



NIRB File No.: 08YN065

June 16, 2008

Scott Lamoureux  
Dept. of Geography, Queens University  
Kingston, ON  
K7L 3N6

Via email: [scott.lamoureux@queensu.ca](mailto:scott.lamoureux@queensu.ca)

Re: **Notice of Part 4 Screening for Scott Lamoureux's "Reconstructing climate and river fluctuations at Pelly Bay, Nunavut" project proposal**

Dear Scott Lamoureux:

On June 4, 2008 the Nunavut Impact Review Board (NIRB or Board) received a request from the Nunavut Research Institute (NRI) to screen your project proposal entitled "Reconstructing climate and river fluctuations at Pelly Bay, Nunavut". The NIRB has assigned this project proposal file number **08YN065**.

The proposed project is located in Pelly Bay, near the community of Kugaaruk, Nunavut. The objective of this project is to investigate past climate changes and river fluctuations using sediment cores collected from Pelly Bay and lakes in the Kugaaruk region. The majority of this work will be completed from boats or on ice. Throughout the research process, communication will be maintained with the local Hunters' and Trappers' Organization (HTO), as well as with the local school. The final results of this work will result in scientific publications and a non-scientific, descriptive publication for interested community members. The proposed timeframe will be from 2008-2010.

The proposed project activities include:

- Measure water characteristics (temperature, sediment amount)
- Collect sediment cores from Pelly Bay and nearby lakes
- Record temperatures using lines equipped with sensors
- Install funnel traps and other instruments to collect sediment during the study period
- associated boat travel and potentially ATV or snowmobile travel to access lakes

All documents received and pertaining to this project proposal can be obtained from NIRB's ftp site at <http://ftp.nirb.ca/SCREENINGS/ACTIVE%20SCREENINGS/08YN065-Scott%20Lamoureux/> including:

- NRI Application
- Non technical Project Proposal summary in Inuinnaqtun
- Non technical Project Proposal summary in English
- Non technical Project Proposal summary in Inuktitut
- Location Maps

Pursuant to Part 4, Article 12 of the Nunavut Land Claims Agreement (NLCA), NIRB shall proceed to screen this project proposal. The NIRB may request additional information at any time during the process. NIRB will copy you on screening process related correspondence and upload related documents to the above ftp site for public access.

Be advised that NIRB is copying interested Parties and municipalities most affected by your project proposal. Interested persons are encouraged to comment directly to NIRB by **June 25, 2008**. Please note that proposed project specific terms and conditions, should the project proceed, have been attached for consideration and comments.

NIRB would like Parties to provide comments regarding:

- Whether the project proposal is likely to arouse significant public concern; and if so, why;
- Whether the project proposal is likely to cause significant adverse eco-systemic and socio-economic effects; and if so, why;
- Whether the project is of type where the potential adverse effects are highly predictable and mitigable with known technology, (please provide any recommended mitigation measures); and any matter of importance to the Party related to the project proposal.

Please send your comments to the attention of NIRB's Manager of Environmental Administration Leslie Payette by email at [lpayette@nirb.ca](mailto:lpayette@nirb.ca) or via fax at **(867) 983-2594**.

If you have any questions or concerns, feel free to contact the NIRB's Assistant Technical Advisor, Paul Mikiyungiak at (867) 983- 4619 or [pmikiyungiak@nirb.ca](mailto:pmikiyungiak@nirb.ca).

Sincerely,

<original signed by>

Paul Mikiyungiak  
Assistant Technical Advisor

Cc: Distribution List  
Andrew Dunford, NRI ([adunford@nac.nu.ca](mailto:adunford@nac.nu.ca))  
Kasey Kathan, Queens University ([6kmkk@queensu.ca](mailto:6kmkk@queensu.ca))

Attachments:  
Comment Form

## **Proposed Project-specific Terms and Conditions**

The following is a list of project-specific terms and conditions which, should the project proceed, may be recommended to be attached to any approval.

### **General**

1. Scott Lamoureux (the Proponent) shall maintain a copy of the Project Terms and Conditions at the site of operation at all times.
2. The Proponent shall forward copies of all permits obtained and required for this project to the Nunavut Impact Review Board (NIRB) prior to the commencement of the project.
3. The NIRB shall be notified of any changes in operating plans or conditions associated with the project prior to any such change.
4. The Proponent shall operate in accordance with all commitments stated in correspondence provided to NIRB (NRI License Application, received June 4, 2008).
5. The Proponent shall operate the site in accordance with all applicable Acts, Regulations and Guidelines.

### **Water**

6. The Proponent shall ensure that all water intake hoses are equipped with a screen with an appropriate mesh size to ensure that there is no entrapment of fish.
7. The Proponent shall not use water, including constructing or disturbing any stream, lakebed or the banks of any definable water course unless approved by the Nunavut Water Board.

### **Waste**

8. The Proponent shall keep all garbage and debris in bags placed in a covered metal container or equivalent until disposed of. All wastes should be kept inaccessible to wildlife at all times.

### **Wildlife**

9. The Proponent shall ensure that there is no damage to wildlife habitat in conducting this operation.
10. The Proponent shall not harass wildlife. This includes persistently worrying or chasing animals, or disturbing large groups of animals. Deliberate feeding of any wildlife is absolutely prohibited. The Proponent shall not hunt or fish, unless proper Nunavut authorizations have been acquired.
11. The Proponent shall avoid raptor nesting sites and concentrations of nesting or moulting waterfowl by aircraft/helicopter at all times and ensure that there is minimal disturbance to any nesting birds, migratory birds and wildlife in the area.
12. If nests containing eggs or young are encountered, the proponent should avoid these areas until nesting is complete and the young have left the nest.
13. The Proponent shall cease activities that may interfere with migration or calving of caribou or muskox, until the caribou or muskox have passed or left the area.

### **Physical Environment**

14. The Proponent shall not move any equipment or vehicles unless the ground surface is in a state capable of fully supporting the equipment or vehicles without rutting or gouging. The Proponent shall suspend overland travel of equipment or vehicles if rutting occurs.
15. The Proponent shall ensure that the land use area is kept clean and tidy at all times.

## Other

16. The Proponent should, to the extent possible, hire local people and to consult with local residents regarding their activities in the region.

## Regulatory Requirements

In addition to the proposed project specific terms and conditions, Scott Lamoureux (the Proponent) is advised, should the project proceed, that the following legislation may apply to the project:

1. The *Fisheries Act* (<http://laws.justice.gc.ca/en/showtdm/cs/F-14//en>). Section 35(1) of the *Fisheries Act* specifies that unless authorized by federal regulation, no person shall carry on any work or undertaking that results in the harmful alteration, disruption or destruction of fish habitat. Section 36(3) of the *Fisheries Act* specifies that unless authorized by federal regulation, no person shall deposit or permit the deposit of a deleterious substance in any type in water frequented by fish or in any place under any conditions where the deleterious substance may enter such a water body.
2. The *Nunavut Waters and Nunavut Surface Rights Tribunal Act* which states that “no person shall use, or permit the use of, waters in Nunavut except in accordance with the conditions of a licence,” and “no person shall deposit or permit the deposit of waste (a) in the waters in Nunavut; or (b) in any other place in Nunavut under conditions in which the waste, or any other waste that results from the deposit of that waste, may enter waters in Nunavut” (<http://www.canlii.org/ca/sta/n-28.8/whole.html>).
3. The *Migratory Birds Convention Act* and *Migratory Birds Regulations* which state that no person disturb or destroy the nests or eggs of migratory birds, and that no person shall deposit or permit to be deposited oil, oil wastes or any other substance harmful to migratory birds in any waters or any area frequented by migratory birds (<http://laws.justice.gc.ca/en/showtdm/cs/M-7.01>)
4. The *Species at Risk Act* (<http://laws.justice.gc.ca/en/showtdm/cs/S-15.3>) which states that no person shall kill, harm, harass, capture or take an individual of a wildlife species that is listed as an extirpated species, an endangered species or a threatened species; and no person shall damage or destroy the residence of one or more individuals of a wildlife species that is listed. The Proponent should consult the Species at Risk Public Registry (<http://www.sararegistry.gc.ca/>) to identify any Species at Risk within the project location and shall develop monitoring plans. Attached in **Appendix A** is a list of Species at Risk in Nunavut.
5. The *Nunavut Wildlife Act* which contains provisions to protect and conserve wildlife and wildlife habitat, including specific protection measures for wildlife habitat and species at risk.
6. *Nunavut Act* (<http://laws.justice.gc.ca/en/showtdm/cs/N-28.6>) which requires that no person alter or disturb any archaeological or palaeontological sites in Nunavut unless permission is first granted through the permitting process. If any archaeological or palaeontological sites are found they should remain undisturbed and their location should be reported to the Government of Nunavut Department of Culture, Language, Elders and Youth. The Proponent must comply with the proposed terms and conditions listed in the attached **Appendix B**.
7. The use of water, disposal of wastewater or waste as a result of the project proposal activities require a Nunavut Water Board license and the project cannot proceed until this is obtained (<http://www.nunavutwaterboard.org/en/legislation>).

## Appendix A

### Species at Risk in Nunavut

This list includes species listed on one of the Schedules of SARA (*Species at Risk Act*) and under consideration for listing on Schedule 1 of SARA. These species have been designated as at risk by COSEWIC (Committee on the Status of Endangered Wildlife in Canada). This list may not include all species identified as at risk by the Territorial Government.

- Schedule 1 is the official legal list of Species at Risk for SARA. SARA applies to all species on Schedule 1. The term “listed” species refers to species on Schedule 1.
- Schedule 2 and 3 of SARA identify species that were designated at risk by the COSEWIC prior to October 1999 and must be reassessed using revised criteria before they can be considered for addition to Schedule 1.
- Some species identified at risk by COSEWIC are “pending” addition to Schedule 1 of SARA. These species are under consideration for addition to Schedule 1, subject to further consultation or assessment.

Schedules of SARA are amended on a regular basis so it is important to periodically check the SARA registry ([www.sararegistry.gc.ca](http://www.sararegistry.gc.ca)) to get the current status of a species.

Updated: **January 3, 2007**

Species at Risk	COSEWIC Designation	Schedule of SARA	Government Organization with Lead Management Responsibility <sup>1</sup>
Eskimo Curlew	Endangered	Schedule 1	EC
Ivory Gull	Endangered <sup>2</sup>	Schedule 1	EC
Peregrine Falcon (subspecies anatum)	Threatened	Schedule 1	Government of Nunavut
Ross's Gull	Threatened	Schedule 1	EC
Harlequin Duck (Eastern population)	Special Concern	Schedule 1	EC
Felt-leaf Willow	Special Concern	Schedule 1	Government of Nunavut
Peregrine Falcon (subspecies tundrius)	Special Concern	Schedule 3	Government of Nunavut
Short-eared Owl	Special Concern	Schedule 3	Government of Nunavut
Fourhorn Sculpin	Special Concern	Schedule 3	DFO
Peary Caribou	Endangered <sup>3</sup>	Pending	Government of Nunavut
Beluga Whale (Eastern Hudson Bay population)	Endangered	Pending	DFO
Beluga Whale (Cumberland Sound population)	Threatened	Pending	DFO
Beluga Whale (Western Hudson Bay population)	Special Concern	Pending	DFO
Beluga Whale	Special Concern	Pending	DFO

(Eastern High Arctic – Baffin Bay population)			
Bowhead Whale (Hudson Bay-Foxe Basin population)	Threatened <sup>4</sup>	Pending	DFO
Bowhead Whale (Davis Strait-Baffin Bay population)	Threatened <sup>4</sup>	Pending	DFO
Porsild's Bryum	Threatened	Pending	Government of Nunavut
Atlantic Walrus	Special Concern	Pending	DFO
Narwhal	Special Concern	Pending	DFO
Rusty Blackbird	Special Concern	Pending	Government of Nunavut
Barren-ground Caribou (Dolphin and Union population)	Special Concern <sup>3</sup>	Pending	Government of Nunavut
Grizzly Bear	Special Concern	Pending	Government of Nunavut
Polar Bear	Special Concern	Pending	Government of Nunavut
Wolverine (Western Population)	Special Concern	Pending	Government of Nunavut

<sup>1</sup> Environment Canada has a national role to play in the conservation and recovery of Species at Risk in Canada, as well as responsibility for management of birds described in the Migratory Birds Convention Act (MBCA). Day-to-day management of terrestrial species not covered in the MBCA is the responsibility of the Territorial Government. Populations that exist in National Parks are also managed under the authority of the Parks Canada Agency. EC = Environment Canada, DFO = Department of Fisheries and Oceans

<sup>2</sup> Designated as Endangered by COSEWIC in April 2006 and it is expected that the category of concern in SARA will also be changed from Special Concern to Endangered.

<sup>3</sup> Peary Caribou was split into three separate populations in 1991: Banks Island (Endangered), High Arctic (Endangered) and Low Arctic (Threatened) populations. The Low Arctic population also included the Barren-ground Caribou - Dolphin and Union population. In May 2004 all three population designations were de-activated, and the Peary Caribou, Rangifer tarandus pearyi, was assessed separately from the Barren-ground Caribou (Dolphin and Union population), Rangifer tarandus groenlandicus. The subspecies pearyi is composed of a portion of the former "Low Arctic population" and all of the former "High Arctic" and "Banks Island" populations, and it was designated Endangered in May 2004. Although SARA lists Peary Caribou on Schedule 2 as three separate populations, the most current designation is the COSEWIC designation of the subspecies pearyi as Endangered.

<sup>4</sup> The "Eastern and Western Arctic populations" of Bowhead Whale were given a single designation of Endangered in April 1980 by COSEWIC. These were split into two populations to allow separate designations in April 1986. The Eastern population was not re-evaluated in April 1986, but retained the Endangered status of the original "Eastern and Western Arctic populations". The Eastern Arctic population was further split into two populations (Hudson Bay-Foxe Basin population and Davis Strait-Baffin Bay population) in May 2005, and both these populations were designated as Threatened. Both these populations are under consideration for addition to Schedule 1. Although SARA lists the Eastern Arctic population as Endangered (Schedule 2), the most current designation is the COSEWIC designations of the Hudson Bay-Foxe Basin and Davis Strait-Baffin Bay populations as Threatened.

**Appendix B**  
Archaeological and Palaeontological Resources Terms and Conditions for Land Use Permit Holders



**BACKGROUND: Archaeology**

*As stated in Article 33 of the Nunavut Land Claims Agreement:*

The archaeological record of the Inuit of Nunavut is a record of Inuit use and occupancy of lands and resources through time. The evidence associated with their use and occupancy represents a cultural, historical and ethnographic heritage of Inuit society and, as such, Government recognizes that Inuit have a special relationship with such evidence, which shall be expressed in terms of special rights and responsibilities. [33.2.1]

The archaeological record of Nunavut is of spiritual, cultural, religious and educational importance to Inuit. Accordingly, the identification, protection and conservation of archaeological sites and specimens and the interpretation of the archaeological record is of primary importance to Inuit and their involvement is both desirable and necessary. [33.2.2]

In recognition of the cultural, spiritual and religious importance of certain areas in Nunavut to Inuit, Inuit have special rights and interests in these areas as defined by Article 33 of the Nunavut Land Claims Agreement. [33.2.5]

**BACKGROUND: Palaeontology**

Under the Nunavut Act<sup>1</sup>, the federal Government can make regulations for the protection, care and preservation of palaeontological sites and specimens in Nunavut. Under the *Nunavut Archaeological and Palaeontological Sites Regulations*<sup>2</sup>, it is illegal to alter or disturb any palaeontological site in Nunavut unless permission is first granted through the permitting process.

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<sup>1</sup> s. 51(1)

<sup>2</sup> P.C. 2001-1111 14 June, 2001

## Definitions

As defined in the *Nunavut Archaeological and Palaeontological Sites Regulations*, the following definitions apply:

“archaeological site” means a place where an archaeological artifact is found.

“archaeological artifact” means any tangible evidence of human activity that is more than 50 years old and in respect of which an unbroken chain of possession or regular pattern of usage cannot be demonstrated, and includes a Denesuline archaeological specimen referred to in section 40.4.9 of the Nunavut Land Claims Agreement.

“palaeontological site” means a site where a fossil is found.

“fossil” includes:

- (a) natural casts
- (b) preserved tracks, coprolites and plant remains; and
- (c) the preserved shells and exoskeletons of invertebrates and the eggs, teeth and bones of vertebrates.

## Terms and Conditions

- 1) The permittee shall not operate any vehicle over a known or suspected archaeological or palaeontological site.
- 2) The permittee shall not remove, disturb, or displace any archaeological artifact or site, or any fossil or palaeontological site.
- 3) The permittee shall immediately contact the Department of Culture, Language, Elders and Youth (867) 934-2046 or (867) 975-5500 or 1 (866) 934-2035 should an archaeological site or specimen, or a palaeontological site or fossil be encountered or disturbed by any land use activity.
- 4) The permittee shall immediately cease any activity that disturbs an archaeological or palaeontological site encountered during the course of a land use operation, until permitted to proceed with the authorization of the Department of Culture, Language, Elders and Youth, Government of Nunavut.
- 5) The permittee shall follow the direction of the Department of Culture, Language, Elders and Youth and DIAND in restoring disturbed archaeological or palaeontological sites to an acceptable condition.
- 6) The permittee shall provide all information requested by the Department of Culture, Language, Elders and Youth concerning all archaeological sites or artifacts and all palaeontological sites and fossils encountered in the course of any land use activity.
- 7) The permittee shall make best efforts to ensure that all persons working under authority of the permit are aware of these conditions concerning archaeological sites and artifacts, and palaeontological sites and fossils.



- 8) The permittee shall avoid the known archaeological and/or palaeontological sites listed in Attachment 1.
- 9) The permittee shall have an archaeologist or palaeontologist perform the following functions, as required by the Department of Culture, Language, Elders and Youth:
  - a. survey
  - b. inventory and documentation of the archaeological or palaeontological resources of the land use area
  - c. assessment of potential for damage to archaeological or palaeontological sites
  - d. mitigation
  - e. marking boundaries of archaeological or palaeontological sites
  - f. site restoration

The Department of Culture, Language, Elders and Youth shall authorize by way of a Nunavut Archaeologist Permit or a Nunavut Palaeontologist Permit, all procedures subsumed under the above operations.