

# PROPOSAL REVIEW

**Project Number:** 3-15-12

**Applicant:** Kimberly Howland

**Title:** Development of a community-based program for monitoring and early detection of Arctic Invasive Species in the Canadian Arctic

**Funding Requested:** Multi Year Funding<sup>1</sup> - \$75,000 for 2015-2016

**Rank:** 15 / 17

**Total Score** 68.00 /100

(no deductions)

**Scoring Breakdown:** NWMB Priority: 8.50 / 17.50

Regional Priority: 6.50 / 7.50

Quality: 20.00 / 35.00

Consultation: 12.00 / 15.00

Funding: 21.00 / 25.00

## Project Summary:

The main objectives of this project are to: 1) analyze shipping vectors to identify high risk pathways for aquatic invasive species; 2) identify and rank key ship-mediated aquatic invasive species for early detection and monitoring, and geographic locations with highest probability for establishment; 3) develop genetic early detection methodologies for aquatic invasive species in high risk ports; and 4) establish a community based monitoring network for aquatic invasive species.

## Project Contributions:

Requested from NWMB	\$75,000	10%
Other Contributions	<u>\$691,000</u>	<u>90%</u>
Total	\$766,000	100%

## NWMB Staff Evaluation:

NWMB Priority: #4 – Contributes to the provision of advice regarding the Nunavut Settlement Area’s marine areas and proposed decisions which would affect those marine areas.

Regional Priority: #2 Baffin – Investigate mitigation measures for impacts of shipping on wildlife.

Project design: Ballast water from arriving ships will be sampled for water quality and zooplankton and phytoplankton composition. This information will be combined with data collected in previous years to analyze shipping pathways and identify high risk points of intrusion for invasive species. Analysis will also be undertaken to identify and rank species based on their potential to become invasive and to determine geographic areas with the highest probability for establishment. This project will also develop a methodology for analyzing environmental DNA that will allow for early detection of invasive species in high

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<sup>1</sup> This proposal did not meet the minimum criteria required to qualify for Multi Year Funding; therefore, it is being brought to the Board for Single Year Funding for 2015-2016.

risk ports. Local community members will be trained to collect samples on an ongoing basis.

Application of results: Results of this project will assist in the development of further targeted monitoring programs for invasive species in order to maintain the integrity of coastal marine ecosystems that support fish and marine mammals stocks in Nunavut. Results will also identify risks of increased shipping associated with developments such as the Baffinland Mary River Mine.

Community involvement / consultation: The project leader has requested support from the affect Hunters and Trappers Organizations and has received one reply in support from the Amaruq (Iqaluit) Hunters and Trappers Organization. As per the NWRT Funding Guide, the researcher will be required to obtain support from the affected Regional Wildlife Organization when more than 5 communities are impacted. The project will employ and train locally hired guides for a total of 10 person days per year.

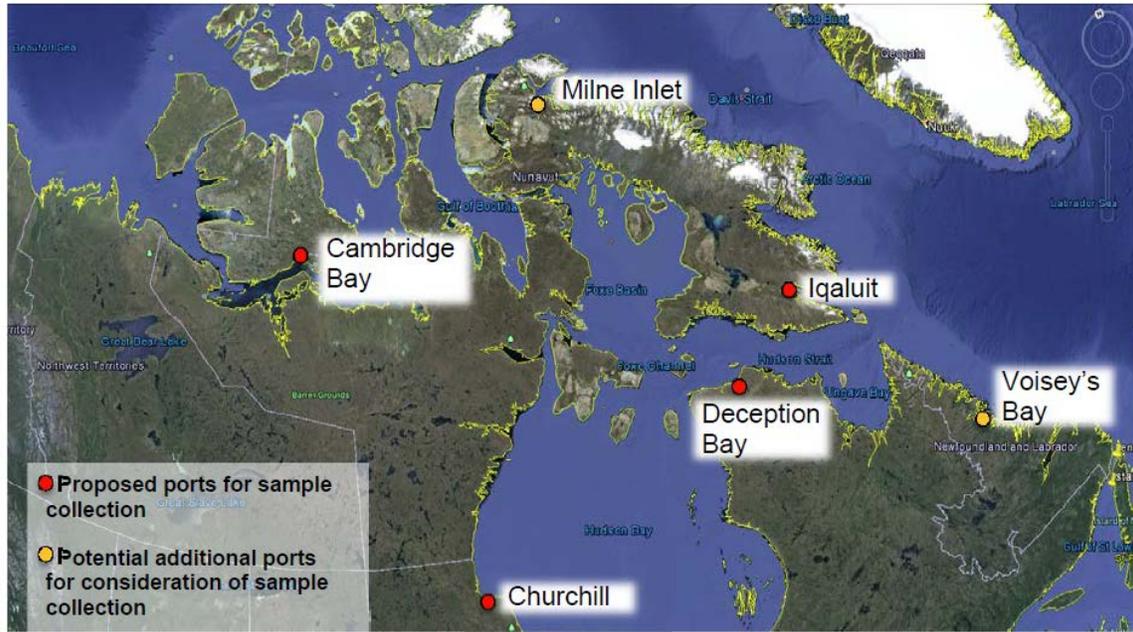
As per the NWRT policy, if the project is funded by the NWRT the researcher is required to: (1) provide a letter of support from all affected communities by June 30<sup>th</sup>, 2015; **OR** (2) provide a letter of support from a majority of the affected communities by June 30<sup>th</sup>, 2015 and provide evidence that the researcher has done a “conscientious” job of consulting; **OR** (3) provide the required information to demonstrate that “conscientious” consultation has been conducted by June 30<sup>th</sup>, 2015.

**Recommendations:** If this project is funded, the following conditions should apply:

1. Funding should be conditional on meeting the consultation requirements identified as per the NWRT policy.

**Prepared By:** Danica Crystal, Wildlife Management Biologist, NWMB

**Consultations:** Sarah Spencer, Wildlife Management Biologist, NWMB



**Figure 1.** Ports that will be sampled for aquatic invasive species.