NIRB Application for Screening #126223

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

Application Type:	New
Project Type:	Scientific Research
Application Date:	Monday, August 11, 2025
Period of operation:	from 2025-08-03 to 2028-10-19
Project Proponent:	Kevin Hedges Fisheries and Oceans Canada 501 University Crescent Winnipeg MB R3T 2N6 Canada Phone Number:: 2047705814, Fax Number::

DETAILS

Non-technical project proposal description

English: The main objective is to improve our understanding of the movement patterns and ecology of Greenland Shark, Greenland Halibut and Arctic Skate. Individuals of each species will be caught on bottom set longlines and marked with acoustic tags that allow the tracking of individual animals. Fish tracking moorings deployed near Clyde River and Qikiqtarjuaq, near the Disko Fan Conservation Area and along the shelf break in Baffin Bay will be retrieved, refit and redeployed. A new set of moorings will be deployed in the outer half of Cumberland Sound. Bottom set longline 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. All captured fishes and invertebrates will be identified and the lengths and weights will be recorded for all Greenland Halibut and Arctic Skate. Tissue samples will be taken from a subset of specimens of all species (except SARA listed species and Greenland Sharks) for chemical tracer analyses to examine food web structure; gonad samples and morphometric measurements will also be taken from these individuals. 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. 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 near Pond Inlet, Clyde River, Qikiqtarjuaq and in Cumberland Sound 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. All non-retained animals will be returned to the water at the site of capture.

French: L'objectif principal est d'améliorer notre compréhension des habitudes de déplacement et de l'écologie de la laimargue atlantique, du flétan du Groenland et de la raie boréale. Les individus de chaque espèce seront capturés à la palangre et marqués avec des étiquettes acoustiques qui permettent de suivre les animaux individuels. Les amarres de suivi des poissons déployées près de la rivière Clyde et de Qikiqtarjuaq, près de l'aire de conservation Disko Fan et le long du rebord du plateau continental dans la baie de Baffin seront récupérées, radoubées et redéployées. Un nouvel ensemble d'amarres sera déployé dans la moitié extérieure de la baie Cumberland. La palangre de fond sera utilisée pour évaluer la répartition et l'abondance relative du flétan du Groenland de taille commerciale dans les eaux côtières près de la rivière Clyde et de Qikiqtarjuaq, au Nunavut. La pêche n'aura pas lieu dans la baie Cumberland. Les palangres seront installées pour une durée maximale de 12 heures. Les hameçons seront appâtés avec des calmars et les lignes seront posées au fond de l'océan. Tous les poissons et invertébrés capturés seront marqués, et la longueur et le poids de tous les flétans du Groenland et des raies boréales seront consignés. Des échantillons de tissus seront prélevés sur un sous-ensemble de spécimens de toutes les espèces (à l'exception des espèces inscrites à la Loi sur les espèces en péril (LEP) et des laimargues atlantiques) pour des analyses de traceurs chimiques afin d'examiner la structure du réseau trophique. Des échantillons de gonades et des mesures morphométriques seront également prélevés sur ces individus. Des émetteurs acoustiques VEMCO (V16 : http://www.vemco.com/pdf/v16cont.pdf) seront implantés par intervention chirurgicale dans les cavités corporelles de flétans du Groenland capturés et sains (n = 300), de laimargues atlantiques (n = 60) et de raies boréales (n = 60). Les interventions chirurgicales et la manipulation prendront moins de 5 minutes pour minimiser le stress des animaux. Les laimargues atlantiques seront marquées à partir d'un zodiac, les animaux étant maintenus parallèlement au bateau et juste à la surface de l'eau. Des moniteurs acoustiques VEMCO (VR2W : http://www.vemco.com/pdf/vr2w.pdf) qui enregistrent l'heure et la date de l'identification des animaux (dans un rayon de plus de 500 m d'un moniteur individuel) seront déployés en réseaux près de Pond Inlet, de Clyde River, de Qikiqtarjuaq et dans la baie Cumberland pour suivre les déplacements des animaux. Les moniteurs acoustiques individuels seront sécurisés à l'aide de poids fixes de 200 lb, de flotteurs souterrains et d'un mécanisme de libération acoustique qui peut être déclenché l'année suivante pour récupérer les moniteurs pour le téléchargement des données. Tous les animaux non conservés seront remis à l'eau sur le site de capture.

Inuktitut: ᑐᕌᒐᓪᓚᑦᑖᖑᓂᐊᖅᑐᖅ ᐱᐅᓯᑎᑦᓯᒋᐊᕈᒪᓂᖅ ᐅᕙᒍᑦ ᑐᑭᓯᐅᒪᔭᖏᓐᓂᒃ ᓇᒧᑦ ᓅᑦᑕᐸᓐᓂᖏᒍᑦ ᐱᐅᓯᖏᓐᓂᒃ ᐊᒻᒪ ᐱᔾᔪᑎᖃᖅᑐᓂᒃ ᑳᓚᓖᑦ ᓄᓈᑕ ᐃᖃᓗᔾᔪᐊᖑᓐᓂᒃ, ᑳᓚᓖᑦ ᓄᓈᑕ ᖃᓕᕋᓕᖏᑦ, ᐊᒻᒪ ᐃᓱᖓᐅᔮᐃᑦ/ᐊᓪᓚᕐᓇᐃᑦ.

ᐊᑐᓂ ᑕᒪᒃᑯᐊ ᐱᔭᐅᔪᑦ ᐃᖅᑲᖓᓃᑦᑐᓄᑦ ᐊᑦᑐᓈᑯᑖᓄᑦ ᐊᒻᒪ ᓇᓄᓇᐃᖅᑕᐅᕙᓪᓗᑎᒃ ᓂᐱᓕᐅᕈᑎᓄᑦ ᓂᕙᖓᑖᓄᑦ ᖃᐅᔨᓴᐅᑎᑦᓴᓂᒃ ᓂᕙᖓᑖᓕᖅᑕᐅᓂᖏᓐᓂᒃ. ᐃᖃᓗᓐᓂᒃ ᖃᐅᔨᓴᐅᑎᐅᔪᑦ ᕿᒪᑦᑕᐅᓯᒪᔪᑦ ᖃᓂᒋᔭᖏᓐᓂ ᑲᖏᖅᑐᒑᐱᐅᑉ ᐊᒻᒪ ᕿᑭᖅᑕᕐᔪᐊᑉ, ᖃᓂᒋᔭᖏᓐᓂ ᑏᔅᑯ ᕚᓐ ᐱᐅᖅᓱᐊᕐᕕᐅᑉ ᐊᕙᑎᐊᓂ ᐊᒻᒪ ᐃᖅᑲᖓᑕ ᑭᓪᓕᖓᒍᑦ ᓴᓐᓂᕈᑎᐅᑉ ᐃᒪᖓᓂ ᐅᑎᖅᑎᑕᐅᓛᖅᑐᑦ, ᓄᑖᓂᒃ ᐱᓕᕆᔾᔪᑎᓂᒃ ᐋᖅᑭᑦᓯᕕᐅᓗᑎᒃ ᐊᒻᒪ ᕿᒪᑦᑕᐅᑲᓐᓂᕐᓗᑎᒃ. ᓄᑖᓂᒃ ᖃᐅᔨᓴᐅᑎᓕᐅᓛᖅᑐᑦ ᑎᓄᔾᔨᕙᒻᒥ ᐹᖅᐸᓯᐊᓄᑦ. ᐃᖅᑲᖓᓅᖓᔪᑯᑖᒥᒃ ᐊᑐᓛᖅᑐᑦ ᖃᐅᔨᓴᖅᑕᐅᓗᑎᒃ ᓇᒧᖕᒌᕙᓐᓂᖏᓐᓄᑦ ᐊᒻᒪ ᐊᒥᓲᓂᖏᓐᓂᒃ ᑮᓇᐅᔭᓕᐅᕈᑎᐅᕙᑦᑐᑦ ᐊᖏᓂᕆᕙᑦᑕᖏᓐᓂᒃ ᑲᓛᖦᖥᑦ ᓄᓈᑕ ᖃᓕᕋᓕᖏᑦ ᐃᒪᖏᓐᓂ ᖃᓂᑦᓴᖅᑐᓂᒃ ᑲᖏᖅᑐᒑᐱᐅᑉ ᐊᒻᒪ ᕿᑭᖅᑕᕐᔪᐊᑉ, ᓄᓇᕗᒻᒥ; ᐃᖃᓗᒐᓱᓛᖏᑦᑐᑦ ᐅᕙᓂ ᑎᓄᔾᔨᕙᒻᒥ. ᐊᑦᑐᓈᑯᑖᑦ ᐋᖅᑭᑦᑕᐅᓯᒪᓛᖅᑐᑦ 12 ᐃᑲᕐᕋᓄᑦ; ᓂᑦᓯᖏᑦ ᓂᕆᐊᖅᑲᓛᖅᑐᑦ ᓯᑯᐃᑦᓂᒃ ᐊᒻᒪ ᐃᖅᑲᖓᓅᖓᑎᑕᐅᓗᑎᒃ. ᐃᓅᓐᓇᑎᒃ ᐱᔭᐅᓛᖅᑐᑦ ᐃᖃᓗᐃᑦ ᐊᒻᒪ ᕿᒥᕐᓗᖃᖏᑦᑐᑦ ᐆᒪᔪᐃᑦ ᓇᓄᓇᐃᔭᖅᑕᐅᓛᖅᑐᑦ ᐊᒻᒪ ᑕᑭᓂᖏᑦ ᐱᔭᐅᓗᑎᒃ ᐊᒻᒪ ᐅᖅᑯᒪᐃᓐᓂᕐᓂᐊᖅᑕᐅᓗᑎᒃ ᐊᒻᒪ ᑎᑎᖅᑕᐅᕙᓪᓗᑎᒃ ᐃᓅᓐᓇᖏᓐᓄᑦ ᑲᓛᖦᖥᑦ ᓄᓈᑕ ᖃᓕᕋᓕᖏᑦ, ᐊᒻᒪ ᐃᓱᖓᐅᔭᐃᑦ/ᐊᒡᓕᕐᓇᐃᑦ. ᐊᒥᖏᓐᓂᒃ ᐊᒻᒪ ᓂᕿᖏᓐᓂᒃ ᐱᕕᐅᕙᓛᖅᑐᑦ ᖃᐅᔨᓴᖅᑕᐅᔪᑦᓴᓂᒃ ᐃᓅᓐᓇᖏᓐᓂᒃ ᐆᒪᔪᓂᒃ (ᐱᔭᐅᖏᓪᓗᑎᒃ ᐃᒫᒃ SARA ᑎᑎᕋᖅᑕᐅᓯᒪᔪᑦ ᐆᒪᔪᐃᑦ ᐊᒻᒪ ᑲᓛᖦᖥᑦ ᓄᓈᑕ ᐃᖃᓗᔾᔪᐊᖓᓐᓂᒃ) ᐃᓚᐅᕈᑎᓄᑦ ᐳᓚᐅᕐᕕᐅᓯᒪᒻᒪᖔᑕ ᑎᒥᖏᑦ ᖃᐅᔨᓴᖅᑕᐅᒐᔭᕐᓗᑎᒃ ᓂᕿᕆᕙᑦᑕᖏᑦ; ᕿᑐᕐᖏᐅᕈᑎᒋᕙᑦᑕᖏᓐᓂᒃ ᖃᐅᔨᓴᕐᓗᑎᒃ ᐊᒻᒪ ᐱᕈᖅᐸᓪᓕᐊᔪᓂᒃ ᐆᑦᑕᐃᕙᓪᓗᑎᒃ ᖃᓄᑎᒋ ᐱᕈᖅᐸᓪᓕᐊᕙᓐᓂᖏᓐᓄᑦ ᐱᔭᐅᕕᐅᕙᓐᓂᐊᕐᒥᔪᑦ ᑕᒪᒃᑯᐊ ᐱᔭᐅᔪᑦ. VEMCO ᓂᐱᓕᐅᕈᑎᓂᒃ (V16 ᓂᐱᓕᐅᕈᑏᑦ: http://www.vemco.com/pdf/v16cont.pdf) ᐃᓕᓯᖅᑲᑦᑕᓛᖅᑐᑦ ᐆᒪᔪᐃᑦ ᑎᒥᖏᑕ ᐃᓗᖏᓐᓄᑦ ᑎᒍᔭᐅᔪᑦ ᐊᒻᒪ ᐋᓐᓂᐊᖅᑲᖏᑦᑐᓄᑦ ᑲᓛᖦᖥᑦ ᓄᓈᑕ ᖃᓕᕋᓕᖏᑦ (n=300), ᑲᓛᖦᖥᑦ ᓄᓈᑕ ᐃᖃᓗᔾᔪᐊᖓᓐᓂᒃ (n=60), ᐊᒻᒪ ᐃᓱᖓᐅᔭᐃᑦ/ᐊᒡᓕᕐᓇᐃᑦ (n=60). ᑲᒪᒋᔭᐅᓇᓱᑉᐸᓛᖅᑐᑦ ᐆᒪᔪᐃᑦ ᑐᖔᓂ 5 ᒪᓇᑦᓯ ᐱᔭᖅᑯᖅᑐᓴᓗᐊᖅᑯᓇᒥᑦ. ᑲᓛᖦᖥᑦ ᓄᓈᑕ ᐃᖃᓗᔾᔪᐊᖓᓐᓂᒃ ᓂᕙᖓᑖᓕᖅᑕᐅᓛᖅᑐᑦ ᐳᓪᓚᓕᒻᒥᒃ ᐅᒥᐊᑲᓪᓚᒻᒥᒃ ᐊᑐᕐᓗᑎᒃ, ᐆᒪᔪᐃᑦ ᖁᓪᒍᐊᖓᑎᑕᐅᕙᓪᓗᑎᒃ ᐃᒫᓂ ᐊᒻᒪ ᐃᒪᐅᑉ ᖂᖓᓂᒐᓛᓕᕋᐃᒍᑎᒃ. VEMCO ᓂᐱᓕᐅᕈᑎᓂᒃ (VR2W ᓂᐱᓕᐅᕈᑏᑦ: http://www.vemco.com/pdf/vr2w.pdf) ᖃᐅᔨᓴᐅᑎᖃᕐᓗᑎᒃ ᓇᓄᓇᐃᔭᐃᓰᓂᒃ ᓯᕿᙳᔭᖓᓂᒃ ᐊᒻᒪ ᐅᓪᓗᖓᓂᒃ ᓂᕙᖓᑖᓕᖅᑕᐅᓯᒪᔪᑦ ᐆᒪᔪᐃᑦ (ᐃᓗᐊᓃᑦᑐᓂᒃ >500 m ᖃᐅᔨᓴᐅᑎᒥᒃ ᐊᑕᐅᓯᕐᒥᒃ) ᐃᓚᑰᑎᖅᑕᐅᓗᑎᒃ ᐱᓕᕆᔾᔭᑎᐅᖃᑦᑕᓛᖅᑐᑦ ᖃᓂᒋᔭᖏᓐᓂ ᒥᑦᑎᒪᑕᓕᒃ, ᑲᖏᖅᑐᒑᐱᒃ, ᕿᑭᖅᑕᕐᔪᐊᖅ ᐊᒻᒪ ᑎᓄᔾᔨᕙᒻᒧᑦ ᖃᐅᔨᓴᖅᑕᐅᕙᓪᓗᑎᒃ ᐆᒪᔪᐃᑦ ᓇᓕᐊᓐᓄᑦᓴᕐᓂᖏᑦ. ᐊᑐᓂ ᓂᐱᓕᐅᕈᑎᓂᒃ ᖃᐅᔨᓴᐅᑎᖃᓛᖅᑐᑦ ᐊᑐᕐᓗᑎᒃ ᐋᖅᑭᑦᓯᒪᔪᓂᒃ 200 ᐸᐅᓐᓂᒃ ᐅᖅᑯᒪᐃᓐᓂᓕᓐᓄᑦ, ᐃᒪᐅᑉ ᐃᑭᐊᖓᓃᓯᓄᑦ ᐳᑦᑕᖅᑯᑎᖃᕐᓗᑎᒃ ᐊᒻᒪ ᓂᐱᓕᐅᕈᑎᓂᒃ ᐱᓕᕆᔾᔭᑎᖃᕐᓗᑎᒃ ᓴᒃᑯᐃᓰᓂᒃ ᐃᒻᒥᓂᒃ ᐊᐅᓚᔾᔭᒍᓇᖅᑐᓂᒃ ᐊᕐᕌᒍᐊᑉ ᑭᒍᓪᓚᐅᑉ ᐃᓗᐊᓂ ᖃᐅᔨᓴᐅᑏᑦ ᐱᔭᐅᔭᓐᓇᓕᕋᔭᕐᓗᑎᒃ ᓂᐱᓕᐅᕐᓯᒪᓂᖏᑦ ᖃᐅᔨᓴᐅᑎᓂ. ᐃᓅᓐᓇᑎᒃ ᐱᓯᒪᔭᐅᖏᑦᑐᑦ ᐆᒪᔪᐃᑦ ᐅᑎᖅᑎᑕᐅᓛᖅᑐᑦ ᐃᒫᓄᑦ ᐃᓂᖓᓄᑦ ᐱᔭᐅᕕᒋᓚᐅᖅᑕᖏᓐᓄᑦ.

Personnel

Personnel on site: 10
Days on site: 30
Total Person days: 300
Operations Phase: from 2025-08-03 to 2028-10-19

Activities

Location	Activity Type	Land Status	Site history	Site archaeological or paleontological value	Proximity to the nearest communities and any protected areas
NAFO Divisions 0B-2G border inside Hatton Basin Conservation Area; moorings located in the area for 3+ years	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
Outer half of Cumberland Sound; moorings located in area for last two years	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
NAFO Divisions 0A-0B border inside Davis Strait Conservation Area; moorings located in the area for 3+ years	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
Northern end of Hatton Basin Conservation Area; moorings located in the area for 3+ years	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

Community Involvement & Regional Benefits

Community	Name	Organization	Date Contacted
Pangnirtung	Mark Kilabuk	Pangnirtung Hunters and Trappers Organization	2025-05-21

Authorizations

Indicate the areas in which the project is located:

Transboundary
South Baffin

Authorizations

Regulatory Authority	Authorization Description	Current Status	Date Issued / Applied	Expiry Date
Fisheries and Oceans Canada	Licence to Fish for Scientific Purposes	Applied, Decision Pending		
Nunavut Research Institute	NRI license to deploy moorings in Cumberland Sound	Applied, Decision Pending		

Project transportation types

Transportation Type	Proposed Use	Length of Use
Air	Commercial air travel for field crew from Ontario to Nunavut, and return to Ontario	
Water	Transit of F.V. Kiviuq I from Newfoundland to Nunavut, research cruise in Nunavut for this project, transit of ship back to Newfounland at end of project.	

Project accomodation types

Other,

Material Use

Equipment to be used (including drills, pumps, aircraft, vehicles, etc)

Equipment Type	Quantity	Size - Dimensions	Proposed Use
Kiviuq 1	1	28.53	The Kiviuq 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 Kiviuq is primarily used for marine research and delivers supplies to Arctic Fishery Alliance's owner communities during the summer months.

Detail Fuel and Hazardous Material Use

Detail fuel material use:	Fuel Type	Number of containers	Container Capacity	Total Amount	Units	Proposed Use
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).

Water Consumption

Daily amount (m3)	Proposed water retrieval methods	Proposed water retrieval location
0		

Waste

Waste Management

Project Activity	Type of Waste	Projected Amount Generated	Method of Disposal	Additional treatment procedures
Scientific/International Polar Year Research	Greywater	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	Hazardous	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	Non-Combustible wastes	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	Overburden (organic soil, waste material, tailings)	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	Sewage (human waste)	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.

Environmental Impacts:

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 of Existing Environment: Physical Environment

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 of Existing Environment: Biological Environment

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

Description of Existing Environment: Socio-economic Environment

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

N/A

Identification of Impacts and Proposed Mitigation Measures

No significant impacts anticipated; no mitigation measures developed.

Cumulative Effects

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.

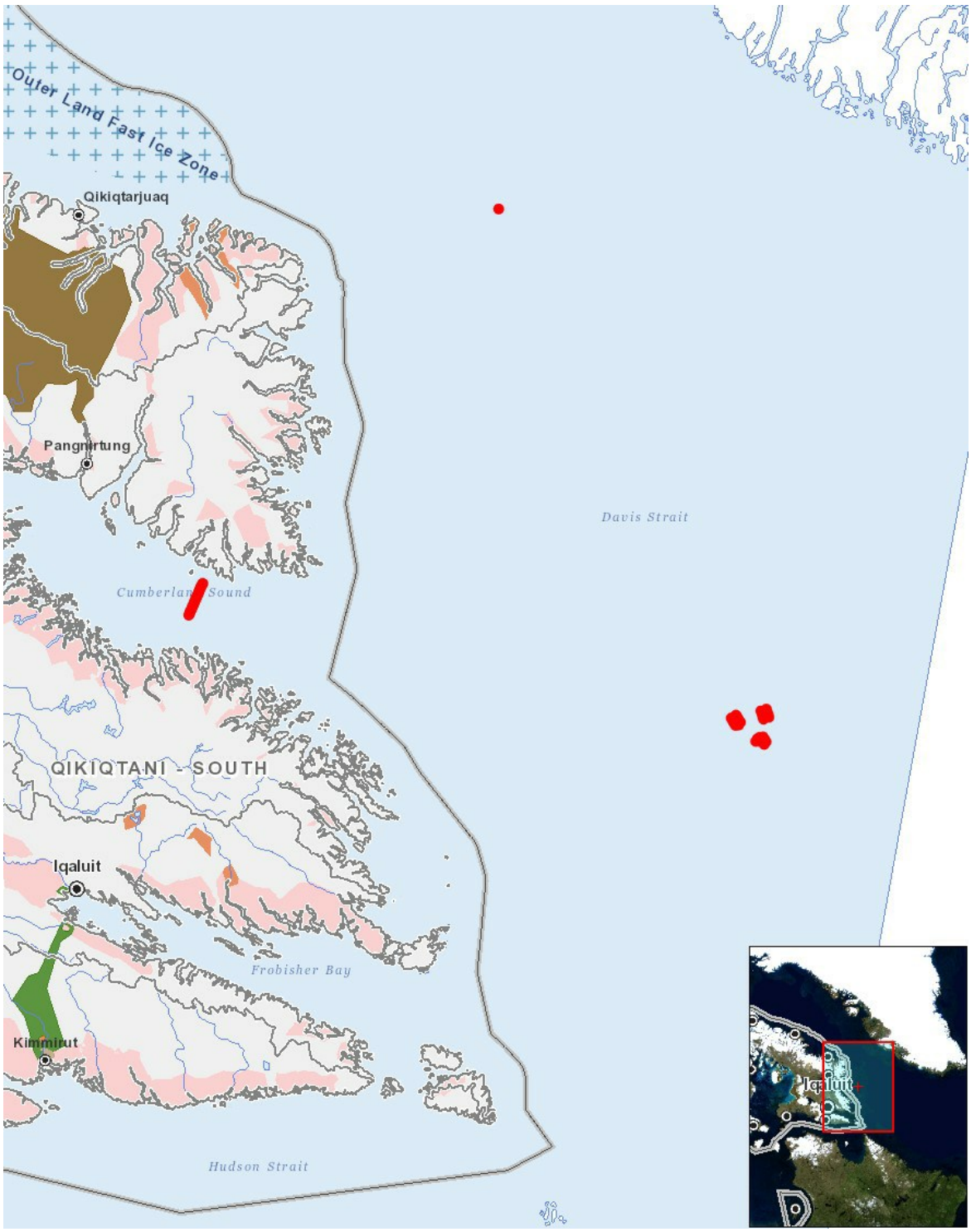
Impacts

Identification of Environmental Impacts

	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																									
-		-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-		-	-	-	-	-
Operation																									
Scientific/International Polar Year Research		-	-	-	-	M	-	-	-	-	-	-	M		-	-	-	M	M		-	P	-	-	-
Decommissioning																									
-		-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-		-	-	-	-	-

(P = Positive, N = Negative and non-mitigatable, M = Negative and mitigatable, U = Unknown)

Project Location



List of Project Geometries

1	point	NAFO Divisions 0B-2G border inside Hatton Basin Conservation Area; moorings located in the area for 3+ years
2	point	NAFO Divisions 0B-2G border inside Hatton Basin Conservation Area; moorings located in the area for 3+ years
3	point	NAFO Divisions 0B-2G border inside Hatton Basin Conservation Area; moorings located in the area for 3+ years
4	point	NAFO Divisions 0B-2G border inside Hatton Basin Conservation Area; moorings located in the area for 3+ years
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11	point	NAFO Divisions 0B-2G border inside Hatton Basin Conservation Area; moorings located in the area for 3+ years
12	point	NAFO Divisions 0B-2G border inside Hatton Basin Conservation Area; moorings located in the area for 3+ years
13	point	Outer half of Cumberland Sound; moorings located in area for last two years
14	point	NAFO Divisions 0A-0B border inside Davis Strait Conservation Area; moorings located in the area for 3+ years
15	point	Northern end of Hatton Basin Conservation Area; moorings located in the area for 3+ years
16	point	Northern end of Hatton Basin Conservation Area; moorings located in the area for 3+ years
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