



Environment
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NIRB File: 14YN040

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Nunavut Impact Review Board
P.O. Box 1360
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via: Info@nirb.ca

RE: Notice of Part 4 Screening for the University of Laval's "Green Edge" Project Proposal

Environment Canada (EC) has reviewed the information submitted to the Nunavut Impact Review Board (NIRB) regarding the above-mentioned project proposal and is submitting comments on mitigation measures as well as other matters of importance to the project proposal as requested by NIRB. EC's specialist advice is provided pursuant to the *Canadian Environmental Protection Act 1999*, the pollution prevention provisions of the *Fisheries Act*, the *Migratory Birds Convention Act* (MBCA), and the *Species at Risk Act* (SARA).

For further clarification on any aspect of the submission, please contact me at (867) 975-4983 or Erika.Marteleira@ec.gc.ca.

Sincerely,

Erika Marteleira
Senior Environmental Assessment Coordinator

Attached – EC's Comments

cc: Dave Fox, A/Head, Environmental Assessment North (NT & NU), EPOD-PNR, EC



Environment Canada's Comments

General

1. Subsection 36(3) of the *Fisheries Act* specifies that, unless authorized by federal regulation, no person shall deposit or permit the deposit of deleterious substances of any type in water frequented by fish, or in any place under any conditions where the deleterious substance, or any other deleterious substance that results from the deposit of the deleterious substance, may enter any such water. In the definition of deleterious substance Subsection 34(1) of the *Fisheries Act* includes "any water that contains a substance in such quantity or concentration, or that has been so treated, processed or changed, by heat or other means, from a natural state that it would, if added to any other water, degrade or alter or form part of a process of degradation or alteration of the quality of that water so that it is rendered or is likely to be rendered deleterious to fish or fish habitat or to the use by man of fish that frequent that water." Subsection 36(3) makes no allowance for a mixing or dilution zone at the point of deposit.

Spills

2. Please note that according to the AANDC's "Guidelines for Spill Contingency Planning" (April 2007), available at <http://www.aadnc-aandc.gc.ca/eng/1100100024236/1100100024253>, all releases of harmful substances, regardless of quantity are to be reported to the NWT / NU 24-hour Spill Line, (867) 920-8130 if the release is near or into a water body, is near or into a designated sensitive environment or sensitive wildlife habitat, poses imminent threat to human health or safety, poses imminent threat to a listed species at risk or its critical habitat, or is uncontrollable. The project proposal describes fuel transfers occurring on land-fast ice. EC offers the following comments for fuel transfer operations, both on ice and for all other fuel transfer operations:
 - Transfer operations should be attended by trained personnel at all times;
 - A dedicated area should be used for refuelling equipment with measures taken to ensure capture and containment of drips and potential spills;
 - The Proponent should not store any materials on the surface ice of lakes or streams, unless fuel is stored within a secondary containment system (fuel stored on plastic or metal trays able to contain 110% of the fuel stored); and
 - Secondary containment or a surface liner (drip pans, etc.) should be used when refuelling any equipment on site and should also be used at all fuel drum locations. Secondary containment should be of adequate size and volume to contain and hold fluids for the purpose of preventing spills. An appropriate spill kit with absorbent material should be located at all fuel storage and transfer sites and at drill sites.

Wildlife and Species at Risk

3. Environment Canada is responsible for implementing the *Migratory Birds Convention Act*, which provides for the protection of migratory birds through the *Migratory Birds Regulations*, and to develop and implement policies and regulations to ensure the protection of migratory birds, their eggs and their nests. Paragraph 6(a) of the *Migratory Bird Regulations* states that no one shall disturb or destroy the nests or eggs of migratory birds. Migratory birds, the nests of migratory birds and/or their eggs can be inadvertently harmed or disturbed as a result of many activities including but not limited



to clearing trees and other vegetation, draining or flooding land, or using fishing gear. The inadvertent harming, killing, disturbance or destruction of migratory birds, nests and eggs is known as **incidental take**. Incidental take, in addition to harming individual birds, nests or eggs, can have long-term consequences for migratory bird populations in Canada, especially through the cumulative effects of many different incidents.

If active nests are encountered during project activities, the nesting area should be avoided until nesting is complete (i.e., the young have naturally left the vicinity of the nest). For further information on how to protect migratory birds and their nests and eggs when planning or carrying out project activities, consult Environment Canada's Incidental Take web page and the fact sheet "**Planning Ahead to Reduce the Risk of Detrimental Effects to Migratory Birds, and their Nests and Eggs**" at: www.ec.gc.ca/paom-itmb/.

4. Environment Canada recommends that food, domestic wastes, and petroleum-based chemicals (e.g., greases, gasoline, glycol-based antifreeze) be made inaccessible to wildlife at all times. Such items can attract predators of migratory birds such as foxes, ravens, gulls, and bears. Although these animals may initially be attracted to the novel food sources, they often will also eat eggs and young birds in the area. These predators can have significant negative effects on the local bird populations.

Section 5.1 of the *Migratory Birds Convention Act* prohibits persons from depositing substances harmful to migratory birds in waters or areas frequented by migratory birds or in a place from which the substance may enter such waters or such an area.

5. The following comments are pursuant to the *Species at Risk Act* (SARA). The *Species at Risk Act* is directed towards preventing wildlife species from becoming extinct or lost from the wild, helping in the recovery of species that are at risk as a result of human activities, and promoting stewardship. The killing, harming or harassing of listed species; the damage and destruction of their residences; and the destruction of critical habitat is prohibited under SARA. The prohibitions apply to all Threatened, Endangered and Extirpated species listed on Schedule 1 of SARA on federal lands and to Migratory Birds (as defined under the *Migratory Birds Convention Act*) and aquatic species (as defined under the *Fisheries Act*) everywhere they are found.

Subsection 79 (2) of SARA, states that during an assessment of a project, the adverse effects of the project on listed wildlife species and their critical habitat must be identified, that measures are taken to avoid or lessen those effects, and that the effects need to be monitored. This subsection applies to all species listed on Schedule 1 of SARA. However, as a matter of best practice, Environment Canada suggests that similar consideration be given to species on other Schedules of SARA and under consideration for listing on SARA, including those designated as "at risk" by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC).

The Table below lists species that may be encountered in the project area that have been designated as at risk by COSEWIC as well as their current listing on Schedule 1 of SARA. This list may not include all species identified as at risk by the Government of Nunavut. It does not include aquatic species, which are under the responsibility of Fisheries and Oceans Canada.



Table 1. Terrestrial Species at Risk potentially occurring within the project area.

Terrestrial Species at Risk potentially within project area ¹	SARA Status	Government Organization with Primary Management Responsibility ²
Polar Bear	Schedule 1, Special Concern	GN
Ross's Gull	Schedule 1, Threatened	EC
Ivory Gull	Schedule 1, Endangered	EC

¹ Fisheries and Oceans Canada has responsibility for aquatic species.

² Environment Canada (EC) 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 MBCA. Day-to-day management of terrestrial species not covered in the MBCA is the responsibility of the Government of Nunavut. Populations that exist in National Parks are also managed under the authority of the Parks Canada Agency.

- For any Species at Risk that could be encountered or affected by the project, the proponent should note any potential adverse effects of the project to the species, its habitat, and/or its residence. All direct, indirect, and cumulative effects should be considered. Refer to species status reports and other information on the Species at Risk registry at <http://www.sararegistry.gc.ca> for information on specific species;
 - If Species at Risk are encountered or affected, the primary mitigation measure should be avoidance. The proponent should avoid contact with or disturbance to each species, its habitat and/or its residence;
 - Monitoring should be undertaken by the proponent to determine the effectiveness of mitigation and/or identify where further mitigation is required. As a minimum, this monitoring should include recording the locations and dates of any observations of Species at Risk, behaviour or actions taken by the animals when project activities were encountered, and any actions taken by the proponent to avoid contact or disturbance to the species, its habitat, and/or its residence. This information should be submitted to the appropriate regulators and organizations with management responsibility for that species, as requested;
 - The Government of Nunavut should be consulted to identify other appropriate mitigation and/or monitoring measures to minimize project effects to species under their management responsibility
 - Mitigation and monitoring measures must be taken in a way that is consistent with applicable recovery strategies and action/management plans;
6. The Canadian Wildlife Service (CWS) of Environment Canada is interested in observations of bird, especially observations of birds identified as Species at Risk (e.g., Ivory Gull, Ross's Gull, Red Knot, etc.) or of species occurring outside their known ranges. Since 1995 CWS has been collecting observations on northern birds through its Northwest Territories and Nunavut Bird Survey Checklist program. This program relied on the assistance of hundreds of volunteers to submit their bird observations throughout



the territories. Over the past 2 decades CWS has collected >100,000 observations of over 20 million individual birds. The checklist program is the first to provide wide-scale information on northern bird populations. In 2012, CWS integrated the Northwest Territories and Nunavut Bird Checklist Survey program into eBird and we plan to use eBird as the main database for northern bird observations going forward. Given that there are few observations for remote locations in the Northwest Territories and Nunavut, especially in the eBird database, it would be invaluable for project location data to be included.

To submit data to eBird, an account must be created. Visit www.eBird.org and register as a new user. If you have any questions about the program or uploading your data to eBird, contact the NWT/Nunavut Bird Checklist program at NWTchecklist@ec.gc.ca.

7. Implementation of these measures may help to reduce or eliminate some effects of the project on migratory birds and Species at Risk, but will not necessarily ensure that the proponent remains in compliance with the *Migratory Birds Convention Act*, *Migratory Birds Regulations*, and the *Species at Risk Act*. The proponent must ensure they remain in compliance during all phases and in all undertakings related to the project.

