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EEOU MARINE REGION IMPACT REVIEW BOARD

COMMISSION DE LA RÉGION MARINE D'EEYOU

CHARGÉE DE L'EXAMEN DES RÉPERCUSSIONS

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Screening Decision Report

NMRIRB File Number: 125652

EMRIRB File Number: 0046-323-010

Date: August 23, 2023

Honourable Joanna Quassa

Minister, Department of Environment (DOE), Government of Nunavut

Minister, Nunavut Arctic College, Nunavut Research Institute

PO Box 1000 Station 200 Iqaluit, Nunavut, X0A 0H0

Via email: jquassa6@gov.nu.ca

CC:

Franz Seibel, franzseibel@lp.knet.ca

Jamal Shirley, Nunavut Research Institute, jamal.shirley@arcticcollege.ca

Mosha Cote, Nunavut Research Institute, mosha.cote@arcticcollege.ca

Jonathan Pynn, Government of Nunavut, Department of Environment, jpynn@gov.nu.ca

Jon Neely, Government of Nunavut, Department of Environment, jneely@gov.nu.ca

Barrie Ford, Chairperson, Nunavik Marine Region Impact Review Board (NMRIRB), bford@nmrirb.ca

Isaac Masty, Chairperson, Eeyou Marine Region Impact Review Board (EMRIRB),

isa_mastywhap@hotmail.ca

Pailin Chua-oon Rinfret, Director, Eeyou Marine Region Impact Review Board (EMRIRB),

prinfret@eeyoumarineregion.ca

Adam Lewis, Executive Director, Nunavik Marine Region Impact Review Board (NMRIRB),

alewis@nmrirb.ca

Tommy Palliser, Executive Director, Nunavik Marine Region Wildlife Board (NMRWB),

tpalliser@nmrwb.ca

Angela Coxon, Director, Eeyou Marine Region Wildlife Board (EMRWB), acoxon@eeyoumarineregion.ca

Re: Screening Decision for the proposed project “Keewaytinook Okimakanak Bathymetric Marine Fibre Optic Cable Survey”

The Nunavik Marine Region Impact Review Board (**NMRIRB**) is an Institution of Public Government established pursuant to Section 7.2.1 of the Nunavik Inuit Land Claims Agreement (NILCA). The NMRIRB has a mandate under Section 7.2.2 of the NILCA to screen project proposals in the Nunavik Marine Region (NMR) and indicate to the Territorial and Federal Ministers in charge of authorizing a project whether a review is required.

Likewise, the Eeyou Marine Region Impact Review Board (**EMRIRB**) is an Institution of Public Government established pursuant to Section 18.2.1 of the Eeyou Marine Region Land Claims Agreement (EMRLCA). The EMRIRB has a mandate under section 18.2.2 of the EMRLCA, to screen project proposals in the Eeyou Marine Region (EMR) and indicate to the Territorial and Federal Ministers in charge of authorizing a project whether a review is required.

The purpose of this letter is to communicate to you the NMRIRB and EMRIRB screening decision as required pursuant to Section 7.4.4 of the NILCA and Section 18.4.4 of the EMRLCA. As the proposed project is within the Joint Zone, the NMRIRB and EMRIRB have decided to issue a joint Screening Decision Report (SDR).

Following the NMRIRB’s and EMRIRB’s assessment of all materials provided by Franz Seibel (the “Proponent”), the NMRIRB and EMRIRB is recommending that a review of the “Keewaytinook Okimakanak Bathymetric Marine Fibre Optic Cable Survey” (the “Project” or “Project Proposal”) is not required pursuant to paragraph 7.4.2 of the NILCA and the paragraph 18.4.2 of the EMRLCA. Subject to the Proponent’s compliance with the terms and conditions set out below, the NMRIRB and EMRIRB is of the view that the Project Proposal is not likely to cause significant public concern and is unlikely to result in significant adverse environmental and social impacts.

The NMRIRB and EMRIRB therefore recommend that you, as the responsible Minister, accept this Screening Decision Report (SDR).

The following information provides the results of the NMRIRB’s and EMRIRB’s screening of the Project and its reasons for the decision. The Boards acknowledge that in addition to the terms and conditions set out below, licenses, authorizations and permits issued by responsible agencies may include additional terms and conditions, however the Boards have consulted with departmental staff and additional terms and conditions would not conflict with the terms and conditions set forth below.

OUTLINE OF THE SCREENING DECISION REPORT

1. Regulatory framework
2. Project referral
3. NMRRIB/EMRIRB Procedural History
4. Project overview
5. Proponent commitments
6. Public Comments
7. Assessment of the project proposal and decision
8. Recommended project specific terms and conditions
9. Monitoring and reporting requirements
10. Regulatory requirements
11. Conclusion

1. REGULATORY FRAMEWORK

NMRIRB

The primary objectives of the NMRIRB are set out in Section 7.2.5 of the Nunavik Inuit Land Claims Agreement (NILCA):

7.2.5 In carrying out its functions, the primary objectives of NMRIRB shall be at all times to protect and promote the existing and future well-being of the persons and communities resident in or using the NMR, and to protect the ecosystemic integrity of the NMR. NMRIRB shall take into account the well-being of residents of Canada outside the NMR.

The purpose of screening is provided for under Section 7.4.1 of the NILCA:

7.4.1 Upon receipt of a project proposal, NMRIRB shall screen the proposal to determine whether it has significant impact potential, and therefore whether it requires a review under Part 5 or 6.

To determine whether a review of a project is required, the NMRIRB is guided by the considerations as set out under Section 7.4.2 of the NILCA:

7.4.2 In screening a project proposal, NMRIRB shall be guided by the following principles:

- a) NMRIRB generally shall determine that such a review is required when, in its judgement,*
 - i) the project may have significant adverse effects on the ecosystem, wildlife habitat or Nunavik Inuit harvesting activities,*
 - ii) the project may have significant adverse socio-economic effects on northerners;*
 - iii) the project will cause significant public concern, or*
 - iv) the project involves technological innovations for which the effects are unknown;*

b) NMRIRB generally shall determine that such a review is not required when, in its judgment, the project is unlikely to arouse significant public concern and

i) the adverse ecosystemic and socio-economic effects are not likely to be significant, or

ii) the project is of a type where the potential adverse effects are highly predictable and mitigable with known technology; and

c) in determining whether a review is required or not NMRIRB shall give greater weight to the provisions of paragraph 7.4.2 (a).

As set out under Section 7.4.4 of the NILCA, upon conclusion of the screening process, the Board must provide a written report to the Minister(s):

7.4.4 Upon receipt of a project proposal, NMRIRB shall screen the proposal and indicate to the Minister in writing that:

a) the proposal may be processed without a review under Part 5 or 6; NMRIRB may recommend specific terms and conditions attached to any approval reflecting the primary objectives set out in section 7.2.5;

b) the proposal requires review under Part 5 or 6; NMRIRB shall identify particular issues or concerns which should be considered in such a review;

c) the proposal insufficiently developed to permit proper screening, and should be returned to the proponent for clarification; or

d) the potential adverse impacts of the proposal are so unacceptable that it should be modified or abandoned.

EMRIRB

The primary objectives of the EMRIRB are set out in Section 18.2.5 of the *Eeyou Marine Region Land Claims Agreement (EMRLCA)*:

EMRLCA, Section 18.2.5: In carrying out its functions, the primary objectives of the EMRIRB shall be at all times to protect and promote the existing and future well-being of the residents in the EMR, and of the coastal Cree communities of Eeyou Istchee and of their members and to protect the Ecosystemic integrity of the EMR. The EMRIRB shall take into account the well-being of residents of Canada outside the EMR.

The purpose of screening is provided for under Section 18.4.1 of the *EMRLCA*:

EMRLCA, Section 18.4.1: Upon receipt of a Project Proposal, the EMRIRB shall screen the Project Proposal to determine whether it has significant impact potential, and therefore whether it requires review.

To determine whether a review of a project is required, the EMRIRB is guided by the considerations as set out under Section 18.4.2 of the *EMRLCA*:

EMRLCA, Section 18.4.2: In screening a Project Proposal, the EMRIRB shall be guided by the following principles:

- a) the EMRIRB generally shall determine that such a review is required when, in its judgment:
 - i. the project may have significant adverse effects on the ecosystem, Wildlife habitat or Cree Harvesting activities;
 - ii. the project may have significant adverse socio-economic effects;
 - iii. the project will cause significant public concern; or
 - iv. the project involves technological innovations for which the effects are unknown;
- b) the EMRIRB generally shall determine that such a review is not required when, in its judgment, the project is unlikely to arouse significant public concern; and
 - i. the adverse Ecosystemic and socio-economic effects are not likely to be significant; or
 - ii. the project is of a type where the potential adverse effects are highly predictable and mitigable with known technology; and
- c) in determining whether a review is required or not the EMRIRB shall give greater weight to the provisions of paragraph 18.4.2(a).

As set out under Section 18.4.4 of the *EMRLCA*, upon conclusion of the screening process, the Board must provide its written report the Minister:

EMRLCA, Section 18.4.4: Upon receipt of a Project Proposal, the EMRIRB shall screen the Project Proposal and indicate to the Minister in writing and make public that:

- a) the Project Proposal may be processed without a review; the EMRIRB may recommend specific terms and conditions to be attached to any approval;
- b) the Project Proposal requires review;
- c) the Project Proposal is insufficiently developed to permit proper screening, and should be returned to the Proponent for clarification; or
- d) the potential adverse impacts of the Project Proposal are so unacceptable that it should be modified or abandoned.

2. PROJECT REFERRAL

On July 14, 2023, the NMRIRB and the EMRIRB received a referral to screen the “Keewaytinook Okimakanak Bathymetric Marine Fibre Optic Cable Survey” project from the Nunavik Marine Region Planning Commission (“NMRPC” or “Commission”) and the Eeyou Marine Region Planning Commission (“EMRPC” or “Commission”) which noted that the Project was not exempt from screening by the NMRIRB under Schedule 7-1 of the NILCA and not exempt from screening by the EMRIRB under Schedule 18-1 of the EMRLCA.

On July 31, 2023, the Proponent submitted the application online and pursuant to Sections 7.4.2 and 7.4.4 of the NILCA and Sections 18.4.2 and 18.4.4 of the EMRLCA, the NMRIRB and EMRIRB commenced screening the Project Proposal on August 3, 2023. The NMRIRB assigned a file number 125652 and the EMRIRB assigned a file number 0046-323-010.

3. PROCEDURAL HISTORY

The following chart indicates key stages of the screening process and when they were completed.

Date	Stage
July 7, 2023	Proponent submission to the EMRPC
July 13, 2023	Proponent submission to the NMRPC
July 14, 2023	EMRPC/NMRPC referred the project for screening
July 31, 2023	Proponent submitted the project application to both the NMRIRB and EMRIRB
July 31, 2023	NMRIRB/EMRIRB accepted the application and moved to Completeness check
August 3, 2023	NMRIRB/EMRIRB Moved the project to Active Screening
August 3, 2023	NMRIRB/EMRIRB issued Notice of Screening to the project Distribution Lists and posted information on the Public Registries
August 1, 2023 – August 23, 2023	Public Commenting Period
August 23, 2023	NMRIRB/EMRIRB Board Meeting
August 23, 2023	Screening Decision Report issued to Minister and Public

4. PROJECT OVERVIEW

NOTE: This project overview is taken from the Proponent’s submission:

“Keewaytinook Okimakanak has contracted Seaforth Geological Surveys and the Arctic Research Foundation’s vessel the William Kennedy to complete a bathymetric (sonar) survey during September and October 2023 between Kuujjuaraapik, Peawanuck and Fort Severn. The survey, vessel with a crew of 14, will be completing the survey in 45 days. The purpose of this marine survey phase is to determine a route for a marine fibre optic cable between Kuujjuaraapik and the two Ontario Cree Nations. The survey includes the use of sonar equipment to map the sea bottom to determine the best route (swath bathymetry (MBES), sidescan sonar (SSS) and subbottom profiler (SBP). A magnetometer will be used to magnetically locate the crossing point of the Eastern Arctic Undersea Fibre Optic Network cable. Vibracore or Grab Sampler will be used to collect samples of the sea bottom every 5 kilometers up to a water depth of 25 meters to determine how the cable can be buried and protected as it comes to the shore landings. If the marine survey route phase and all other future construction permitting is approved, the fibre optic cable could be installed in the summer of 2026. The construction phase in 2026 would include (1) new shore landing at Peawanuck, (2) new shore landing at Fort Severn, (3) fibre optic cable being laid on the sea bottom from Kuujjuarapik to Peawanuck and Fort Severn, (4) connecting to existing Kuujjuarapik shore landing and Kativik Regional Government existing fibre optic network. No new shore landing will be built in Whapmagoostui and Kuujjuarapik. The remote Cree Nations of Peawanuck and Fort Severn require long-term fibre optic

broadband (internet) connection for access to critical health, education, and administrative services, and community-led environmental monitoring.”

NOTE: The submission is for the completion of a bathymetric (sonar) survey in September and October 2023. If the marine survey route phase and all future construction permitting is approved, the fibre optic cable could be installed in the summer of 2026.

5. PROPONENT COMMITMENTS

As stated in the Proponent’s application, the following commitments have been made:

- The William Kennedy will sail from Churchill, Manitoba on or around September 9, 2023, and will bring all supplies required for the survey on board. The Churchill, Manitoba port will be used as a starting point to load fuel, supplies and crew, the Nain, Newfoundland port will be used to replenish fuel, and the Halifax, Nova Scotia port will be the termination point. All told, the project will require 55 sailing days, 45 survey days, and 4 days in the Cree-Inuit Joint Zone.
- The survey vessel, with a crew of 14, will complete the survey in 45 days. A survey launch vessel being used during the daylight hours at the existing Kuujjuaraapik landing and proposed Fort Severn and Peawanuck landings. No new shore landing will be built in Whapmagoostui and Kuujjuarapik.
- If a pollutant is spilled from a vessel, immediate action will be taken to stop the spill from continuing. Following this action, an initial assessment of the size, type and location of the spill will be recorded, along with what shoreline, habitat, and marine life, if any, are threatened.
- Freshwater intake will be completed at the Churchill port to prevent fish entrapment. If needed, sea water will be retrieved in small amounts from the ocean to replenish the freshwater supply. The vessel is equipped with two 114 L/hour reverse osmosis water makers and if needed, sea water will be drawn through a screen to stop any marine life from entering the system.
- Sewage will be treated via the vessel’s two Managem sewage treatment systems. All sewage, grey water, solid waste, and waste oil will be stored onboard and disposed of at an approved facility in Nain, NL.
- Any local knowledge and mapping released by the Cree Nations will be kept confidential and included as part of project planning.
- During the survey project phase, Keewaytinook Okimakanak will continue to work with the Ontario Cree Nations through bi-weekly planning meetings, additional interviews completed by the community leads, and another visit to discuss the findings of the marine survey in the winter of 2023. If approved, consultations will continue including requesting input from additional communities and groups who would like to learn more about the project, including Sanikiluaq, Kuujjuaraapik, and Whapmagoostui.
- **Underwater noise:** engines and mufflers will be maintained in good working order to reduce underwater noise. Bathymetric equipment emits acoustic pulses (up to 221dB) that are temporary during the period of the survey and localized to an area surrounding

the vessel as it travels along the survey route. Survey equipment will be turned off if mammals are observed and powered back up gradually after mammals are clear of the survey area.

- **Displacement of soil/sediment disturbance:** One 3m long, 3" diameter cylindrical vibracore sample or one 12L grab sample is the maximum expected recovery at any one site. The total sea bottom sampling is up to a total 11 meters squared at up to a total of 11 sites.
- **Sediment, soil, and water quality:** seabed samples will affect a total of less than 1m squared at any one site and surrounding water quality and sediment will settle following the sampling. No oils / drilling muds or other fluids will be released into the water column or soils during the sampling process. All procedures will be adhered to ensuring minimal disturbance with spill response enacted.
- **Benthic fauna:** if any known sensitive sites are within the route, a route deviation will be made.
- **Marine mammal disturbance:** while sailing, cetacean monitoring will be completed by visual observation post. Mitigation of aquatic life disturbance is included in the above mitigations. The bathymetric survey will be operating 24/7 and equipment will be operating at power levels required to achieve suitable survey data, which will not necessarily be the maximum power level the systems are capable of. If marine mammals/aquatic life are observed and survey operations are required to stop, upon resuming survey operations the survey equipment will be turned on at the lowest possible power setting (noise level) and be incrementally enabled (ramped up) to the higher power settings required to obtain quality survey data. The ramp up to higher power and acoustic output levels is over a period of 30 minutes to ensure aquatic life has time to leave the survey area.
- Based on best practices of the Eastern Arctic Undersea Fibre Optic Network (EAUFON) project in Nunavik, and the DFO July 4, 2023 Letter of Advice, the following will be implemented during the marine survey:
 1. The use of minimum gear power level to achieve the survey objectives will be used to reduce the impact on aquatic life.
 2. Ramp up procedure will be completed with gradual increase in power of survey equipment to reduce impact on aquatic life.
 3. Cetacean monitoring by visual observation post will be completed. The survey will begin only if cetaceans are absent from the survey zone and stop survey if cetaceans are present. A summary cetacean sightings report will be provided to appropriate agencies following the survey completion.
 4. Plan in-water works, undertakings and activities to respect timing windows to protect fish and fish habitat.
 5. Plan in-water works, undertakings and activities to respect timing windows, or as stipulated by the Ministry of Natural Resources and Forestry (MNRF), to protect fish, including their eggs, juveniles, spawning adults and/or the organisms upon which they feed and migrate.
 6. Develop and implement a response plan to prevent a spill of deleterious substances from entering a waterbody.
 7. The marine survey will not capture, handle or dispose of any wildlife species. The survey team will report any incidents resulting in wildlife being harmed or killed.
 8. The marine survey will not enter any rivers.

- If any Polar Bear are observed in the area during surveying or construction, work will stop until the bears have left the area. Mitigation includes burying the fibre optic line and shore landing with no permanent structures. Shore landing and cable burying construction will occur overland in the winter months when the bears are on the sea ice in the Fort Severn and Peawanuck region.
- The marine survey will not at any time interrupt the traditional rights and practices of Indigenous Peoples.

Any activities outside of the commitment list is considered outside the project scope and would be subject to Screening by the NMRIRB and EMRIRB.

6. PUBLIC COMMENTS

Notice regarding the NMRIRB and EMRIRB Screening was issued on August 3, 2023, and as per Board procedures, a 15-business day public commenting period was initiated from August 3, 2023 to August 23, 2023.

A distribution list was developed that included pertinent Nunavik/Eeyou entities, government departments and land users.

The NMRIRB and EMRIRB requested that interested parties review the proposal information and provide the Boards with any comments or concerns by August 23, 2023, regarding;

- Project related concerns;
- Any suggestions or recommendations for the project application;
- Support for the project;
- Additional project related comments, suggestions, potential terms and conditions.

The following is a summary of the comments and concerns received by the NMRIRB and EMRIRB

1. Alan Penn, August 1, 2023, CNG

This proposal is also relevant to developments in communications in the Cree institutional world. At a practical level, the proposal draws attention to the need for an accessible repository for bathymetric data for James Bay and southern Hudson Bay. The evidence obtained on the composition of marine sediments may well also be of interest in the context of ongoing work on the implementation of the EMRLCA as well as the Feasibility Assessment. This is an issue which might well be taken up with those who are responsible for the use of the William Kennedy for this investigation.

Both the Kativik Regional Government and the Cree Nation Government have taken an interest in the deployment of fiber optic technology in the marine environment of Northern Québec. We are also aware (again in the context of the EMRLCA and its implementation)

of the growing importance of communication links 'across the Bay', linking the Cree communities, with a shared history on both the eastern and western shores of James Bay. I hope that this proposal has been brought to the attention of Eeyou Communications, and that the Kativik Regional Government will continue to work with the Cree in this field.

2. Mark Basterfield, NMRWB (NMRIRB Comment form)

Please describe any concerns: Community involvement and consultation / Other

If you selected other, please list your additional concerns: Please note that these comments are provided by Nunavik Marine Region Wildlife Board (NMRWB) staff and do not necessarily represent the views or recommendations of the NMRWB Directors. Also to note that the comments are restricted to the aspects of this project occurring within, or affecting, the NMR.

Please describe the concerns indicated above: The mitigation measures seem appropriate and effective to minimize impacts on wildlife. However, we know that sound disturbance can have an affect on beluga and other wildlife. The migration and movement patterns of beluga in this area of northern James bay / Southern Hudson Bay are not well understood and there is a possibility of disturbing beluga at all times of year. While these disturbances seem unlikely to cause meaningful levels of impact, the presence of a ship using sonar in the area is very likely to cause concern in Kuujjuarapik.

Do you have any suggestions or recommendations for this project application? I encourage the proponent to visit Kuujjuarapik in advance of the work being conducted, and as the work commences, to spread information on their purpose and to answer any questions about impacts. This should be done both in-person and over the radio.

Do you support the project proposal? Yes

Do you have any other project related comments, suggestions, potential terms and conditions? N/A

Signed by Mark Basterfield, August 22, 2023

3. Angela Coxon, August 22, 2023, Director of EMRWB, Comment form

Community Consultation: the project description describes engagement activities held in Peawanuck and Fort Severn, but fails to mention any engagement or communication efforts or future plans with Whapmagoostui/Kuujjuarapik. The proponent should at a minimum advertise the proposed project prior to the start date. Social media and radio announcements are efficient communication tools for this purpose. It is also recommended (and considered respectful practice) that the proponent request to present the project to the Chief & Council of Whapmagoostui to ensure support at a local level, well in advance of the start date.

Harvesting Activities: the proponent should engage with the Whapmagoostui Cree Trappers Association to ensure that this project does not impact local harvesting activities. The proposed dates (September 9 – November 15) overlap with the migratory period of waterfowl, and thus, the harvesting period for waterfowl in the region. Additionally, there are previous reports of beluga harvest in the region during this period.

Marine Mammals, Fish, & Habitat: the proponent has provided a document titled “Impacts and Mitigation Supporting Documentation” which appears to provide sufficient measures to mitigate any anticipated negative impacts, such as underwater noise from the engine and the bathymetric survey equipment. However, very little is still understood about the effects of sonar use on the health and movement patterns of marine wildlife, and beluga whale may be present in the project area during this time. Particular attention should be made to record all beluga observations and behaviour. The proponents must report any interactions or collisions with beluga to the EMRWB and NMRWB.

Other: in the document “Impacts and Mitigation Supporting Documentation”, the proponents have listed impacts that can potentially negatively impact benthos and fish habitat, such as displacement of soil and sediment disturbance. The overall size of the areas to be sampled will be limited, adding up to a total 11 m² in 11 sites, thus we are satisfied that there will be very little negative impact.

The proponent must follow all provisions of the federal Aquatic Invasive Species Regulations (SOR /2015-121) under the Fisheries Act to prevent the introduction or spread of invasive species.

For people unfamiliar with the equipment being employed it would be helpful to include drawings and photographs.

The title of the Screening is misleading. The bathymetric survey is only part of the proposed activities. This is also an acoustic mapping survey to obtain information on the surficial geology in the proposed cable corridor.

We would request that the proponent make an effort to record all wildlife observations(e.g. polar bear, beluga, caribou, seal, walrus, seabirds, etc.) within the EMR and Overlap Area including number of individuals, time, date and location, and submit the data to the EMRWB at the conclusion of the study.

7. ASSESSMENT OF THE PROJECT PROPOSAL AND DECISION

After a thorough assessment of all material provided to the Boards, in accordance with the principles identified within sections 7.4.2 of the NILCA and 18.4.2 of the EMRLCA, the decision of the Boards as per Section 7.4.4 of the NILCA and 18.4.4 of the EMRLCA is:

The Project Proposal may be processed without a review under Part 5 or 6; NMRIRB and EMRIRB may recommend specific terms and conditions to be attached to any approval, reflecting the primary objectives set out in section 7.2.5 and 18.2.5.

Anticipated impacts – Proponent

Some negative mitigatable environmental impacts are anticipated caused by the project to lands, waters, or natural resources, including wildlife. The marine survey will not capture, handle or dispose of any wildlife species. The survey team will report any incidents resulting in wildlife being killed. At no point will the marine survey disrupt the traditional practices of the people. Based on best practices of the Eastern Arctic Undersea Fibre Optic Network (EAUFON) project in Nunavik, and the DFO July 4, 2023 Letter of Advice, the following will be implemented during the marine survey.

1. The use of minimum gear power level to achieve the survey objectives will be used to reduce the impact on aquatic life.
2. Ramp up procedure will be completed with gradual increase in power of survey equipment to reduce impact on aquatic life.
3. Cetacean monitoring by visual observation post will be completed. The survey will begin only if cetaceans are absent from the survey zone and stop survey if cetaceans are present. A summary cetacean sightings report will be provided to appropriate agencies following the survey completion.
4. Plan in-water works, undertakings and activities to respect timing windows to protect fish and fish habitat.
5. Plan in-water works, undertakings and activities to respect timing windows, or as stipulated by the Ministry of Natural Resources and Forestry (MNRF), to protect fish, including their eggs, juveniles, spawning adults and/or the organisms upon which they feed and migrate.
6. Develop and implement a response plan to prevent a spill of deleterious substances from entering a waterbody.
7. The marine survey will not capture, handle or dispose of any wildlife species. The survey team will report any incidents resulting in wildlife being harmed or killed.
8. The marine survey will not enter any rivers.

See Project Documents for Additional Impact Mitigations.

Anticipated impacts – NMRIRB / EMRIRB

The NMRIRB and EMRIRB have identified a number of anticipated impacts and provide the following views regarding whether or not the proposed project has the potential to result in significant impacts:

- 1. Habitat Disturbance and Destruction:** The use of sonar equipment and seabed sampling methods could disrupt and damage sensitive marine habitats, affecting aquatic species and ecosystems.

2. **Noise Pollution:** The survey vessel and associated activities may introduce underwater noise pollution, which could negatively affect marine species' behavior, communication, and navigation.

3. **Waste Generation and Pollution:** The project's vessel operations could lead to the generation of waste, including plastics, oils, and other pollutants, which could contribute to marine litter and water contamination.

4. **Sediment and Water Quality:** The use of vibrocore or grab sampling methods could lead to localized sediment disturbance and potential water quality impacts, affecting aquatic ecosystems.

Anticipated impacts

	Impact	NMRIRB/EMRIRB Assessment	Proponent Assessment
PHYSICAL	Designated Protected Areas (i.e., national marine conservation areas, marine protected areas)	NO IMPACT	NO IMPACT
	Ground stability	NO IMPACT	NO IMPACT
	Permafrost	NO IMPACT	NO IMPACT
	Hydrology/Limnology	NO IMPACT	NO IMPACT
	Water quality	NEGATIVE-MITIGABLE	NEGATIVE NON-MITIGABLE
	Climate conditions	NO IMPACT	NO IMPACT
	Eskers and other unique or fragile landscapes	NO IMPACT	NO IMPACT
	Surface and bedrock geology	NEGATIVE-MITIGABLE	NEGATIVE MITIGABLE
	Sediment and soil quality	NEGATIVE-MITIGABLE	NEGATIVE NON-MITIGABLE
	Tidal processes and bathymetry	NO IMPACT	NO IMPACT
	Air quality	NO IMPACT	NO IMPACT
	Noise levels	NEGATIVE-MITIGABLE	NEGATIVE NON-MITIGABLE
	Seabed and Marine Sediments	NEGATIVE-MITIGABLE	NO IMPACT
	BIOLOGICAL	Aquatic and Terrestrial Vegetation	
Wildlife, including habitat and migration patterns		NEGATIVE-MITIGABLE	NO IMPACT
Birds, including habitat and migration patterns		NO IMPACT	NO IMPACT
Aquatic Species including habitat and migration / spawning		NEGATIVE-MITIGABLE	NEGATIVE NON-MITIGABLE
SOCIO-ECONOMIC	Archeological and cultural historical sites	NO IMPACT	NO IMPACT
	Cree/Inuit Harvesting Activities	NO IMPACT	NO IMPACT
	Employment	NO IMPACT	POSITIVE
	Community wellness	NO IMPACT	POSITIVE
	Community infrastructure	NO IMPACT	POSITIVE
	Human Health	NO IMPACT	POSITIVE

8. RECOMMENDED PROJECT SPECIFIC TERMS AND CONDITIONS

The NMRIRB and EMRIRB are recommending the following terms and conditions to apply in respect of the Project pursuant to section 7.4.4 (a) of the NILCA and 18.4.4 (a) of the EMRLCA.

General

NOTE: These terms and conditions are the responsibility of the proponent and their contractors and sub-contractors on the vessel. For greater certainty, the responsibility lies with Keewaytinook Okimakanak, Seaforth Geological Surveys and Arctic Research Foundation (William Kennedy).

1. The Proponent shall maintain a copy of the Project Terms and Conditions at the site of operation at all times.
2. The Proponent shall obtain the following permits and abide by any terms and conditions contained therein:
 - a. Wildlife Research License, Government of Nunavut Environment Department
 - b. Research Permit, Nunavut Research Institute
3. The Proponent shall forward copies of all permits obtained and required for this project to the Nunavik Marine Region Impact Review Board (NMRIRB) and the Eeyou Marine Region Impact Review Board (EMRIRB) prior to the commencement of the project:
 - a. Wildlife Research License, Government of Nunavut Environment Department
 - b. Research Permit, Nunavut Research Institute

Proponents are responsible for identifying all licenses, permits, and approvals that are required to carry out the proposed project.

4. The Proponent shall forward copies of all permits obtained and required for this project to the Nunavik Marine Region Impact Review Board (NMRIRB) and the Eeyou Marine Region Impact Review Board (EMRIRB) prior to the commencement of the project
5. The Proponent shall operate in accordance with all applicable Acts, Regulations and Guidelines.

Boat Activities

6. The Proponent shall not deposit any fuel, chemicals, waste (including wastewater) or sediment into any marine waters and shall manage waste on board the boat prior to final disposal.
7. The Proponent shall ensure all personnel are properly trained in fuel and hazardous waste handling procedures, as well as spill response procedures. All spills of fuel or other deleterious materials of any amount must be reported immediately to the 24-hour Spill Line at 867-920-8130.

Water Use

8. The Proponent shall not extract water from any fish-bearing waterbody unless the water intake hose is equipped with a screen of appropriate mesh size to ensure that there is no entrapment of fish.
9. The Proponent shall ensure that water extraction from any fish-bearing waterbody is done with appropriate care and caution.

Waste Disposal

10. The Proponent shall pack out all combustible waste and non-combustible waste placed in a covered metal container or equivalent until disposed of. All such wastes shall be kept inaccessible to wildlife at all times.

Fuel and Chemical Storage

11. The Proponent shall store all fuel and chemicals in such a manner that they are inaccessible to wildlife.
12. The Proponent shall locate all fuel and other hazardous materials a minimum of thirty-one (31) metres away from the high-water mark of any water body and in such a manner as to prevent their release into the environment.
13. The Proponent shall ensure that re-fueling of all equipment occurs a minimum of thirty-one (31) metres away from the high-water mark of any water body.
14. The Proponent shall ensure that appropriate spill response equipment and clean-up materials (e.g., shovels, pumps, barrels, drip pans, and absorbents) are readily available during any transfer of fuel or hazardous substances, at all fuel storage sites and when refuelling equipment.
15. The Proponent shall inspect and document the condition of all fuel tanks and fuel caches daily.
16. The Proponent shall ensure that all personnel are properly trained in fuel and hazardous waste handling procedures, as well as spill response procedures. All spills of fuel or other deleterious materials of any amount must be reported immediately to the 24-hour Spill Line.

Wildlife - General

17. The Proponent shall ensure that there is no damage to wildlife habitat in conducting this operation.
18. The Proponent shall not harass wildlife. This includes persistently circling, chasing, hovering over, pursuing or in any other way harass wildlife, or disturbing large groups of animals.
19. Polar bears spend the ice-free months hunting and resting on the offshore islands. The Proponent will minimize any disturbance that may result in scaring or forcing polar bears from land into the water.

20. The Proponent shall maintain a distance of 100 metres if a polar bear is encountered on land, ice or open water while conducting activities from a zodiac or other small craft. It is a crucial time of the year for polar bear movement within the EMR/NMR; any interactions with polar bears should be avoided in order to prevent causing changes in behaviour and movement;
21. The Proponent shall not hunt or fish unless the appropriate territorial license are acquired.
22. The Proponent shall ensure that all project personnel are made aware of the measures to protect wildlife and are provided with training and/or advice on how to implement these measures.
23. The Proponent shall ensure all project staff are trained in appropriate bear/carnivore detection and deterrent techniques. The polar bear is a protected species and as such, in the event of defensive measures required during an encounter, every effort should be made to deter the bear using non-lethal methods when safe to do so.
24. The Proponent or pertinent / assigned project team members shall carry non-lethal deterrent and an appropriate firearm and ammunitions.
25. The Proponent will be familiar with and abide by the recommended setback distances listed in the Marine Mammal Act during encounters with whales while enroute to and from Long Island (e.g., 400 m for species listed under SARA, 200 m for non-listed species).
26. The Proponent shall not touch, feed or entice wildlife to approach by holding out or setting out decoys or any such devices, foodstuffs or bait of any kind.

Migratory Birds

27. The Proponent shall avoid the seaward site of seabird colonies and areas used by flocks of migrating waterfowl by 100 m for non-listed species and 500 m for listed species.

Other

28. The Proponent should coordinate with local villages and land users to prevent potential interference with harvesting and land use activities. For greater certainty, the NMRIRB and EMRIRB urge the proponent to coordinate with Whapmagoostui/Kuujuaraapik.
29. If the Proponent comes across any Cree/Inuit harvesting activities in the designated area, they shall not interfere with or disrupt these activities and must immediately cease their operations in the affected area.
30. The Proponent should reach out to the Canadian Coast Guard, Canadian Hydrographic Service and Transport Canada to notify them of the work to ensure the safety of the project, of vessels within the area, and to ensure the project can be included in hydrographic mapping. The Canadian Hydrographic Service publishes nautical charts that are used for navigation and will indicate submarine cables, to prevent anchorage and dredging. DFO may issue advisories not only on the environmental aspects but perhaps also on the laying of the cable in regard to navigation particularly near the coast and entrances to the coastal communities where traffic will be highest.

9. MONITORING AND REPORTING REQUIREMENTS

Wildlife Mitigation and Monitoring Plan

- a) Upon completion of the project, the Proponent is required to prepare and submit a comprehensive report to the EMRIRB and NMRIRB.
- b) The Proponent shall report all polar bear encounters, whale species observations as well as the presence of bird nesting colonies to the NMRWB and EMRWB.

Change in Project Scope

- c) The Proponent shall notify the NMRIRB/EMRIRB of any changes in operating plans or conditions associated with this project prior to any such change.

Migratory Birds

- d) For further information on how to protect migratory birds, their nests and eggs when planning or carrying out project activities, consult Environment and Climate Change 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" available at https://publications.gc.ca/collections/collection_2013/ec/CW66-324-2013-eng.pdf
- e) *Migratory Birds Convention Act and Migratory Birds Regulations* (<https://laws.justice.gc.ca/eng/acts/M-7.01/>).

Bear and Carnivore Safety

- f) The Boards recommend reaching out to the EMRWB and local CTA for information on bear safety.
- g) The Proponent should review the Government of Nunavut's booklet on Bear Safety, which can be downloaded from this link: http://gov.nu.ca/sites/default/files/bear_safety_-_reducing_bear-people_conflicts_in_nunavut.pdf.
- h) There are polar bear safety resources available from the Bear Smart Society with videos on polar bear safety available in English, French and Inuktitut at <http://www.bearsmart.com/play/safety-in-polar-bear-country/>. Information can also be obtained from Parks Canada's website on bear safety at the following link: <http://www.pc.gc.ca/eng/pn-np/nu/quttinirpaaq/visit/visit6/d.aspx> or in reviewing the "Safety in Polar Bear Country" pamphlet, which can be downloaded from the following link: http://www.pc.gc.ca/eng/pn-np/nu/quttinirpaaq/visit/visit6/~media/pn-np/nu/auyuittuq/pdf/shared/PolarBearSafety_English.ashx.

Species at Risk

- i) The Proponent shall review Environment and Climate Change Canada's "Environment Assessment Best Practice Guide for Wildlife at Risk in Canada", available at the following link: http://www.sararegistry.gc.ca/virtual_sara/files/policies/EA%20Best%20Practices%2

[02004.pdf](#). The guide provides information to the Proponent on what is required when Wildlife at Risk, including *Species at Risk*, are encountered or affected by the project. Appendix D lists the Species at Risk found in the Eeyou Marine Region/Nunavik Marine Region.

10. REGULATORY REQUIREMENTS

The onus is on the Proponent to be informed of all licencing and permitting requirements related to their Project. The Proponent has applied for the following Government authorizations for this Project.

- a) Wildlife Research License, Government of Nunavut Environment Department
- b) Research Permit, Nunavut Research Institute

The Proponent is responsible to submit the proposal to the Nunavut Planning Commission (NPC) for conformity and exemption review for portions of the work falling outside the NMR, EMR and falling within the Nunavut Settlement Area (NSA).

Finally, the Proponent is reminded that in addition to the terms and conditions set forward by the NMRIRB herein, they remain subject to the laws of general application in the NMR and EMR as it relates to their Project activities.

In addition to the NMRIRB/EMRIRB, there may be other access and regulatory considerations the Proponent needs to consider prior to commencing their Project.

The vessels for the project should be familiar with and abide by the following Acts and Regulations:

The Canada Shipping Act, 2001 (CSA, 2001), which provides an overall regime to protect safety and the environment for vessels operating in Canadian jurisdiction;

The Arctic Waters Pollution Prevention Act (AWPPA), which provides enhanced protection for vessels operating in Canadian jurisdiction north of 60°North latitude, and establishes a zero-discharge regime. It prohibits discharges from oil, chemicals, garbage and other wastes generated onboard. The regulations under AWPPA also establish vessel control systems for preventing a vessel from operating in ice conditions which exceed its capability;

Arctic Shipping Safety Pollution Prevention Regulations as they were updated in 2018 and incorporate the Polar Code by reference, speak to new mandatory crew certification (certificate of proficiency for personnel on ships operating in polar waters), Ice Navigator requirements, and address domestic vessels that are 300-500 GT. The Polar Code speaks to vessels of 500 gross tons or more and links the International Convention for the Safety of Life at Sea and the International Convention for the Prevention of Pollution from Ships for safety/construction and pollution requirements respectively.

The Marine Liability Act (MLA), which sets out a regime that requires vessels operating in Canadian jurisdiction to carry insurance to pay for damages from oil spills. There are various regimes available to pay for cleanup and compensation costs, such as ship owners' insurance, domestic and international funds. These regulations establish liability limits and insurance requirements to cover damages caused by the deposits of waste in Arctic waters.

Vessels coming into and out of Canadian waters will also be subject to the Ballast Water Control and Management Regulations which protect waters under Canadian jurisdiction from non-indigenous aquatic organisms and pathogens that can be harmful to ecosystems through the management of ships' ballast water.

For the tenders (small vessels) to be used for inshore work, please refer to Transport Publication 14070 (Small Commercial Vessel Safety Guide), in particular Appendix 5, which informs which regulations are in force for small vessels of various types and sizes.

Entry and Access Permission

The Proponent is reminded that within the NMR/EMR there are lands owned by Nunavik Inuit, lands owned by the Cree of Eeyou Itschee and some lands jointly owned by Nunavik Inuit and the Cree of Eeyou Istchee which includes Long Island. This screening report and the Project Certificate herein does not constitute authorization to access those lands. Where the Project involves accessing such lands, the Proponent is required to seek permission of the landowners prior to accessing those lands.

11. CONCLUSION

The foregoing constitutes the Boards' screening decision with respect to Franz Seibel's (Keewaytinook Okimakanak) Project Proposal. The NMRIRB and EMRIRB remain available for consultation with the Minister regarding this report as necessary.

The NMRIRB and EMRIRB look forward to your decision on this file as well as being kept informed and updated on the relevant permitting processes.

Dated August 23, 2023.



Barrie Ford
Chairperson
Nunavik Marine Region Impact Review
Board (NMRIRB)



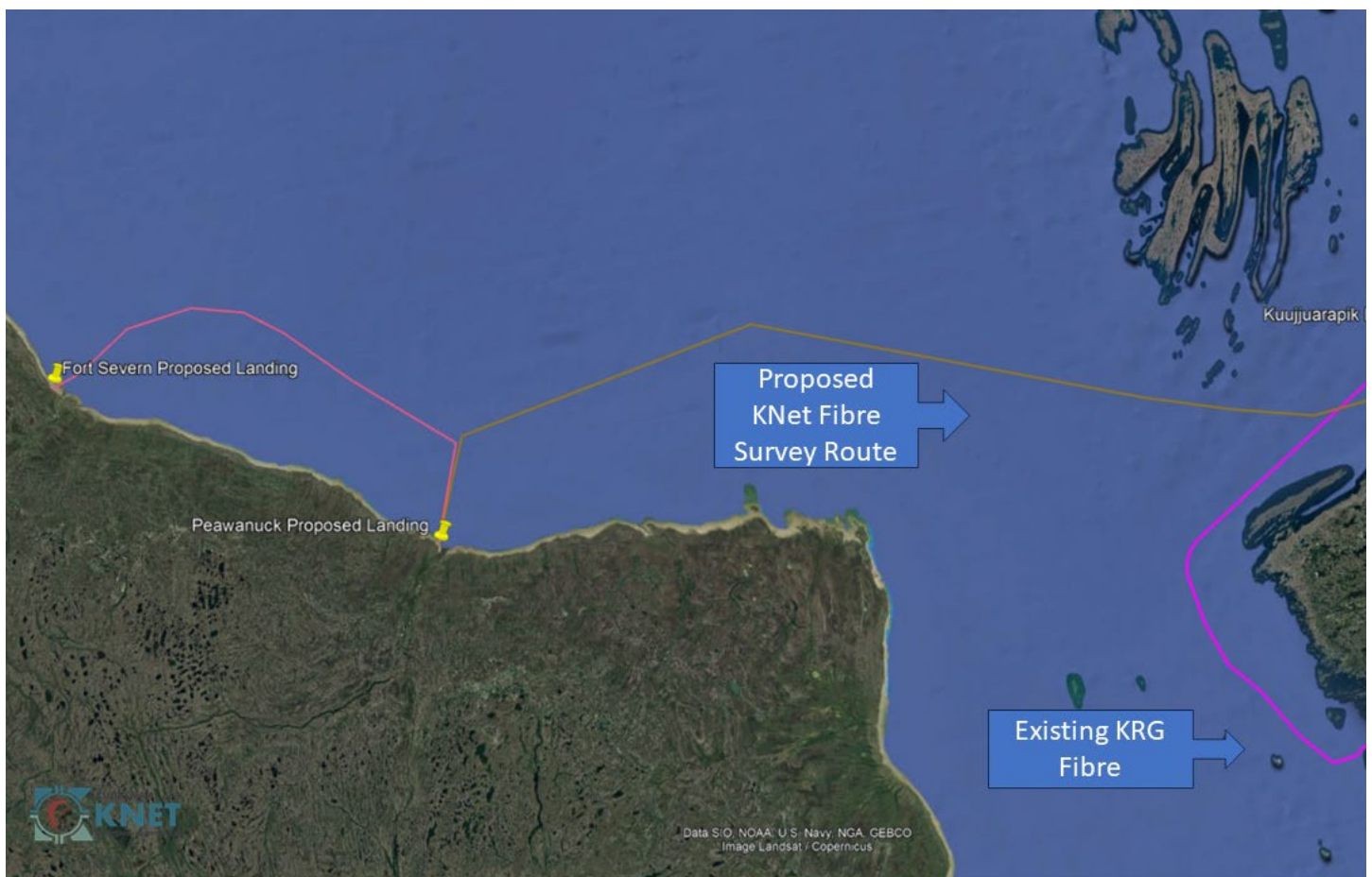
Isaac Masty
Chairperson
Eeyou Marine Region Impact Review Board
(EMRIRB)

- Attachments: Appendix A: Project Timeline
Appendix B: Project Map and Sampling Sites
Appendix C: Material Use
Appendix D: Species at Risk in the Eeyou Marine Region

APPENDIX A: PROJECT TIMELINE

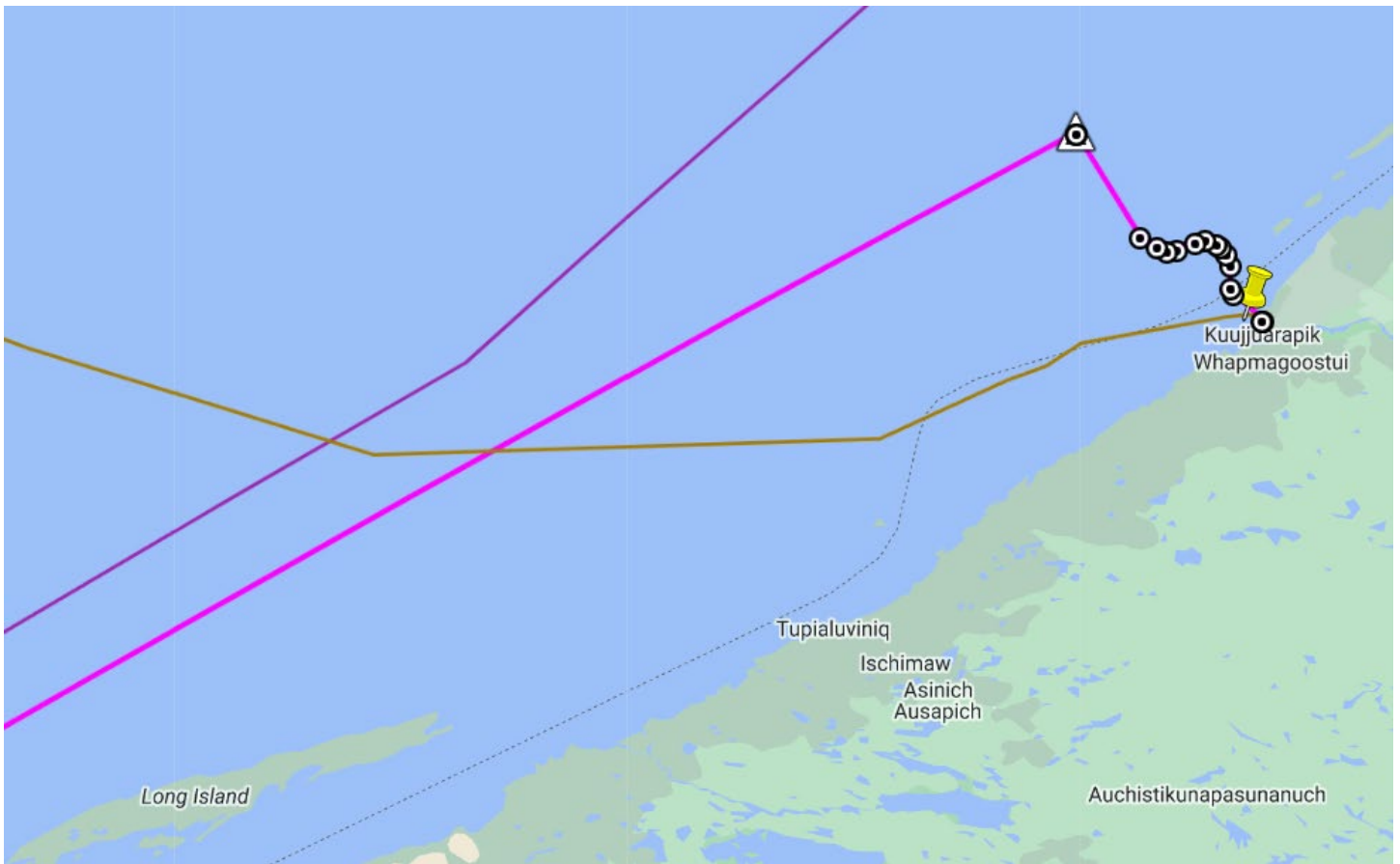
September 1, 2023 to October 31, 2023.

APPENDIX B: PROJECT MAPS



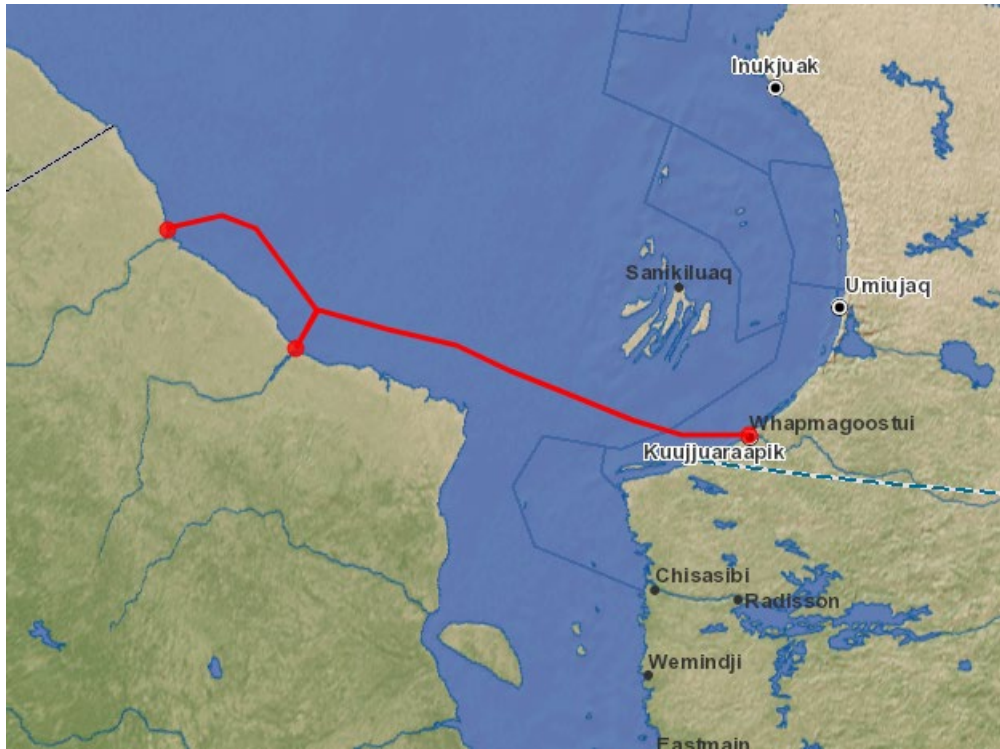
The pink line shows the existing KRG fibre. The brown line starting at Kuujjuarapik/Whapmagoostui is the proposed survey route.





The pink line shows the existing KRG fibre, with the branching unit shown by a triangle. The brown line starting at Kuujuarapik/Whapmagoostui is the proposed survey route. The purple line shows the boundary of the EMR. Only a small portion of the survey will occur in the EMR.

Entire Survey Area



APPENDIX C: MATERIAL USE

List of all Material Use:

- Vessel: William Kennedy
- Magnetometer
- Vibracore
- Grab Sampler
- Pole mounted, towed geophysical survey equipment: Multibeam Echosounder
- Side Scan Sonar (SSS)
- Sub Bottom Profiler (SBP)

APPENDIX D: SPECIES AT RISK IN THE NMR AND/OR EMR

The following are the terrestrial species that are listed in Schedule I of the Species at Risk Act and for which at least one occurrence/mention/observation is in Eeyou Istchee (for the territory, I used the footprint of Cree traplines, taken from a map provided by the CTA) and the Eeyou Marine Region. This is based on data from a number of databases, including SOSPOP, the Centre de données sur le patrimoine naturel du Québec (CDPNQ), the Atlas of amphibians and reptiles of Quebec (AARQ).

- Harlequin duck (Special Concern)
- Monarch butterfly (Special Concern, under consideration for Endangered)
- Red knot, rufa subspecies (Endangered)
- Yellow rail (Special Concern)
- Short-eared owl (Special Concern, under consideration for Threatened);
- Common nighthawk (Threatened, under consideration for Special Concern)
- Red-necked phalarope (Special Concern);
- Peregrine falcon (Special Concern, under consideration for Not at Risk);
- Bank swallow (Threatened);
- Barn Swallow (Threatened, under consideration for Special Concern);
- Olive-sided flycatcher (Threatened, under consideration for Special Concern)
- Rusty blackbird (Special Concern);
- Canada warbler (Threatened, under consideration for Special Concern)
- Little brown myotis (Endangered)
- Northern myotis (Endangered)
- Polar bear (Special Concern)
- Wolverine (Special Concern)
- Boreal caribou (Special Concern)

Critical habitat has been identified on Cree territory for the following species:

- Red knot (Boatswain Bay)
- Bank swallow
- Little brown myotis
- Northern myotis
- Boreal caribou