### Project: Conserving Shorebirds through Community Engagement

- 1. Two-year budget: C\$570,000
- 2. Short statement of the need identified (including current status), the project objective and outcomes (achievable by June 2019) to address it:

A recent "State of North America's Birds" report highlighted shorebirds as priority species in great conservation need and identified habitat degradation at migratory stopover sites as a key reason for declines. Over the 2015-2016 Operational Plan (OP) period (Phase I), communities were engaged to identify threats and conservation actions for protection of eight sites used by priority shorebirds in Canada, Mexico and the United States (Bay of Fundy, James Bay, Alto Golfo de California/Delta del Río Colorado, Bahía de Todos Santos, Delaware Bay, Copper River, Georgia Barrier Islands, Willapa Bay). As a result, human disturbance was identified as the main threat to shorebird conservation at several sites, leading to the prioritization of actions to reduce this threat through raising awareness and demonstrating the local benefits of conservation. At more remote sites, conservation actions would greatly benefit from having more data on the use of the sites by the migratory birds. Building on these results, which provided a path for effective conservation at each site, this project (Phase II) will implement the actions that were identified for each site, use Traditional and Local Ecological Knowledge to augment conservation actions of priority species throughout their annual cycle, and capture best practices for selected actions. It will also monitor the effectiveness of selected actions and provide an analysis of the economic incentives and key considerations of ecotourism.

3. Explain how the project can achieve more impact by working trinationally, and why the CEC is the most effective vehicle to undertake this work:

North American shorebirds use a set of stopover sites in middle North America to refuel during their biannual migrations between breeding grounds in the Arctic and wintering grounds in Mexico. In each country, the federal government has a mandate for the conservation and protection of shorebirds. However, to help ensure that national investments are protected and result in the most effective shorebird conservation, there are two key factors to address: 1) cross-border cooperation is essential, since the loss of a site anywhere along the migratory flyway will severely impact the survival of the birds; and 2) engagement of the local community is critical to successfully conserve specific sites. The CEC's history and experience in facilitating coordinated action across the three countries and of engaging local communities in multi-sectoral activity makes it the most effective vehicle to help accomplish the proposed objectives.

4. Describe how the project may capitalize on, or advance, the relationship between ecosystems, job creation, gender impacts, and income generation:

The large flocks of shorebirds that congregate at stopover and overwintering sites are a spectacle that can attract visitors in large numbers. Studies have shown that economic incentives are crucial for sustained community engagement in conservation, and that birdwatching and ecotourism can be significant sources of additional income. The project will support the development of the local ecotourism economy by fostering and introducing shorebird festivals at key sites, through site exchanges where key

partners from sites that already hold successful festivals can share experience and 'know-how' with people from other sites. It will also support an analysis of the linkages between tourism, local benefits and conservation, using data from the selected sites if possible. This will provide valuable information to decision-makers and to communities hosting key migratory bird habitat, including economic value and factors to consider when planning ecotourism development (e.g., tourist preferences and specialization, local participation modes, and impacts on local development and local conservation). In addition, TEK studies in Nunavut will train local researchers in study methods and TEK data analysis. This skill is 'marketable' in the Arctic, as TEK is used more frequently to make resource management decisions. Indigenous communities in Alaska and Mexico will participate in festivals to celebrate the importance of shorebirds on the breeding grounds and to help inform the importance of the Gulf Grunion (spawning fish) and reduce human disturbance to shorebirds from recreation visitors.

### 5. Describe how the project complements or avoids duplication with other national or international work:

This project helps meet habitat conservation objectives identified by the Atlantic and Pacific flyway shorebird initiatives, the Arctic Council's Arctic Migratory Birds Initiative, and the Western Hemisphere Shorebird Reserve Network. Each of these groups strives to protect and monitor migratory shorebirds and habitats through the protection of key sites and is linked to this proposal. The project provides a community-based, citizen-science approach that will build local support for the preservation of the sites, while the aforementioned initiatives focus on large-scale conservation goals aimed at protecting shorebirds more globally.

## 6. Describe opportunities for inclusion of traditional ecological knowledge (TEK), if applicable, and how these opportunities are incorporated into the project:

As part of the nomination process and management of the Western Hemisphere Shorebird Reserve Network (WHSRN), representatives of the sites will include, where relevant, consideration of traditional and local ecological knowledge. This could include: 1) combining Indigenous knowledge with increasing participation in monitoring at the James Bay, Ontario, site (Moose Cree First Nation); 2) collecting Inuit traditional knowledge to manage the shorebird habitat at two communities in Nunavut, Canada, and prevent their destruction by overabundant snow geese; (3) having representatives from Indigenous communities in western and northern Alaska participate in festivals to learn of the economic and traditional strength that could come from hosting similar events in their communities (Yupik and *Iñupiat*); 4) learning from TEK from local fishermen and Indigenous people harvesting grunion (spawning fish) that produce eggs used by wintering shorebirds at Colorado River Delta, Mexico (Cocopah Indigenous community); and 5) engaging youth, local women, and Indigenous groups that participate in bird and grunion festivals, shorebird monitoring, and other actions to reduce or mitigate human disturbance during shorebird staging in Mexico.

# 7. Describe opportunities for youth engagement, if applicable, and how these opportunities are incorporated into the project:

Youth will be engaged during community activities to build a diverse constituency of support for shorebird conservation at sites, including citizen science such as the LEO Network, eBird and INaturalist, sign development, slogan/theme creation, integration of shorebird education materials into schools, beach cleanups, and incorporating shorebird components into major area events and festivals. In addition, actions to collect Inuit traditional knowledge will engage youth as study videographers and elder assistants.

Youth will also be engaged to monitor shorebirds and human recreational use, and provide outreach to reduce disturbance by tourists visiting sites in Mexico during Easter when birds are there for their spring migration.

8. List significant involvement of other levels of government, Indigenous groups, local communities, experts, private sector, civil society and others, as applicable:

Western Hemisphere Shorebird Reserve Network, Arctic Migratory Birds Initiative, Atlantic Flyway Shorebird Initiative, Pacific Americas Shorebird Conservation Strategy, Mushkegowuk Council, Moose Cree First Nation, Mi'kmaq First Nation, Nature Canada, Nature Conservancy of Canada, Bird Studies Canada, Eastern Habitat Joint Venture, Town of Dorchester (New Brunswick), Point Blue, Manomet Center for Conservation Science, Washington Department of Fish and Wildlife, Pacific Birds Habitat Joint Venture, US Forest Service, Prince William Sound Science Center, Washington Audubon, Terra Peninsular, Arviat and Coral Harbour Hunters and Trappers Organization, Regional Alaska Native organizations, schools and youth groups in communities, Nunavut General Monitoring Program, Alaska Migratory Bird Co-Management Council, Alaska Department of Fish and Game, Bird Festival coordinators in Cordova, Willapa Bay, Bahía de Todos Santos, *Centro de Investigación Científica de Educación Superior de Ensenada* (CICESE), *Comisión Nacional para el Conocimiento y Uso de la Biodiversidad* (National Commission for the Knowledge and Use of Biodiversity —Conabio), *Comisión Nacional de Áreas Naturales Protegidas* (National Commission for Protected Natural Areas—Conap)

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

Canada: Garry Donaldson, Vicky Johnston (Environment and Climate Change Canada) Mexico: Humberto Berlanga (*Comisión Nacional para el Conocimiento y Uso de la Biodiversidad*) United States: Richard Lanctot, Gilbert Castellanos (US Fish and Wildlife Service, Department of the Interior)

#### 10. List the objectives and activities to be conducted to achieve measurable results:

Objectives	Main activities to achieve objectives	Measurable results
By June 2019, communities at the selected sites will be engaged in new or enhanced shorebird conservation	Activity 1 Build and enhance shorebird science and community engagement at sites along both flyways	A more diverse and larger group of people from the local communities are actively involved in shorebird habitat conservation
		Shorebird conservation actions are informed by new data

Objectives	Main activities to achieve objectives	Measurable results
By June 2019, sites will be organized as knowledge-action networks of shared experiences and best practices (in outreach and research) for conservation of shorebird habitat	Activity 2 Link sites to share experiences and develop best practices for shorebird conservation, including ecotourism and monitoring effectiveness	Successful community-based outreach activities, research projects and ecotourism development options are identified, shared and implemented through cross-site collaboration
By June 2019, local and traditional ecological knowledge will be shared and used to inform conservation actions at sites	Activity 3 Use local and traditional ecological knowledge to improve understanding of the value of migratory birds, assess and remedy site threats, and implement conservation actions	Stakeholders along flyways gain greater appreciation of each other's value systems with regard to shorebirds Site management is informed by TEK