



Demande de la CNER faisant l'objet d'un examen préalable #126223

Ocean Tracking Network: Marine fish tracking in Baffin Bay and connected waters onboard the RV Kiviuq 1.

Type de demande : New

Type de projet: Scientific Research

Date de la demande : Wednesday, August 27, 2025

Period of operation: from 2025-07-25 to 2028-10-10

Promoteur du projet: Kevin Hedges
Fisheries and Oceans Canada
501 University Crescent
Winnipeg MB R3T 2N6
Canada
Téléphone :: 2047705814, Télécopieur ::

Activités

Emplacement	Type d'activité	Statut des terres	Historique du site	Site à valeur archéologique ou paléontologique	Proximité des collectivités les plus proches et de toute zone protégée
Fish tracking mooring	Scientific/International Polar Year Research	Marine	Ocean Tracking Network moorings located in the area for more than 3 years.	N/A	Inside Hatton Basin Conservation Area
Fish tracking mooring	Scientific/International Polar Year Research	Marine	Ocean Tracking Network moorings located in the area for last two years	N/A	Closest Community is Pangnirtung; inside the Cumberland Sound Turbot Management Area
Fish tracking mooring	Scientific/International Polar Year Research	Marine	Ocean Tracking Network moorings located in the area for more than 3 years.	N/A	Inside Davis Strait Conservation Area
Fish tracking mooring	Scientific/International Polar Year Research	Marine	Ocean Tracking Network moorings located in the area for more than 3 years.	N/A	Inside Hatton Basin Conservation Area

Engagement de la collectivité et avantages pour la région

Collectivité	Nom	Organisme	Date de la prise de contact
Pangnirtung	Mark Kilabuk	Pangnirtung Hunters and Trappers Organization	2025-05-21

Autorisations

Indiquez les zones dans lesquelles le projet est situé:

Transboundary
South Baffin

Autorisations

Organisme de régulation	Description des autorisations	État actuel	Date de l'émission/de la demande	Date d'échéance
Pêches et Océans Canada	Licence to Fish for Scientific Purposes	Applied, Decision Pending		
Institut de recherche du Nunavut	NRI license to deploy moorings in Cumberland Sound	Applied, Decision Pending		

Project transportation types

Transportation Type	Utilisation proposée	Length of Use
Air	Commercial air travel for field crew from Ontario to Nunavut, and return to Ontario	
Water	Transit of F.V. Kiviug I from Newfoundland to Nunavut, research cruise in Nunavut for this project, transit of ship back to Newfoundland at end of project.	
Land	Taxi in Iqaluit between airport, hotel, and vessel at start and end of cruise	

Project accommodation types

Collectivité
Autre,

Utilisation de matériel

Équipement à utiliser (y compris les perceuses, les pompes, les aéronefs, les véhicules, etc.)

Type d'équipement	Quantité	Taille – Dimensions	Utilisation proposée
Kiviug 1	1	28.53	The Kiviug 1 is a steel fixed-gear fishing vessel owned by Arctic Fishery Alliance. It is equipped with freezing at sea capabilities. The net tonnage of the vessel is 199.38. The maximal vessel speed is 12 knots. The Kiviug is primarily used for marine research and delivers supplies to Arctic Fishery Alliance's owner communities during the summer months.
Internal electronic tag (V16, Innovasea Inc.)	420	56 mm long	VEMCO acoustic transmitters (V16s: http://www.vemco.com/pdf/v16cont.pdf) will be surgically implanted in the body cavities of captured and healthy Greenland Halibut (n=300), Greenland Sharks (n=60) and Arctic Skate (n=60). Surgical procedures and handling will be <5 mins to minimize stress to the animals. Greenland Sharks will be tagged from a zodiac, with the animals held parallel to the boat and just at the surface of the water.
Fish tracking moorings	70	14 m tall	VEMCO acoustic monitors (VR2Ws: http://www.vemco.com/pdf/vr2w.pdf) that record the time and date of individual tagged animals (within >500 m of an individual monitor) will be deployed in arrays to track animal movements. Individual acoustic monitors will be secured using fixed 200lb weights, sub surface floats and an acoustic release mechanism that can be triggered the following year to retrieve monitors for data download. Instruments will also record water temperature, salinity, and depth.
Longlines	20	1.5 km long	Bottom set longlines will be used to assess the distribution and relative abundance of commercially sized Greenland Halibut in inshore waters near Clyde River and Qikiqtarjuaq, Nunavut; fishing will not occur in Cumberland Sound. Longlines will be set for up to 12 hours; hooks will be baited with squid and the lines will be set on the ocean bottom.

Décrivez l'utilisation du carburant et des marchandises dangereuses

Décrivez l'utilisation de carburant :	Type de carburant	Nombre de conteneurs	Capacité du conteneur	Quantité totale	Unités	Utilisation proposée
Oil and lubricant products	hazardous	1	3000	3000	Gallons	2-20 gallons of oil and lubricant products are used on a daily basis for a vessel in the 25

						meter size range.
Diesel	fuel	1	130000	130000	Gallons	On average a small research vessel fuel consumption is about 15-30 gallons per hour (this is dependent upon factors such as vessel size, speed and type of work occurring).
Silicone grease	hazardous	1	0.15	0.15	Liters	Waterproof seals on moored instruments (VEMCO monitors, acoustic releases, conductivity-temperature-depth instruments)

Consommation d'eau

Quantité quotidienne (m3)	Méthodes de récupération de l'eau proposées	Emplacement de récupération de l'eau proposé
0		

Déchets

Gestion des déchets

Activités du projet	Type des déchets	Quantité prévue	Méthode d'élimination	Procédures de traitement supplémentaires
Scientific/International Polar Year Research	Eaux grises	246 liters per day per person	Greywater will be released back into the marine environment in designated areas/zones where this is allowed. All marine transport laws will be followed. Greywater will include cleaning and rinsing of the vessel deck after sampling procedures are completed.	No additional treatment procedures are identified.
Scientific/International Polar Year Research	Dangereux	1-2% of heavy fuel oil used ends up as sludge	All oil and lubricant products used will be stored safely in appropriate containers and disposed of when the vessel reaches the home port. Disposal at port will follow provincial and federal guidelines for safe disposal.	No additional treatment procedures are identified.
Scientific/International Polar Year Research	Déchets non combustibles	1.4-2.3 Kg per person per day	All non-combustible waste will be stored on board the vessel and disposed when the vessel reaches a port. Disposal at the port will follow provincial/territorial and federal guidelines for safe disposal.	No additional treatment procedures are identified.
Scientific/International Polar Year Research	Mort-terrain (sol organique, déchets, résidus)	80-200 kg per long line set	Overburden (organic waste products from longlining) will be released back into the marine environment in designated areas/zones where this is allowed. All marine transport laws will be followed.	No additional treatment procedures are identified.

Scientific/International Polar Year Research	Eaux usées (matières de vidange)	30 liter per person per day	Sewage will be stored in a holding tank and released into the marine environment in designed areas where this is allowed. All marine transport laws will be followed regarding waste and dumping of waste.	No additional treatment procedures are identified.
--	----------------------------------	-----------------------------	--	--

Répercussions environnementales :

Environmental impacts are expected to be minor and reversible. Project activities are focused on releasing captured fish alive and in good condition, and minimizing impacts on habitats to minimize effects on fish movement and habitat selection behaviours.

Additional Information

SECTION A1: Project Info

SECTION A2: Allweather Road

SECTION A3: Winter Road

SECTION B1: Project Info

SECTION B2: Exploration Activity

SECTION B3: Geosciences

SECTION B4: Drilling

SECTION B5: Stripping

SECTION B6: Underground Activity

SECTION B7: Waste Rock

SECTION B8: Stockpiles

SECTION B9: Mine Development

SECTION B10: Geology

SECTION B11: Mine

SECTION B12: Mill

SECTION C1: Pits

SECTION D1: Facility

SECTION D2: Facility Construction

SECTION D3: Facility Operation

SECTION D4: Vessel Use

SECTION E1: Offshore Survey

SECTION E2: Nearshore Survey

SECTION E3: Vessel Use

SECTION F1: Site Cleanup

SECTION G1: Well Authorization

SECTION G2: Onland Exploration

SECTION G3: Offshore Exploration

SECTION G4: Rig

SECTION H1: Vessel Use

SECTION H2: Disposal At Sea

SECTION I1: Municipal Development

Description de l'environnement existant : Environnement physique

Research will occur in marine waters outside any concentrations of sea ice. Marine areas are used by other vessels for transportation, commercial fishing (outside Conservation areas, where longlining will take place) tourism, military purposes.

Description de l'environnement existant : Environnement biologique

Marine biological community is considered healthy; commercial fisheries for Greenland Halibut and Northern and Striped Shrimp being sustainably managed.

Description de l'environnement existant : Environnement socio-économique

Cumberland Sound is a traditional hunting and fishing area for the community of Pangnirtung. Project activities, area and duration were co-developed with the Pangnirtung Hunters and Trappers Organization board.

Miscellaneous Project Information

This application was edited to respond to questions provided by email on 2025-08-27:

- Clarify if the scientific crew will be staying in accommodations in Iqaluit before and after the research activities.
- oI have checked the "community" box under accommodations, checked the "Land" transportation box too and add a note there about taxis between airport, hotel, and ship.
- Provide a list of equipment used for these research activities. Only the research vessel was listed in the equipment list.
- oInternal electronic tags, fish tracking moorings, and longlines were added under "Equipment" on the "Material Use" page.
- Provide a list of chemicals that would be used in the research activities.
- oSilicone grease used to coat o-rings in mooring components was added under "Hazardous Materials and Chemicals Use" un the "Materials Use" page.
- oAs per the approved Animal Use Protocol for this research, anesthetics and analgesics will not be used as the animal handling time will be minimal with external tagging that likely causes only acute, brief discomfort to the animal. Therefore, no additional chemicals added.
- Has the RV Kiviuq been included in other research activities in Nunavut? That is, has it been previously assessed by the NIRB?
- oThe FV Kiviuq has previously been used for research activities in Nunavut conducted by Arctic Fisheries Alliance and the Marine Institute, but I do not know if the ship was previously assessed by NIRB.

Identification des répercussions et mesures d'atténuation proposées

No significant impacts anticipated; no mitigation measures developed.

Répercussions cumulatives

Significant cumulative effects with other human activities or climate change are not anticipated. Project is small in scale, occurs away from other human activities, and is focused on releasing caught fish alive and healthy, and minimizing impacts on marine habitats to obtain realistic data on fish movement and habitat use.

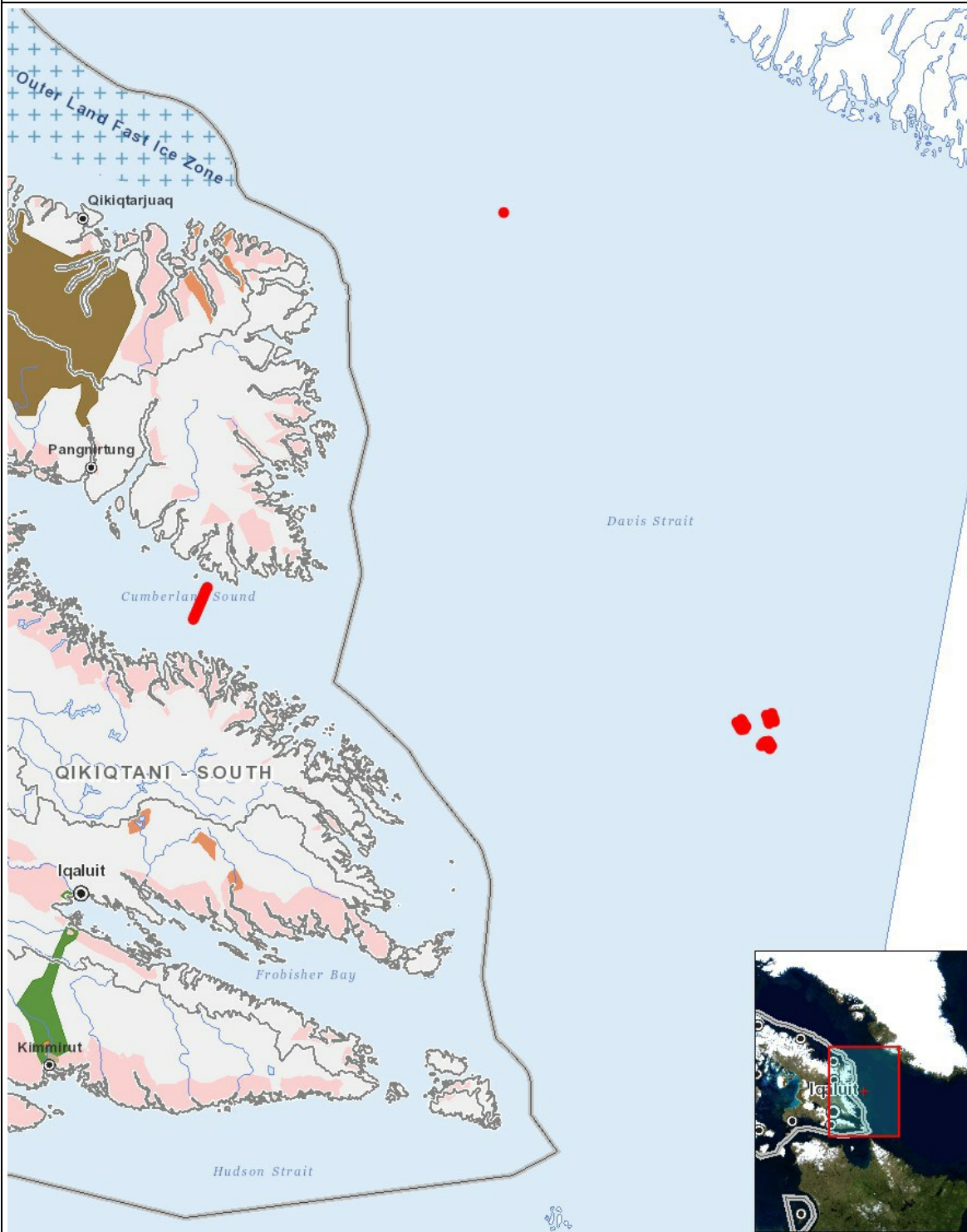
Impacts

Identification des répercussions environnementales

	PHYSICAL	Designated environmental areas	Ground stability	Permafrost	Hydrology / Limnology	Water quality	Climate conditions	Eskers and other unique or fragile landscapes	Surface and bedrock geology	Sediment and soil quality	Tidal processes and bathymetry	Air quality	Noise levels	BIOLOGICAL	Vegetation	Wildlife, including habitat and migration patterns	Birds, including habitat and migration patterns	Aquatic species, incl. habitat and migration/spawning	Wildlife protected areas	SOCIO-ECONOMIC	Archaeological and cultural historic sites	Employment	Community wellness	Community infrastructure	Human health
Construction	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Exploitation																									
Scientific/International Polar Year Research		-	-	-	-	M	-	-	-	-	-	-	-	M					M	M		P	-	-	-
Désaffectation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(P = Positive, N = Négative et non gérable, M = Négative et gérable, U = Inconnue)

Site du projet



Liste des géométries de projet

1	point	Fish tracking mooring
2	point	Fish tracking mooring
3	point	Fish tracking mooring
4	point	Fish tracking mooring
5	point	Fish tracking mooring
6	point	Fish tracking mooring
7	point	Fish tracking mooring
8	point	Fish tracking mooring
9	point	Fish tracking mooring
10	point	Fish tracking mooring

11	point	Fish tracking mooring
12	point	Fish tracking mooring
13	point	Fish tracking mooring
14	point	Fish tracking mooring
15	point	Fish tracking mooring
16	point	Fish tracking mooring
17	point	Fish tracking mooring
18	point	Fish tracking mooring
19	point	Fish tracking mooring
20	point	Fish tracking mooring
21	point	Fish tracking mooring
22	point	Fish tracking mooring
23	point	Fish tracking mooring
24	point	Fish tracking mooring
25	point	Fish tracking mooring
26	point	Fish tracking mooring
27	point	Fish tracking mooring
28	point	Fish tracking mooring
29	point	Fish tracking mooring
30	point	Fish tracking mooring
31	point	Fish tracking mooring
32	point	Fish tracking mooring
33	point	Fish tracking mooring
34	point	Fish tracking mooring
35	point	Fish tracking mooring
36	point	Fish tracking mooring
37	point	Fish tracking mooring
38	point	Fish tracking mooring
39	point	Fish tracking mooring
40	point	Fish tracking mooring
41	point	Fish tracking mooring
42	point	Fish tracking mooring
43	point	Fish tracking mooring
44	point	Fish tracking mooring
45	point	Fish tracking mooring
46	point	Fish tracking mooring
47	point	Fish tracking mooring
48	point	Fish tracking mooring
49	point	Fish tracking mooring
50	point	Fish tracking mooring
51	point	Fish tracking mooring
52	point	Fish tracking mooring
53	point	Fish tracking mooring
54	point	Fish tracking mooring

55	point	Fish tracking mooring
56	point	Fish tracking mooring
57	point	Fish tracking mooring
58	point	Fish tracking mooring
59	point	Fish tracking mooring
60	point	Fish tracking mooring
61	point	Fish tracking mooring
62	point	Fish tracking mooring
63	point	Fish tracking mooring
64	point	Fish tracking mooring
65	point	Fish tracking mooring
66	point	Fish tracking mooring
67	point	Fish tracking mooring
68	point	Fish tracking mooring
69	point	Fish tracking mooring
70	point	Fish tracking mooring
71	point	Fish tracking mooring