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Assessing contaminants in seabird habitats in Eclipse Sound

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සෑම මැත්තුවක්:

New

අප්‍රේල් නොවුනුවක්
සෑම මැත්තුවක්:

Scientific Research

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සෑම මැත්තුවක්:

4/13/2022 10:57:57 AM

Period of operation:

from 0001-01-01 to 0001-01-01

බැඳීම්දාරුවාදීම්දාරුවක්: from 0001-01-01 to 0001-01-01

අප්‍රේල් නොවුනුවක්:

Jennifer Provencher

ECCC

NWRC C/O Carleton University, 1125 Colonel By Drive, Raven Road
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Canada

දින දින: 819 955 1399, ජ්‍යෙෂ්ඨ:

‘**બોધિંદુઃહ**’ અને ‘**બોધિંદુઃસ**’

With this project we aim to assess ship-based pollution in migratory bird habitat near Arviat and Pond Inlet. This includes examining how ship traffic contributes to oil pollution and emissions in areas used by seabirds, as well as ship based plastic pollution, including microplastics. While pollution in seabirds have been studied in Nunavut for over 40 years via the Northern Contaminants Program (NCP), there is lack of information on pollution of emerging concern such as oil pollution and microplastics. We hope that this study will start to explore these issues in two communities in Nunavut, Arviat and Pond Inlet. This project will be carried out with partners in Pond Inlet and Arviat as part of a recently funding project titled Inuit Qaujisarnirmut Pilirijjutit on Arctic Shipping Risks in Inuit Nunangat funded under the CINUK call for proposals led by ITK. Small teams of community members will deploy the sampling during the open water seasons in Arviat and Pond. There will be three sampling types. One set of passive air samplers will be deployed near where migratory birds breed in the areas. These are small dishes approximately 30cm in diameter that are left in the habitat for 60 days a retrieved. Second, an active high volume sampler will be used to test the output from ships when they are moored close to town. A total of 10 active samples will be collected from each site per year, and will involved samples when no ships are in town, and when ships are in town. The last sampling will involve using a manta net to sample for microplastics in the water column. This will be down 5 times a year at each site. The manta net filters the water while being pulled behind a small vessel. The filters are then collected and analysed, with no active water collection. As this project was extensively co-developed though regular consultation with international, national, and local Inuit community organizations in order to respond directly to urgent and locally identified research needs, it is anticipated that project will have substantial impact and wide-ranging outcomes. Results will support multiple levels of decision makers aiming to; a) minimise harmful impacts of shipping to Inuit livelihoods, culture, quality of life and the environment, b) promote the use of scientific evidence in policy decisions affecting shipping in the Arctic/Inuit homeland, and c) improve cooperation between maritime industries, communities and science. All data generated by this project will be a part of the Inuit Qaujisarnirmut Pilirijjutit on Arctic Shipping Risks in Inuit Nunangat team discussion. Community partners will co-collect, co-analyse and co-finalise all reports and data stewardship decisions. The results will be shared within Arviat and Pond Inlet as the project develops from 2022 to 2025, and as results are summarised the team will prepare plain language reports, radio interviews, Facebook posts and other material as needed for wide spread sharing.

►ΔΔΔ□□□: Avec ce projet, nous visons à évaluer la pollution causée par les navires dans l'habitat des oiseaux migrateurs près de Pond Inlet. Cela comprend l'examen de la façon dont le trafic maritime contribue à la pollution par les hydrocarbures et aux émissions dans les zones utilisées par les oiseaux de mer, ainsi que la pollution plastique causée par les navires, y compris les microplastiques. Bien que la pollution chez les oiseaux de mer soit étudiée au Nunavut depuis plus de 40 ans dans le cadre du Programme des contaminants du Nord (PCN), il y a un manque d'information sur la pollution préoccupante émergente comme la pollution par les hydrocarbures et les microplastiques. Nous espérons que cette étude commencera à explorer ces questions dans Pond Inlet. Ce projet sera réalisé avec des partenaires de Pond Inlet dans le cadre d'un projet récemment financé intitulé Inuit Qaujisarnirmut Pilirijjutit on Arctic Shipping Risks in Inuit Nunangat financé dans le cadre de l'appel de propositions CINUK dirigé par ITK. De petites équipes de membres de la communauté déployeront l'échantillonnage pendant les saisons d'eau libre à Pond. Il y aura trois types d'échantillonnage. Un ensemble d'échantilleurs d'air passifs sera déployé près de l'endroit où les oiseaux migrateurs se

reproduisent dans les régions. Ce sont de petits plats d'environ 30cm de diamètre qui sont laissés dans l'habitat pendant 60 jours à récupérés. Deuxièmement, un échantillonneur actif à volume élevé sera utilisé pour tester la sortie des navires lorsqu'ils sont amarrés près de la ville. Au total, 10 échantillons actifs seront prélevés sur chaque site chaque année et comprendront des échantillons lorsqu'aucun navire n'est en ville et lorsque les navires sont en ville. Le dernier échantillonnage consistera à utiliser un filet de manta pour prélever un échantillon de microplastiques dans la colonne d'eau. Ce sera en baisse 5 fois par an sur chaque site. Le filet manta filtre l'eau tout en étant tiré derrière un petit récipient. Les filtres sont ensuite collectés et analysés, sans collecte d'eau active. Étant donné que ce projet a été largement élaboré dans le cadre de consultations régulières avec des organismes communautaires inuits internationaux, nationaux et locaux afin de répondre directement aux besoins de recherche urgents et identifiés localement, on s'attend à ce que le projet ait un impact substantiel et des résultats de grande envergure. Les résultats appuieront plusieurs niveaux de décideurs qui visent à; a) réduire au minimum les effets néfastes du transport maritime sur les moyens de subsistance, la culture, la qualité de vie et l'environnement des Inuits, b) promouvoir l'utilisation de données scientifiques dans les décisions stratégiques touchant la navigation dans l'Arctique et la patrie inuite, et c) améliorer la coopération entre les industries maritimes, les collectivités et la science. Toutes les données générées par ce projet feront partie de la discussion de l'équipe inuit Qaujisarnirmut Pilirijjutit sur les risques de la navigation dans l'Arctique à Inuit Nunangat. Les partenaires communautaires co-collecteront, co-analyseront et co-finaliseront tous les rapports et les décisions de gestion des données. Les résultats seront partagés au sein de Pond Inlet au fur et à mesure de l'évolution du projet de 2022 à 2025, et au fur et à mesure que les résultats seront résumés, l'équipe préparera des rapports en langage clair, des entrevues radiophoniques, des publications Facebook et d'autres documents au besoin pour un partage à grande échelle.

Δ_μ^εΠ_Ω^ε: Από την Ιερά Μητρόπολη Καρδίτσας και Λαζαρέων, ο ιερέας Νικόλαος Σταύρου, παρακαλεί την επιστροφή της από την Ελλάδα στην Τουρκία. Οι Έλλησης και Τούρκης συνομιλούν για την επιστροφή της στην Τουρκία, με την Ελλάδα να διατηρεί την θέση της στην Ευρώπη.

Personnel

Personnel on site: 4

Days on site: 20

Total Person days: 80

Operations Phase: from 2022-07-01 to 2025-10-01

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መር-የትና	ፋስ	ይህንናውን በትኩና	የኩናውን ስራውን አድራሻ
ጥርክስ ተቋማ	Molleen	HTO	2021-11-23
ጥርክስ ተቋማ	Shelly Elverum	Ikaarvik	2021-12-01
ጥርክስ ተቋማ	Jamie Enook	ECCC	2021-11-01
ጥርክስ ተቋማ	Justin Milton	Ikaarvik	2021-12-01

ՀԱՅԻ ՐՅՈՒՄ ԱՐԵՎՈՒՆ ԳՐՈՒԹԵԿԸ

መጥበቃዎች ለተዘረዘሩ ለሚፈልግ በበኩል:

North Baffin

ՀԱՅՈՒԹՅԱՆ ԱՐԵՎՈՎՈՐԾ ԳՐԱՄԱՆԱԿ

Project transportation types

Transportation Type	Location Description	Length of Use
Water	small vessels from Pond Inlet, day trips	

Project accommodation types

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አዲር ፍዴራል የጊዜ ሰነድ በስተቀርበው የሚገኘውን የሚከተሉት ደንብ የሚያሳይ

| የዕለታዊ
ዲzel ማኅበር ብቻ የሚከተሉት
ፍጻድን አለው |
|--|--|--|--|--|--|--|
| Diesel | fuel | 3 | 5 | 15 | Liters | Use of a small boat to collect samples |

ΔLና ፍጻድን ማኅበር ብቻ የሚከተሉትን የዕለታዊ ዲzel ማኅበር ብቻ የሚከተሉትን የሚከተሉት ተስፋዎች

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፩፻፭፻፪፯ የ፩፻፭፻፪፯ ስራ በ፩፻፭፻፪፯

ለመስጠና አገልግሎት ስራ በ፩፻፭፻፪፯	የመልዕክት	የመስጠና የ፩፻፭፻፪፯	የመልዕክት	የመስጠና የ፩፻፭፻፪፯
Information is not available				

፩፻፭፻፪፯ የ፩፻፭፻፪፯ ስራ በ፩፻፭፻፪፯

We do not expect any environmental impacts from this work, in fact, the goal of the work is to address potential environmental impacts from vessel traffic in the region. Our team will actively work in minimize any impacts on wildlife during the collection of samples.

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 11: Municipal Development

Miscellaneous Project Information

8. 20 $\Delta^6 C B \pi^{-6} \pi^6$ \rightarrow $\pi^6 C B \pi^6$ | $\Delta^6 \pi^6 \Delta^6 C B \pi^6 \pi^6$ \rightarrow $\pi^6 C B \pi^6 \Delta^6 C B \pi^6 \pi^6$

Cumulative Effects

We do note expect any cumulative effects from this work, and in fact we set out to study the cumulative effects from shipping.

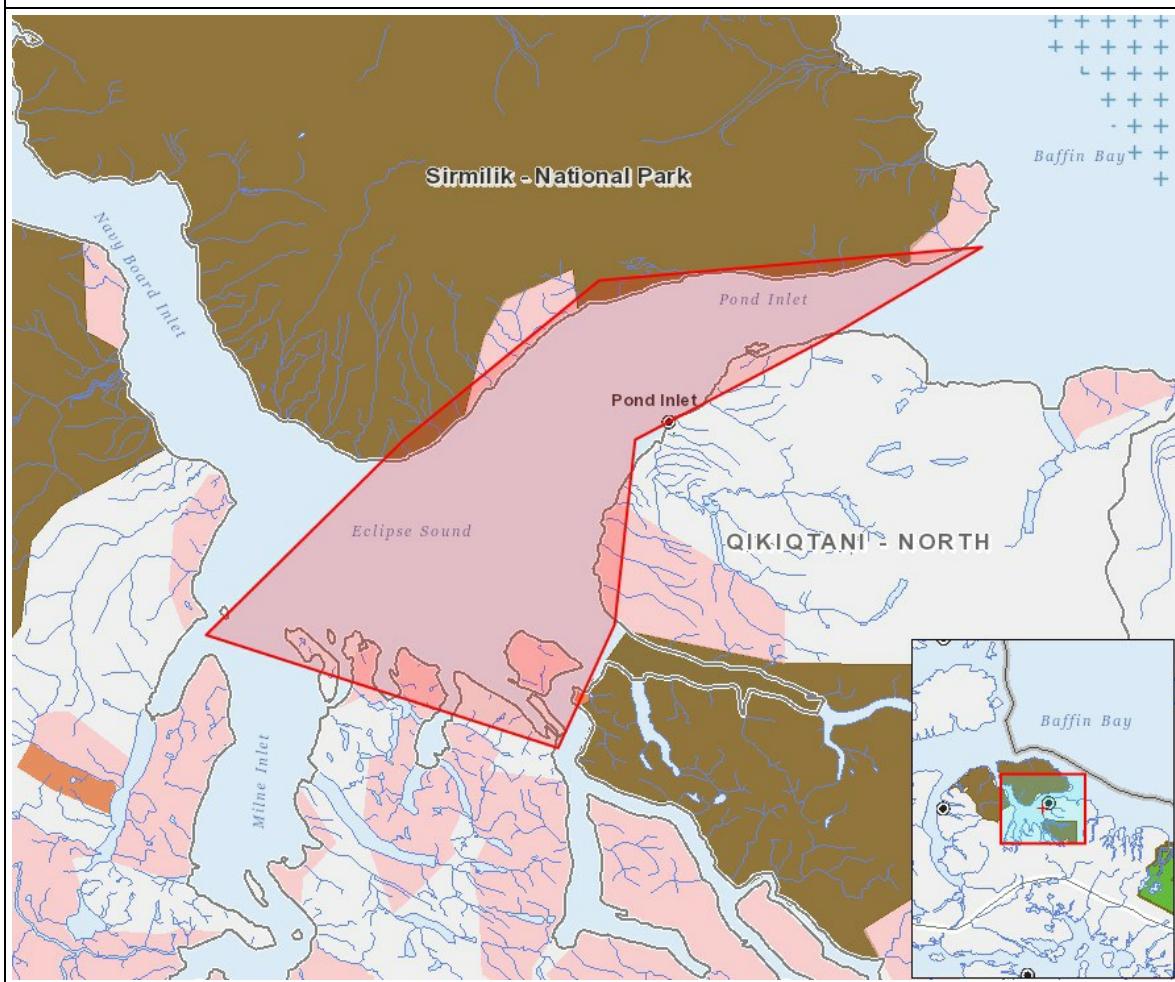
Impacts

പ്രധാന പ്രവർത്തനങ്ങൾ എന്നതും കൂടിയാണ് ഇത്.

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											
BIOLOGICAL											
Noise levels											
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											

(P = പ്രധാന പ്രവർത്തനങ്ങൾ, N = നിരവധി പ്രവർത്തനങ്ങൾ, M = മാത്രം പ്രവർത്തനങ്ങൾ, U = ഉല്ലംഖനിക്കാൻ ശ്രദ്ധിച്ച പ്രവർത്തനങ്ങൾ)

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List of Project Geometries

1	polygon	Eclipse Sound
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