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# Nunavummi Qaujisaqtulirijikkut / Nunavut Research Institute

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## SCIENTIFIC RESEARCH LICENSE

LICENSE # 02 137 12R-M

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AFFILIATION: York University

TITLE: Hydrology and Resilience of High Arctic Wetlands: Submerging vs. Emerging  
Ecosystems

### OBJECTIVES OF RESEARCH:

The overall purpose of this study is to improve understanding of the seasonal hydrology of "sinking" or submerging coastal wetlands located on Melville Island and to understand how they are responding to rising sea level, wave action (both tidal and storm surges) and erosion from thick multi-year ice which moves through the Melville-Bathurst Island corridor. Ongoing wetland studies have been ongoing at Polar Bear Pass, Bathurst Island since about 2007. I would like to compare the hydrology of these wetlands to the wetland ecosystem at Polar Bear Pass (an emerging site-rising), where snowcover, pond storage and runoff studies will continue for the same interval. The new site at Alison Inlet (studying snowcover & runoff) is another example of an emerging extensive wetland site on Bathurst Island.

### TERMS & CONDITIONS:

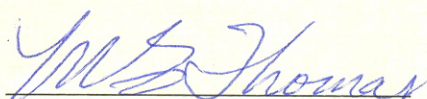
The holder of the licence will be bound by the terms and conditions of the Nunavut Impact Review Board Screening Decision Report (05YN072) and by the Department of Culture, Language, Elders and Youth archeological sites terms and conditions. These terms and conditions will form part of this licence.

### DATA COLLECTION IN NU:

DATES: May 15, 2012-July 15, 2012

LOCATION: Ellesmere Island, Somerset Island, Bathurst Island

Scientific Research License 02 137 12R-M expires on December 31, 2012  
Issued at Iqaluit, NU on November 08, 2011

  
Mary Ellen Thomas  
Science Advisor

