

PROJECT PROGRESS REPORT

PROJECT NUMBER: 3-14-07

RESEARCHER: Kimberly Howland

TITLE: Climate related changes in marine invertebrate communities and Aquatic Invasive Species (AIS) risk in the north

ORIGINALLY FUNDED: 2014-2015

NWMB FUNDING: \$20,000

PROJECT SUMMARY: The purpose of this project is to spatially model future climate change-related invasion risks using hydro-climatic variables. More specifically, the objectives are: 1) assess the risks of invasive species spread in different areas across the Canadian Arctic using predicted environmental conditions (ice conditions, water temperature, etc.) and compare these to areas of biological importance; and 2) predict where specific invasive species will be able to survive given projected changes in environmental conditions.

FINANCIAL REPORT:

Amount from NWMB:	\$20,000
Amount from Others:	\$55,000
TOTAL	\$75,000
Expenses:	\$49,750
Difference	+ \$25,250

COMMENTS: As indicated in the interim progress report, a list of eight species were identified as having a high relative risk for invasion in the Canadian Arctic: bay barnacle, orange sheath tunicate, green crab, Japanese skeleton shrimp, periwinkle, coffin box bryozoan, soft-shelled clam and red king crab. Results of species distribution modelling under current environmental conditions have shown that three out of eight of these high risk invasive species have suitable habitat conditions in the Hudson Complex and Beaufort Sea regions of the Canadian Arctic. Written and oral updates on the project were provided to community representatives at the Qikiqtaaluk Wildlife Board Annual General Meeting. As indicated in the interim financial report, the remaining funds will likely be spent before March 31st after paying out final contracts, invoices and travel claims.

RECOMMENDATIONS:

1. NWMB Wildlife staff do not have any recommendations for this reporting period. The project leader has met all of the reporting requirements to date. A final financial report will be required by June 30th 2015 as per the NWRT policy. Project results will be captured in the final project report which is required by September 30th, 2015.

CONSULTATIONS: Danica Crystal, Wildlife Management Biologist, NWMB

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