 **Year 1: C$140,000** **Year 2: C$160,000**	

Strategic Priority/Subtheme

- Sustainable Communities and Ecosystems / Landscapes and Seascapes; and Priority Species and Ecosystems
- Climate Change Mitigation and Adaptation / Blue Carbon (Marine and Coastal Ecosystems)

This project addresses the Sustainable Communities and Ecosystems strategic priority and in particular, the Landscapes and Seascapes subtheme. It also has several components that address the Priority Species and Ecosystems subtheme, the Climate Change Mitigation and Adaptation strategic priority and Blue Carbon (Marine and Coastal Ecosystems) subtheme. The project aims to support marine protected area networks, seascape-level Marine Park Partnerships, climate-smart adaptation and mitigation activities, and the integration of traditional knowledge and community-level awareness and engagement. It will work with the private sector as well as with indigenous and local communities to better understand and ameliorate the ecological, social, cultural, and economic vulnerability of fisheries, traditional and nature-based activities within North American seascapes. It also addresses issues and opportunities raised at JPAC's November 2014 meeting on North America's Coasts in a Changing Climate.

How will this project address the cross-cutting themes?

Learning from and assisting vulnerable groups and indigenous communities

This project builds on previous initiatives to improve connectivity of priority ecosystems in North America through the establishment of Marine Protected Area networks. Focusing primarily on sustainable communities, it also builds on other CEC work aimed at identifying and mapping blue carbon habitats in a changing climate. In addition, this project will apply CEC and national guidelines at the seascape level to assist vulnerable and indigenous coastal communities in preserving essential economic, social, and cultural benefits.

Enhancing information sharing, transparency, capacity building and communication

The project will promote information sharing, communication, and capacity building on themes of common interest. The project also aims to support ongoing initiatives on climate change adaptation and mitigation as well as on community-level awareness, engagement and capacity in working collaboratively with marine protected area managers in conserving marine ecosystems and traditional sustainable livelihoods.

Project Summary (including a clear statement of project goal)

The project will develop a North American approach to marine protected area (MPA) management effectiveness and coastal community resilience, building on existing efforts within the three countries and taking into account climate and other related pressures and their impacts on species, ecosystems, and people. This conservation approach recognizes the critical role that MPAs can play in helping to sustain the

benefits that these special places provide to local economies and communities, while recognizing the critical role of sustainable economic activities in helping to maintain and restore species and ecosystems.

This project responds to existing national and international commitments to enhance management effectiveness in MPAs through the development of a new Marine Park Partnership, which will target pilot clusters of MPAs in priority shared seascapes (e.g., Gulf of Mexico, Arctic, Salish Sea, Gulf of California). The main objective of these partnerships will be to work collaboratively to tackle threats affecting shared resources and ecosystems. Marine protected area managers of pilot MPAs will apply existing CEC**,** national climate-smart and other MPA management guidelines to identify local economic activities that are potentially threatened by climate change and other impacts to the MPA, with a primary focus on one or several of the following: commercial/recreational fishing, nature-based recreation, and traditional use by indigenous communities (including eco-cultural restoration). In collaboration with community partners, the project will promote new cross-sectorial partnerships while nurturing the integration of project outcomes into the management plans and activities of the pilot marine protected areas. The project is intended to be flexible and scalable to address the varying levels of management capacity necessary to address these challenges within different MPAs.

Key elements of the project will include sharing information on how MPAs can be managed more effectively, assessing impacts and vulnerabilities at the seascape and local levels, redefining conservation goals and objectives under changing climate scenarios, improving MPA management plans, recognizing the role of sustainable local economic activities in the conservation of species and ecosystems, and identifying potential policy changes, including planning for new MPAs. By improving climate-smart seascape planning, the project will improve our understanding of how current threats impact migration patterns and ecosystem processes at three different levels: system (across the North American MPA network), seascape (regional clusters), and on-site (local). As Canada, Mexico and the United States connect and expand MPA networks by fostering Marine Park Partnerships, this project can serve as a model for broader implementation of partnerships to enhance conservation at the seascape level and adapt management plans to improve effectiveness. At the same time, the project will improve communities' livelihoods by identifying the most important traditional, fisheries, and nature-based activities linked to MPA resources and by working with communities and the private sector to adaptively manage these activities to address persisting and emerging threats. These actions are critical if we are to conserve the ability of existing and planned protected areas to provide essential ecosystem services that support human life and livelihoods.

Short-term Outcomes (at halfway point)

1. Cooperation among MPA managers within the framework of Marine Park Partnerships
2. Identification of common threats at seascape and local levels of their impact on resources
3. Identification of sustainable economic activities at each pilot site that have a positive impact on MPA conservation
4. Identification of and contact made with community partners in pilot sites
5. Promotion of effectiveness measures through climate-smart approaches that take into account the needs of local economies and interactions between indigenous communities, coastal resources, and eco-cultural restoration (both for social and ecological value)
6. Promotion of sustainable fishing, traditional, and nature-based activities through North American cross-sectorial partnerships

Long-term Outcomes (by the end of the project)

1. Partnerships at the seascape level that successfully contribute to increased connectivity and improved eco-social resilience
2. Sharing of experiences and knowledge by MPA managers and coordination of seascape-level activities within the framework of Marine Park Partnerships
3. Better acknowledgment and consideration of an array of economically sustainable activities with positive impacts on ecosystem conservation when formulating MPA management plans.

Longer-term Environmental Outcome (post-project)

- Significant expansion of North America's MPA system to key areas in order to increase coastal ecosystem and community resilience
- Increase in coastal ecosystem and community resilience as a result of climate smart practices in MPAs
- Improved local resource-based economies due to social resilience in coastal communities
- Incorporation of traditional indigenous resource practices into MPA management and resilience thinking

Performance Measures (quantified SMART measures)

Outcome	Measure	Target	Indicator
By 2017, MPA managers in at least two selected seascapes have implemented collaborative activities within in the framework of Marine Park Partnerships.	Creation of partnerships based on MPAs that work to address problems at the seascape-level – these can range from informal to formal partnerships depending on the needs of the MPA programs.	2 Marine Park Partnerships established	Memorandums of understanding between the Marine Parks signed (where appropriate)
By 2017, resource vulnerabilities and potential adaptation actions have been identified using climate-smart guidelines for MPA managers in pilot sites, with a primary focus on fisheries, nature-based recreation, and traditional activities.	Completion of pilot vulnerability assessment of MPAs, including assessment of sensitivity, exposure, and adaptive capacity	Assessment completed for 2 seascapes	Assessment available to MPA experts
By 2017, sustainable economic activities related to fisheries, traditional indigenous resource use,	Analysis of factors determining the vulnerability of these	Analysis completed for 2 seascapes	Analysis available to MPA experts, managers and major stakeholders

and nature-based recreation have been identified, and potential vulnerabilities and adaptation actions have been identified.	activities to potential climate change impacts, sustainability, and potential positive and negative impacts on conservation			
By 2017, at least three workshops have been organized in the pilot seascapes, with participation from key community members, indigenous community leaders, and local businesses.	Participation of key stakeholders and MPA experts and managers in trinational and seascape-level workshops	Three workshops completed	Minutes from workshops available to participants	
By 2017, development of recommended management actions for MPAs in the two seascapes have been identified for consideration in future MPA management plan and operational plan updates.	Guidelines, including maps of blue carbon habitats and North American MPAs, highlighting potential opportunities and priorities for network expansion	Guidelines completed and disseminated	Availability of guidelines and maps	

Tasks necessary to reach the environmental outcome:

1) Establish Marine Park Partnerships.
2) Apply CEC, national climate-smart and other MPA management guidelines in MPA pilot sites.
3) Identify options to support and enhance sustainable economic activities to improve local and indigenous community livelihoods at the site and/or seascape level.

Task #1) Establish Marine Park Partnerships at the seascape level to address management challenges and enhance network resilience and connectivity (e.g., Gulf of Mexico, Arctic, Salish Sea, Gulf of California)

Subtask	**Project outputs**	**How does the subtask/output move the project towards the environmental outcome**	**Timing**	**Budget (C$)** (activities)
1.1 Hold workshops to exchange experiences and	Creation of partnerships based on MPAs that work to address	Working within partnerships at the	Year 1	Year 1: $50,000 Year 2: $0

knowledge, identify common interests, and understand unique circumstances (one workshop for each seascape identified)	problems at the seascape level Identification of a short list of threats, impacts and opportunities to inform Tasks #2 and #3.	seascape level will help increase connectivity and improve eco-social resilience, as well as heighten impacts of system-level activities, while taking into account site-level specificities.		
1.2 Identify legal and technical conditions for the formal establishment of Marine Park Partnerships.	Completion of a legal and technical assessment and roadmap to facilitate high level agreements with a view to establishing memoranda of understanding	This guideline will help sustain this activity beyond the project period.	Year 1	Year 1:$10,000 Year 2:$0
Task #2) With a primary focus on specified activities and within specific seascapes, apply CEC, national climate-smart and other guidelines to identify common threats that affect resources, local economic activities, and traditional activities potentially threatened by climate change and other impacts to MPAs				
Subtask	**Project outputs**	**How does the subtask/output move the project towards the environmental outcome**	**Timing**	**Budget (C$)** (activities)
2.1. Apply CEC, national climate-smart and other guidelines in MPA pilot sites, with a focus on fisheries, traditional, and nature-based activities in two seascapes.	Completion of pilot vulnerability assessment of MPAs, including assessment of sensitivity, exposure, and adaptive capacity	Understanding the vulnerability of MPAs and identification of potential adaptive actions will help address threats to marine species and ecosystems.	Year 1	Year 1: $80,000 Year 2: $0
2.2. Identify opportunities for potential expansion of MPA networks at the North American scale based on analysis of spatial	Map of blue carbon habitats and North American MPAs, highlighting potential opportunities and priorities for network expansion based on	It informs the future expansion of MPA networks in the three countries, based on opportunities for	Year 1	Year 1: $0 Year 2: $5,000

protection of blue carbon habitats.	blue carbon conservation as a co-benefit.	additional protection of blue carbon habitats (with benefits for carbon storage, disaster resilience, and species conservation).		
Task #3) Enhance the management of important fisheries, traditional, and nature-based activities linked to MPA resources, working with communities and the private sector to address persisting and emerging threats.				
Subtask	**Project outputs**	**How does the subtask/output move the project towards the environmental outcome**	**Timing**	**Budget (C$)** (activities)
3.1 Compile and analyze ecological, social, cultural, and economic vulnerability of fishing, traditional, and nature-based activities in pilot sites and seascapes, along with potential adaptive actions to minimize negative impacts.	Identification of fisheries, traditional, and recreational activities at pilot MPAs and seascapes Analysis of factors determining the vulnerability of fisheries, traditional, and recreational activities to potential climate change impacts; sustainability; and potential positive and negative impacts on conservation	This will assist in understanding the vulnerability of strategic economic activities and their direct and indirect impact on conservation activities.	Year 2	Year 1: $0 Year 2: $80,000
3.2. Hold a workshop within each seascape with MPA managers, local communities, and private-sector partners.	Inclusion of cross-sectorial activities into management plans Presentation of information on economic and social vulnerabilities and potential adaptation options and development of priorities and	This will promote sustainable development and/or management of economic activities that benefit marine conservation. This will foster effective	Year 2	Year 1: $0 Year 2: $60,000

	strategic approach	collaboration with local communities and ensure the long-term viability of sustainable activities.		
3.3. Develop outreach materials to highlight lessons learned and opportunities for MPA adaptation, to enhance effectiveness, and to expand the network.	Outreach materials highlighting project lessons learned Outreach materials for each seascape targeting community, private-sector partners and the public Maps and accompanying analysis on the overlap of key blue carbon areas with areas of ecological, cultural and economic significance to highlight opportunities for additional protection of blue carbon habitats through expanded MPA networks	These materials serve to share key findings of the project with other MPAs and partners, helping to build understanding and support for future implementation in order to enhance coastal resilience.	Year 2	Year 1: $0 Year 2: $15,000

Explain how this project meets the selection criteria adopted by Council in the Strategic Plan (see below)

The goal of all projects funded by the CEC will be to support the efforts of the Parties to conserve, protect and/or enhance the North American environment. The following criteria will guide the Secretariat, Working Groups, Committees, and other appropriate officials of the Parties in considering cooperative activities for Council approval under operational plans. These selection criteria do not apply for activities to be funded through the NAPECA grant program.

How does the project contribute to achieving Council's strategic objectives as described within the current Strategic Plan, or as related to other priorities subsequently confirmed by Council?

This project addresses the Council's Sustainable Communities and Ecosystems strategic priority and, in particular, the Landscapes and Seascapes subtheme. It also has several components that address the Priority Species and Ecosystems subtheme, the Climate Change Mitigation and Adaptation strategic priority, and the Blue Carbon (Marine and Coastal Ecosystems) subtheme. The project aims to support MPA networks, seascape-level Marine Park Partnerships, climate-smart adaptation and mitigation activities in marine ecosystems,

integration of traditional knowledge, and community-level awareness and engagement. This project responds to existing formal national and international commitments, including the Convention of Biological Diversity's Aichi Targets 1, 11, and 15 and the White House Priority Agenda for Enhancing the Climate Resilience of America's Natural Resources to promote awareness of the values of biodiversity, integration of marine and coastal environments, and enhancement of ecosystem resilience and carbon stocks. It builds on precious worked supported by the CEC (2011–2012) to design resilient marine protected area networks in a changing climate and more recent work (2013–2014) to integrate blue carbon assessments into North America's carbon budgets.

Are the proposed objectives North American in scope? In other words, how are the proposed results relevant to protecting the environment in North America? (For example, what would Council members announce to the press at the successful completion of this project?)

At the project's conclusion, Council members will be able to announce new tools and partnerships, including climate-smart guidelines and Marine Park Partnerships for collaboration between MPA programs, resource agencies, coastal and indigenous communities, and tourism and recreation industries to sustain marine ecosystems and local economies.

What specific, clear and tangible results will be achieved and how will progress toward each result be measured over time? Identify performance measures to be used to indicate success at reaching all outcomes and/or performance.

The key performance measures are:

By 2017, managers of MPAs in two selected seascapes -will have implemented collaborative activities within the framework of Marine Park Partnerships.

By 2017, resource vulnerabilities and potential adaptation actions will have been identified using climate-smart guidelines for MPA managers in pilot sites with a primary focus on fisheries, traditional activities, and nature-based recreation.

By 2017, sustainable economic activities related to fisheries, commercial sport fisheries, traditional indigenous resource use, and nature-based recreation will have been identified and potential vulnerabilities and adaptation actions will have been identified.

By 2017, at least three workshops will have been organized in the pilot seascapes, with participation from key community members, indigenous community leaders, and local businesses.

By 2017, development of recommended management actions for MPAs in the pilot seascapes will have been identified for consideration in future MPA management plan and operational plan updates.

Explain why the CEC is the most effective vehicle for the Parties to use in undertaking the project:

This project builds on and complements previous and ongoing CEC work to address sustainable marine ecosystems and the emerging science on blue carbon. It also helps develop a trinational understanding on how to improve management of marine protected areas in light of a changing climate. This cooperative work gives the three countries the opportunity to join forces at a seascape level to develop and apply climate-smart initiatives that would otherwise be disarticulated. In addition, the CEC is uniquely positioned to support the Parties in achieving their goal of maintaining resilient seascapes, ecosystems, and communities across North America.

Does the project propose a clear timeline for implementation of the activities, including a target end-date for CEC involvement? Where applicable, describe how the work will continue after CEC involvement ends.

The proposed project will be implemented during the 2015–2016 Operational Plan. At the end of the project, the outcomes will serve as a model for broader implementation of trilateral partnerships to enhance conservation at the local and system levels and at the same time improve communities' livelihoods by increasing social and ecological resilience at a the seascape level. In addition, landscape and seascape planning will benefit by expanding MPA networks and improving ecological connectivity.

Where applicable, identify with reasonable specificity:

Linkages with other relevant CEC projects, past or present, in order to create synergies, capitalize on experience, or avoid duplication

The project will be linked to current and proposed CEC blue carbon projects, as well as past projects such as the CEC's 2011–2012 project on *Engaging Communities to Conserve Marine Biodiversity through NAMPAN*, which developed scientific and planning guidelines to design resilient MPA networks in a changing climate. The guidelines will be used to inform some of the proposed seascape-level initiatives. Additionally, the project builds on JPAC discussions/recommendations from the 6–7 November 2014 meeting in Arlington, Virginia on "North America's Coasts in a Changing Climate."

- **The beneficiaries of capacity building activities that the project may include**

The project will also establish Marine Park Partnerships that will enhance the capacity of MPA managers through joint workshops and information exchange.

- **The relevant stakeholders, with particular attention to communities, academia, NGOs and industry, and their involvement and contribution to a successful outcome**

The major stakeholders in each seascape selected will be involved in the project, including indigenous community leaders, nature-based recreation tour operators, fishers, commercial sport industry operators, boaters, kayakers, and divers.

Marlow Pellat – Canadian Parks and Protected Areas, Parks Canada
Lauren Wenzel – Acting Director, National Marine Protected Areas Center, NOAA
Mariana Bellot Rojas – General Director for Institutional Development and Promotion, Conanp
Ivana Fernández Stohanzlova – International Cooperation, Conanp
Laura Martinez Martínez Pepin Lehalleur – International Cooperation, Conanp
Andrew John Rhodes Espinoza – Strategies for Climate Change, Conanp
Valeria Arlette García Lara – Strategies for Climate Change, Conanp
Regional directors and MPA directors in charge of marine parks (pilot sites)