

NIRB 20YN007: CIRNAC Comment Responses

Whether the Project is of a type where the potential adverse effects are highly predictable and mitigable with known technology, (please provide any recommended mitigation measures);

CIRNAC is of the view that the potential impacts of the proposed Project can be mitigated with known practices or technology.

Some common practices include:

- Waste to be kept inaccessible to wildlife at all times; and,
- Food particles should be removed from grey water to the extent possible before disposal (e.g., install filters on kitchen drains).

We carry our food items in coolers and lockable containers to ensure wildlife cannot access our food. To ensure that wildlife cannot access our wastes, we place our solid, non-burnable waste in garbage bags then store them inside of the coolers and containers to be returned to town for proper disposal. While in a camp, the coolers are kept together within a tent.

Since our campsites are temporary and crew size is relatively small (6-8 people), we will be cooking on one or two Coleman camping stoves and cleaning dishes in a plastic wash basin. We are able to use a sieve to strain the food wastes from cooking and cleaning dishes to be incinerated. Water from the dishes will be deposited into a sump away from water sources and will be informed by the Inuit crew members who are knowledgeable about the islands on which we will camp.

We are careful to ensure that no wastes, materials or equipment are left behind on surveyed islands and camp areas. We try to ensure that when we leave the campsites, they are left the way they were prior to our arrival.

Any matter of importance to the Party related to the Project proposal;

Identification of Environmental Impacts Table

CIRNAC notes that the Proponent has not indicated in the 'Identification of Environmental Impacts Table' any potential impacts the Project's camp based operation activities may have on the following components:

- Sediment and soil quality;
- Vegetation; and,
- Birds, including habitat and migration patterns.

CIRNAC recommends that the Proponent provide rationale for leaving these sections empty, given that the Proponent intends to store fuel on land.

Our impacts would be limited to the areas around our tents and walking paths over a period of 1-2 weeks. Our camps on this project will be mobile, so their impacts on a single site would consequently be for short time periods only. We anticipate that our camping activities may compact some of the soil and vegetation. It is possible that our presence may also result in birds avoiding the area for foraging while we are there (1 week).

We thank CIRNAC for pointing out the storage of fuel on the land as having possible consequences as it had slipped our notice. We have fortunately never experienced a fuel spill in any of our camps to date and hope that we will not into the future. Boat fuel will be kept in the

boats. We will therefore have small amounts of fuel stored on land at any one time and we aim to keep our fuel away from both water sources and vegetation to mitigate the potential impacts should a spill occur. To prevent a spill, we also form a berm around the fuel to ensure that the containers are kept upright, and to contain any potential spill should one occur.

In the event that a fuel spill occurs we have an emergency spill kit in camp and a Spill Response Plan protocol that is carried with us and reviewed by the field team as part of our training of staff prior to leaving town to begin work. Should there be a spill it ought to be quite contained by the berm and relatively small given we are filling fuel containers to support boating and cooking on camp stoves to support 1-2 weeks worth of work only. We will refuel in town prior to moving on to a new campsite to reduce the amount of fuel needed to be kept on boats or in camp. Importantly, all gasoline will be stored in newly purchased gasoline containers.

Using the emergency spill kit and following the Spill Response Protocol, a spill will be absorbed quickly to mitigate possible impacts on sediment and soil quality. Since we will store the fuel away from vegetation, we anticipate that a potential spill would have no influence on vegetation. Finally, due to the small amount of fuel we would keep on site, we anticipate we would be able to clean up the entire spill with the contents of our spill kit.

Spill Reporting Form Website Reference

CIRNAC notes that, in the Spill Response Plan, the 'General Actions' section references <http://www.nunavutwaterboard.org> while referring to the Nunavut Spill Report Form. CIRNAC recommends that the Proponent update the link to the spill response website, <https://www.gov.nu.ca/environment/documents/spill-response>, where the Nunavut Spill Report Form can be found.

We have made this change to our Spill Response Plan and attached the updated version with this response letter for verification.

Interactions Summary

The 'Community Involvement and Regional Benefits' section of the Project Application indicates the Proponent was in communication with the Sanikiluaq Hunters and Trappers Association on two occasions, a three day meeting commencing January 14, 2020 and on February 12, 2020. No details are provided on what was discussed during these interactions in terms of community involvement and regional benefits.

CIRNAC recommends that the Proponent provide a brief written summary of its interactions to date with interested parties from the community of Sanikiluaq, including the Sanikiluaq Hunters and Trappers Association. This summary should describe meeting dates, means of interaction (e.g., telephone call, email correspondence, in-person, etc.), discussion topics, and any agreed upon next steps.

We can confirm that we have been in communication with the Sanikiluaq Hunters and Trappers Association on two occasions. First was a three day meeting commencing January 14, 2020. This was an in person meeting with Sam Richard (Carleton University, MSc student), Grant Gilchrist (Environment Canada Research Scientist), Joel Heath (Arctic Eider Society), and 12 members of the community including the Hunters and Trappers Association and 4 additional local guides (and members of the Rangers).

At these meetings, we discussed the team size, and whether the surveys could be conducted by one team or two. It was decided two teams would be required to operate simultaneously in different regions of the large island archipelago. We also discussed and agreed that most of the field crews would be hired from the community of Sanikiluaq itself (with a ratio of 5 northerners to 1 southerner). We addressed dates of the field season to time the team's field activities to the nesting ecology of eiders and when sea ice breakup would permit safe boating (third week of June field preparation in town, last week of June and early July field work). We asked community leaders and members of the Hunters and Trappers Association to set pay rates for 'boat captains' and 'general field technicians'. We also decided that the two field teams would not hire 'camp cooks', but instead that the teams would share responsibility and cook their own meals while in the field.

Second was an email communication between Holly Hennin (Grant Gilchrist's technician) and Lucassie Arragutainaq, an HTA Chairperson, on February 12, 2020. As part of the Canadian Wildlife Service permitting process for this project, CWS wanted proof of community-based support for the project. We reached out to Arragutainaq to inquire if the Sanikiluaq HTA would provide their support for the project in our permit application. Indeed, the HTA confirmed in writing that they were in support of this project, which was signed off on behalf of Arragutainaq. We have attached the form in which they indicate the support of this project with this response letter.

A second face-to-face meeting was planned for May 2020 in Sanikiluaq, however the meeting was cancelled due to the COVID-19 epidemic. During this meeting, the people to be hired were to be selected and the exact travel routes and camping locations would have been decided upon by the boat captains. The cancellation of the field season was agreed upon through email exchanges and phone conversations throughout March of 2020. These occurred between Gilchrist, Joel Heath, Lucassie Arragutainaq (HTA Chairperson with consultation of the HTA), and the boat captains. We hope to be able to conduct this field research in the summer of 2021.

Next steps by the entire team during the summer of 2020 will include gathering all historical data of island surveys and transferring all historical map information into a computer archived GIS and GPS format in preparation for the field season in 2021. This process will also contribute to more rapid data analysis as well as data archiving by both the community and Environment and Climate Change Canada (a shared priority of the entire team). Environment and Climate Change Canada has volunteered to lead this data archiving project (Gilchrist, Richard). Ongoing communication is occurring through email and phone conversations.

The entire team plans to meet again in person in Sanikiluaq in the fall of 2020 if community health issues regarding the COVID-19 pandemic permit. The decision to meet will be made by the community. If they decide a meeting at that time will not be appropriate, the team will aim to meet in early 2021 instead.

The strength of this project is generated by the long-standing, collaborative working relationships that exist between Environment and Climate Change Canada scientists, members of the Sanikiluaq community, the Sanikiluaq HTA, and the Arctic Eider Society. This team has worked together collaboratively since 2000.

Communications with Land Users

CIRNAC recommends that the Proponent maintain open communication with local land users from Sanikiluaq, as well as the Qikiqtani Inuit Association and other interested parties to ensure they are familiar with planned activities and their interests are respected (e.g., the protection of wildlife resources). In particular, the following points should be explored to promote the participation of local Inuit in Project activities:

- Incorporation Inuit knowledge or Inuit Qaujimajatuqangit in the Project design;
- Briefing community members on planned activities;
- Briefing community members on monitoring results; and
- Training and employment opportunities for community members.

A key priority of this project is to ensure that research objectives align with community-identified priorities (see below), and involve community members in the research itself. The most important line of communication will be with the Hunters and Trappers Association of Sanikiluaq, and with Lucassie Arragutainaq as its administrative lead. As outlined in our Interactions Summary response, the HTA's input and participation is critical throughout the duration of this project. This includes informing survey areas through mapping exercises, the hiring of community members to participate in the research, reporting results back to the community, and archiving the new and historical data in the community. Due to the COVID-19 outbreak, field activities have been postponed until the summer of 2021 through strong mutual agreement, and the Qikiqtani Inuit Association has recently suggested we wait to submit our application for access to Inuit Owned Lands until next year when research activities resume (2021). Through the application and reporting process with the QIA, we will be able to ensure that they are informed of our research activities and that we respect their interests.

The goals of this project are to survey breeding colonies of common eiders nesting in the Belcher and Sleeper Islands of Hudson Bay, and at the same time census for other breeding bird species. The results collected will be used to 1) inform the development of a Marine Protected Area (an ongoing community-identified priority), and 2) compare population size and distribution of common eiders relative to historical surveys conducted in the region. For that reason, we will continue to use the same, standardized survey methods used in previous island survey programs, however the islands included in the surveys will be a combination of the islands historically surveyed for consistent comparisons, as well as islands identified by community members as important nesting sites for common eiders, and randomly-selected islands. The randomly selected islands will be surveyed to help assess whether eiders are moving nesting locations to previously unreported locations. By combining historically-identified islands (discovered by previous surveys), with community-identified islands, we will be able to produce a thorough census of the common eider population in the region as well as general idea of the other species breeding in the region.

Since we aim to align research objectives with community priorities, briefing community members of planned activities is a key component to our ongoing research program. This will be a particularly important component of this project because the community would like the information generated from it to help inform the planning of a Marine Protected Area. We have outlined the interactions we have had with the community to date above, but briefly, while Grant Gilchrist was in Sanikiluaq in January, he was able to discuss the project methods

(hiring, survey protocols, boating, camping), gather community input on islands surveyed previously, initially determine which islands the community identify as a new priority to survey, and introduce the Master's student (Sam Richard) who will help organize the field project.

Communication will continue leading up to field work to identify any further islands the community prioritizes for surveys, especially given the delay in field work until the summer of 2021 due to the COVID-19 outbreak.

Once we are able to conduct the field work, we will compile a brief report following the field season which will be sent to the HTA to distribute. This will detail what work was done and some preliminary findings translated in both English and Inuktitut. Once the data is analysed and reports written, Gilchrist and Richard will return to Sanikiluaq to present the final results to the community and share any data they may want for informing the Marine Protected Area, again translated in both English and Inuktitut.

For training and employment opportunities, we will hire 4 boat captains (including rentals for their boats), and 4 captain's assistants (a total of 4-6 community members) for this project. This will establish two survey teams that will operate at the same time in the 'south' and the 'north' of the Belcher Islands archipelago. The people to be hired will be selected by the Sanikiluaq HTA and boat captains, which will also be compensated for their work and organization of the community-based crew. Boat captains will be important members of the team for their boating expertise and knowledge of the land, waters and wildlife, and will help inform camp locations and set up (including sumps and water collection locations). Importantly, these community members will be members of the team both planning and conducting the surveys. To put these people into context, they are Canadian Rangers, participants on the community Emergency Response Teams, and are identified hunters.

Prior to the June 2021 start of the field work itself, we will have a fall meeting in 2020 (at the discretion of the community of Sanikiluaq given the COVID-19 pandemic) and a winter meeting in Sanikiluaq in early 2021. In June of 2021, we will have a meeting with the whole crew (two field survey teams), prior to departing to go over research methods, safety training, and any other important protocols to ensure all crew members are prepared and properly trained. Finally, our research will provide some economic input for the community generally because we will hire crew members, rent accommodation while in town, and purchase the food, fuel, gasoline and some gear locally. The northern staff salary budget is estimated to be \$60,000.