Project 11: Arctic Migratory Birds Initiative (AMBI)—the Americas' Flyway Action Plan	**Operating Year(s): 2015–2016**
Planned Budget for Two Years: C$460,000 **Year 1: C$230,000** **Year 2: C$230,000**	

Strategic Priority/Subtheme

- Sustainable Communities and Ecosystems / Priority Species and Ecosystems; Landscapes and Seascapes; and Sustainable Communities and Urban Initiatives

This project addresses the Sustainable Communities and Ecosystems strategic priority and all three sub-themes of the priority (Priority Species and Ecosystems, Landscapes and Seascapes, Sustainable Communities and Urban Initiatives). The project focuses on two Arctic shorebirds that have been identified as being at-risk and a high conservation concern in all three countries and that are good indicators of overall biodiversity health. The project also focuses on key sites in the three countries along Atlantic and Pacific flyways that host migrating and over-wintering shorebirds, and involves linking communities along the flyways to enhance engagement, communication and information between these communities to enhance the sustainability of these communities to support conservation actions. This will also benefit other shorebirds, people and biodiversity that occur in these habitats.

How will this project address the cross-cutting themes?

Learning from and assisting vulnerable groups and indigenous communities

This project is a component of the Arctic Migratory Bird Initiative (AMBI) and will enhance sustainable communities and ecosystems in the Arctic and along the Pacific and Atlantic coastlines using the Western Hemisphere Shorebird Reserve Network (WHSRN) as a tool to engage in site-based conservation at key habitats used by two species that are of high common conservation concern. A premise of WHSRN is that conservation is best achieved when local communities are engaged and leading activities that support local ecosystems and economies. Many of the important habitats for shorebirds are on lands used by indigenous communities in Canada, the United States and Mexico. Therefore, the focus of this project will be to approach communities, including indigenous communities, next to key habitats that are not part of the WHSRN network, and to increase engagement at others that are already within WHSRN to support local efforts to maintain habitat for Arctic-breeding shorebirds. The compilation of information to support conservation efforts will include information derived from traditional and local knowledge. The successful implementation of the project should benefit local sustainable use of habitats and will generate as-yet undetermined benefits after communities are linked to others along the shorebird flyways.

Enhancing information sharing, transparency, capacity building and communication

Through local engagement, it is expected that existing science and local and traditional knowledge combined will enhance the ability of both streams of knowledge to support conservation. Sites that host the same shorebird populations as they move through the continent each year will be linked according to migration pathways: one along the Atlantic and one along the Pacific. As a North American-focused effort within the broader WHSRN program, this work will contribute to a number of the objectives identified by the CEC-initiated North

American Bird Conservation Initiative (NABCI). In doing so, this project would revitalize the continental implementation of NABCI.

Web-based products and meetings will support transparency and communication. Where indigenous communities are involved, the expected outcomes will represent an innovative step forward as they become engaged for the first time in the type of international conservation partnership that is proposed.

Project Summary (including a clear statement of project goal)

The goal of this project is to improve conservation outcomes for at-risk shorebirds by informing, engaging and connecting communities in Canada, the United States and Mexico at key sites that share responsibility for their well-being.

This project is a component of the Arctic Migratory Birds Initiative (AMBI), a project of the Arctic Council, whose initial work plan focuses on the conservation of two shorebird species: the Semipalmated Sandpiper (*Calidris pusilla*) and the Red Knot (*Calidris canutus; rufa* and *roselaari* subspecies). A foundational principle of AMBI is that conservation work is needed in all countries—be they in the Arctic or further to the south. A common characteristic of migratory shorebirds is their tendency to congregate at key sites on migration or during the winter. This poses a real conservation concern as the loss of one habitat could adversely affect the entire species, but it also provides opportunity, if communities at the sites are engaged and motivated to provide support for these vital habitats. This project aims to foster these opportunities by supporting community efforts at the most important habitats for two species that have very broad breeding ranges and have been identified as key biodiversity indicators for other co-occurring species.

This work will build upon and complement existing conservation efforts for Semipalmated Sandpipers and Red Knots in North America, including the Western Hemisphere Shorebird Reserve Network program, the Atlantic Shorebird Flyway Conservation Business Strategy, and the Pacific Shorebird Conservation Business Strategy. It will also benefit from experiences learned from a previously funded CEC project that linked sites in Saskatchewan, Utah and Sinaloa, which shared populations of American Avocets.

Short-term Outcomes (at halfway point)

1. Sites on Atlantic and Pacific flyways are identified as being critical for the conservation of the two species and that provide a good fit for subsequent linking to other sites.
2. Local communities are engaged in developing site-specific conservation action plans and initiate efforts to forge linkages among sites.

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

1. Identified conservation actions are implemented.
2. Linked sites along the Pacific and Atlantic coasts are actively sharing information and producing conservation outcomes.

Longer-term, Environmental Outcome (post-project)

Linkage efforts are expanded along flyways into South America and are examples for other networks that may form in support of other species and/or geographic areas.

Performance Measures (quantified SMART measures)

Outcome	Measure	Target	Indicator
Sites are identified	New and existing sites that share Semipalmated Sandpiper and Red Knot populations have been identified, including their key threats. At a minimum, one site from each country is included.	3 new WHSRN sites are nominated and part of the WHSRN program	Web site is available in English, French, Spanish as well as indigenous languages to show sites, habitat characteristics, and threats that are important for each species
Local communities are engaged	Key shorebird habitats and the communities associated with them are recognized within the WHSRN program and representatives from the sites identified have collectively developed an action/business plan that addresses threats at a site and network level.	New and existing sites that share Semipalmated Sandpiper and Red Knot populations have identified their key threats and have an action plan in place to address them	Availability of action or business plans that specifically indicate the most important actions needed at each site will be available in each language
Conservation actions are implemented	Implementation results for key conservation actions at a subset of key sites for each species	100% of identified conservation actions are implemented	Availability of results in reports in appropriate languages
The people at WHSRN sites in all three countries are linked and benefiting from the strength of their participation in networks	Partnerships between site representatives are formed along Atlantic and Pacific flyways	100% success rate in linking site partners in the network	Establishment of conservation networks beginning with the subset of key sites

Tasks necessary to reach the environmental outcome:

1) Sites are identified and local communities are engaged
2) Threat assessments are completed and network-level action planning and implementation is undertaken
3) Linkages are established among sites resulting in enhanced conservation at sites

Task #1) Sites are identified and local communities are engaged

Subtask	**Project outputs**	**How does the subtask/output move the project towards the environmental outcome**	**Timing**	**Budget (C$)** (activities)
1.1 Compile a list of all sites known to host Semipalmated Sandpipers and Red Knots, with special attention to locating habitats in the Arctic that are considered resilient to climate change	Website is available to show sites and habitat characteristics that are important for each species	Information is available to support conservation action and decision-making	Early in year 1	Year 1: $40,000 Year 2: $0
1.2 Engage communities, ensuring Arctic and indigenous communities are included, at WHSRN sites of hemispheric or international importance, or in landscapes of importance for both species	Identification of sites that are key for the conservation of the two species and are interested in engaging with other sites in a conservation network. At minimum, one site from each country is included.	Sites that will be the focus of the project are identified within the full set of potential sites	Year 1 only	Year 1: $10,000 Year 2: $0
1.3 Support nomination of any sites not currently part of the WHSRN network (sites of hemispheric and international importance)	Key shorebird habitats and the communities associated with them are recognized within the WHSRN program	All critically important stopover or overwintering habitats benefit from the WHSRN program	Some sites may need two years to ensure full community / landowner support.	Year 1: $80,000 Year 2: $20,000

1.4 Establish connectivity between sites for Red Knots (*roselaari*) along the Pacific flyway and Semipalmated Sandpipers along the Atlantic.	Migration routes showing connections between breeding, wintering and migration sites are determined using telemetry technologies; stopover duration at sites may be determined	Importance of sites and connectivity between sites is demonstrated.	Year 1 and Year 2	Year 1: $30,000 Year 2: $30,000
Task #2) Threat assessments are completed and network-level action planning and implementation is undertaken				
Subtask	**Project outputs**	**How does the subtask/output move the project towards the environmental outcome**	**Timing**	**Budget (C$)** (activities)
2.1 Known threats are compiled for all sites hosting Semipalmated Sandpiper and Red Knot using existing information, as well as information derived from traditional and local knowledge. Threat analysis will include the potential for exposure to pollutants and contaminants.	Website includes information on known threats at each WHSRN site that supports Semipalmated Sandpiper and Red Knot	Information is available to support conservation actions and management decisions	Early in year 1	Year 1: $10,000 Year 2: $0
2.2 Meeting of site representatives	Representatives from sites identified in subtask 1.2 meet in person to collectively develop an action/business plan that addresses threats at a site and network level. May be accomplished as a single face-to-face meeting or divided by Atlantic and Pacific flyways.	Key actions are identified and a path forward is described to resolve each threat.	Year 1	Year 1: $50,000 Year 2: $0

2.3 Based on 2.1, conduct actions at sites on Atlantic and Pacific flyways	Actions identified in subtask 2.2 are implemented. Actions may range from enhancing community awareness to implementing citizen science activities (e.g., monitoring), habitat management, and addressing pollution issues.	Actions are implemented that will lead to measurable conservation results, noting that some results may not be measurable until subsequent years.	Later in Year 1 and Year 2	Year 1: $10,000 Year 2: $100,000
Task #3) Linkages are established among sites resulting in enhanced conservation at sites				
Subtask	**Project outputs**	**How does the subtask/output move the project towards the environmental outcome**	**Timing**	**Budget (C$)** (activities)
3.1 A linking program is established among Atlantic and, separately, Pacific sites supporting Semipalmated Sandpipers and/or and Red Knots. Communities are connected with other communities along the flyway that share the same bird populations	Partnerships between site representatives are formed along Atlantic and Pacific flyways, as a legacy of the current funding.	Capacity is established to continue conservation efforts into the future and a group is established that can evaluate ongoing success of implementation activities. Communities are aware that they steward a shared resource.	Year 2	Year 1: $0 Year 2: $80,000

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

- **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?**
  - *Sustainable Communities and Ecosystems – Priority Species and Ecosystems, Landscapes and Seascapes, Sustainable Communities and Urban Initiatives*
    - The main outcome expected from the proposed work is that communities that are local to important habitats for Semipalmated Sandpiper and Red Knot experience enhanced sustainability in their use of these areas, such that

shorebirds, people and the biodiversity that occurs in these habitats will benefit. This could represent direct economic benefits, if the habitats are used by the communities, or secondary benefits, from the ecosystem services that healthy habitats will offer. These broader-than-bird outcomes are based on the established understanding that birds represent good indicators of overall biodiversity health so while the focus of this work is to benefit declining Arctic-breeding shorebirds, most of the species that they share habitats with will benefit from its results.

Cross-cutting themes

- *Learning from and assisting vulnerable groups and indigenous communities*
    - Many of the important habitats for shorebirds are within the lands used by indigenous communities in Canada, Mexico and the United States. These communities can expect to see benefits as conservation outcomes benefit shorebirds that use local habitats and in the process of doing so, benefits to other biodiversity that use those same areas. Successful implementation should benefit local sustainable use of habitats and will generate as-yet undetermined benefits after communities are linked to others within the shorebird flyways.
- *Enhancing information, transparency, capacity building and communication.*
    - The success of this work hinges on all components of this theme. Through local engagement it is expected that existing science and local and traditional knowledge combined will enhance the ability of both streams of knowledge to support conservation. Web-based products within the project will support transparency and the process of linking communities at sites will inherently result in increased capacity and communication among important habitats. Where indigenous communities are involved, the expected outcomes will represent an innovative step forward as they become engaged for the first time in the type of international conservation partnership that is proposed. Results from telemetry projects will inform conservation efforts and provide tangible evidence for the responsibility communities share for the well-being of shorebird populations.

- **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?)**
    - The outcomes of this project are North American in scope, as efforts will focus at key sites for Semipalmated Sandpipers and Red Knots in the three countries along Atlantic and Pacific flyways. The two species that are a focus of this project are either identified as being at-risk (Red Knot) or are a high conservation concern (Semipalmated Sandpiper) so the Parties will also be able to announce results that positively affect their recovery towards sustainable populations. It is also recognized that the full range of both species extends south into South America, so additional value-added will be obtained when successful efforts in North America attract funding from other sources to expand efforts through to South America.

- **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.**
    - A website identifying all key sites used by each species and the specific threats encountered at each ensuring information is available in English, French, and Spanish, as well as indigenous languages for communities involved in this work.

- Action or business plans that specifically indicate the most important actions needed at each site will be available in each language.
- Implementation results at a subset of key sites for each species, as developed by all site partners that will include communities, NGOs and governments.
- Establishment of conservation networks, beginning with the subset of key sites but recognizing that additional benefits will be gained if sources of funding can be found to expand this work into the Caribbean and into Central and South America.

- **Explain why the CEC is the most effective vehicle for the Parties to use in undertaking this project, considering these points:**

  - **The value-added of doing it under the CEC cooperative program:**
    - The CEC is uniquely positioned to provide continental-level support for conservation of species that migrate among the three countries.
    - The outcomes of the proposed activities also contribute to objectives of the North American Bird Conservation Initiative, which was initiated through a significant investment by the CEC.
  - **Any other public, private or social organizations that work on such activities:**
    - Shorebirds are a federal responsibility in all three countries, so federal wildlife and habitat agencies are involved to an extent in their conservation. Overall, shorebirds are in decline as a group and are, therefore, the interest of a number of bird-focused NGOs. The Western Hemisphere Shorebird Reserve Network (WHSRN) is an initiative of both public and private representatives from many countries in the Americas (including Canada, the United States and Mexico) and is likely to be a key contributor to this work.
    - WHSRN has a proven track record for cultivating community awareness and commitment to conservation at important shorebird sites. As an example, Río Gallegos, an important over-wintering site for Red Knots in southern Argentina, has special protections afforded to their habitat by the federal and municipal governments, as well as strong community involvement in a small conservation centre that houses permanent interpretation displays and hosts well-attended events in support of the habitat there. These achievements can be directly linked to efforts of the Western Hemisphere Shorebird Reserve Network. In some cases, WHSRN has achieved conservation support through the involvement of industries that are active at important shorebird sites. Examples include the California Rice Commission, which works with WHSRN on developing best management practices in their fields in support of shorebirds, and the Ecuasal salt company in Ecuador, which manages its salt evaporation operations in a manner that supports shorebirds and other water birds.
    - Likely, key NGOs involved in the WHSRN program will become involved in the implementation of this work. Included will be the Manomet Center for Conservation Science that houses the WHSRN office and staff, as well as WHSRN partners in Mexico (including Pronatura and *Amigos de Sian Ka'an*), the United States (Point Blue, Friends of Delaware Bay) and Canada (Nature Canada, the Nature Conservancy of Canada and Bird Studies Canada).
  - **Opportunities to cooperate and/or leverage resources with such organizations:**
    - With the development of the Atlantic Flyway Shorebird Initiative and a similar effort developing for the Pacific Flyway, key funding organizations, such as the National Fish and Wildlife Foundation and the US Neotropical Migratory Bird

Conservation Act, are beginning to support efforts like the work described in this project. Much of the work described in this outline is scalable, depending on funding levels such that greater results may be obtained if CEC funding is matched with that of other organizations. In addition to enhancing linkages within North America, sufficient additional funding could also be used to link North American efforts to similar work for these species in Central and South America.

- On the Atlantic flyway, AMBI site-based conservation work will link complimentary goals of the WHSRN program and the Atlantic Shorebird Flyway Initiative (ASFI). AFSI is housed with the Atlantic Coast Joint Venture, which brings together public and private agencies, conservation groups, and other partners focused on the conservation of habitat for native birds in the Atlantic Flyway of the United States. Early on, they realized that to be successful, this initiative would need the participation of partners in other countries, and have since reached out to governments and NGOs from all countries along the Atlantic Coast of North and South America. A recent ASFI document lists the first activity in its objective regarding habitat loss and change as, "engaging constituencies to build support for conservation of shorebirds and wetlands." The expected outcome of this activity is that "actions are implemented by governments and NGOs at 30 priority areas to increase the public's interest in and concern for shorebirds." The activities proposed for this funding from the CEC will contribute directly to this ASFI objective.
- On the Pacific Flyway, AMBI site-based conservation will also link to complimentary goals of the WHSRN program but will also work in cooperation with Pacific-based international shorebird conservation work, including the Copper River International Migratory Bird Initiative (CRIMBI) and the developing Pacific Shorebird Flyway Initiative. CRIMBI is a US Forest Service initiative that seeks to strengthen conservation of migratory birds along the entire Pacific flyway—from the North Slope of Alaska to the southernmost reaches of the Pacific Coast–through effective international partnerships and action on the ground. CRIMBI has been actively involved in working with WHSRN to develop shorebird conservation activities at WHSRN sites along the Pacific Coast of North America, the proposed activities using CEC funding would build on this work in partnership with both organizations. While the Pacific Flyway Shorebird Initiative is still under development, it is expected that CEC funds directed towards community support at shorebird sites will contribute to habitat objectives within that business plan.

- **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.**
  - Yes, tangible results are expected at the end of the current funding cycle. However, since there will be conservation efforts that will not be completed at proposed funding levels, there is potential for reaching out to external funding or potential continuation afterwards. A key outcome of this funding will be the establishment of a network of site partners that will continue beyond the current two-year window. These groups will have the potential to seek funding from a number of sources, such that the legacy of CEC funding will stretch many years into the future.

- **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**
    - A similar project in the 1990s linked important shorebird sites in central Canada, US and Mexico, which remains active to this day. These three communities share populations of American Avocet and are linked through annual shorebird festivals at each site that highlight to the communities the importance of maintaining habitats for the shorebirds that travel among the sites throughout the year. It will be used as a model of success for the networks that will be formed using this funding.
  - **The target audience, as well as its receptivity and capacity to use the information that may be produced as a result of the project.**
    - The project includes partners at the subset of important sites chosen for this project, as well as communities and conservation practitioners at other sites in North America and beyond. It will also build on existing conservation networks that may be present in each of the regions targeted by this work to prevent the need for building new capacity. As communities and local conservation capacity are engaged, ancillary benefits will be obtained for the biodiversity sharing the same habitats.
  - **The beneficiaries of capacity building activities that the project may include**
    - Local communities and other site partners, including indigenous communities as well as the scientific community and shorebird habitat conservation partnerships.
  - **The relevant stakeholders, with particular attention to communities, academia, NGOs and industry, and their involvement and contribution to a successful outcome**
    - All communities adjacent to key shorebird sites will benefit, as will NGOs that are active at any one of the sites chosen for the focus of this work. Many sites are within the territory of indigenous communities, which will be a special focus of this work: providing them with information, capacity and linkages to other communities that share the same shorebird populations during their annual migration across North America.