NIRB Uuktuutinga Ihivriuqhikhamut #125436

BBC Perfect Planet - Ahiak Migratory Bird Sanctuary (Karrak Lake) - Arctic Foxes

Uuktuutinga Qanurittuq: New

Havaap Qanurittunia: Scientific Research

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QANURITTUT

Tukihiannaqtunik havaariyauyumayumik uqauhiuyun

Qablunaatitut: Project Title BBC Perfect Planet - Ahiak Migratory Bird Sanctuary (Karrak Lake) - Arctic Foxes There will be 4 members of crew present on location;•Sarah-Jane Walsh – Field Director•Alain Lusignan – Expedition Leader•Ivo Norenberg – Camera Operator•Tom Crowley - Camera OperatorPerfect Planet is a 5-part wildlife television documentary series, which has been filmed over a 4-year period and is due to air on BBC1 in 2020. Episode 1 focuses on how changes in the distribution of sunlight across the globe drive unique animal behaviours and adaptations. Two of our key sequences will showcase how animals cope with periods of no sunlight and perpetual sunlight. We have already filmed the polar night in Ellesmere Island and now wish to film the Midnight sun in the Ahiak (Queen Maud Gulf) Migratory Bird Sanctuary. This location interests us because there is just a short 5-week window when there is no snow on the ground and it is a race against time for animals to rear their young and get ready for the rapidly approaching winter. Our primary objective will be to film arctic foxes at an active den to document the pups in their first few weeks as they begin to explore their new world beyond their den. An additional part of our filming activities will be to document the large numbers of snow geese that nest around Karrak Lake with the aim to film predation by foxes and or other opportunistic predators such as wolves, wolverines and bears. We would also like to film some scenic landscapes with an unmanned aerial vehicle (drone) and wide shots to showcase the nesting goose colonies.There will be two members of the team at Karrak lake within the Ahiak Migratory Bird Sanctuary from the 15th May – 17th July 2019 and the other two members of crew will be present from the 9th June – 9th July 2019. The crew will be based at a permanent research station which has been in use ever summer since 1991 for migratory bird research. No additional camp or infrastructure will be needed. The crew will arrive will arrive when the bird research crew arrives and stay with them until they close camp on the 1st day of the research season and leave as the research station is being closed. This is the only location they will visit with the exception of stopping at Perry River to swap from a helicopter to a twin otter on departure.The crew will use commercial airlines to reach their point of entry and departure in Cambridge Bay, then charter aircraft as detailed below to reach the research station. All charter aircraft from Cambridge Bay is managed by the Polar Continental Shelf Program. These flights will be shared by the other scientific research teams who will also be working out of the research station. The flights are just used for moving people and equipment in and out of the location and not used for filming or scouting for fox den locations.Crew 1 Outbound: Twin Otter from Cambridge Bay to Karrak Lake – 3.5-hour return flight. Return: Helicopter from Karrak Lake to Perry River, then Twin Otter from Perry River to Cambridge Bay. We are using Perry River as a midway stop to save money on helicopter costs. a twin otter is unable to fly in to Karrak Lake due to unsuitable landing conditions.Crew 2 Outbound: Helicopter from Cambridge Bay to Karrak Lake, a twin otter is unable to make the journey this late in the season.Return: Helicopter from Karrak Lake to Cambridge Bay On location crew will travel on foot and in small boats (10ft aluminium with 16 hp engines) owned by the Karrak Lake Research Station to reach the mainland from the station, which is situated on an island. The research station have 3 boats in total which are stored permanently on site. The boats can only be used once the lake melts from around the 10th June and are just used for crossing from the accommodation which is situated on an island to the main land.Karrak Lake has been the subject of an extensive Arctic Fox study over the past 20 years. Due to the knowledgeable research scientist, it is one of the best places in the world to film at an active den with fox cubs. Arctic foxes - We will be following the advice of the scientific experts who will help us locate the best dens for filming. Filming will take place in a camouflaged blind/hide located close to the den location. The crew will also place remotely operated camouflaged cameras to film much closer to the fox dens (less than 10m). This is already being undertaken by scientists at the same location and involves putting the camera down as quickly as possible, ideally before the pups emerge from the den to avoid disturbance and may need occasional maintenance i.e. Battery changes and memory card swaps. Opportunities to do this will be carefully chosen to avoid disturbance and under the guidance of the scientists.Nesting Geese - One of the objectives will be to film predation on goose nests by arctic foxes and other predators. Filming will be conducted at a distance and the crew will not approach the nest at a distance deemed to cause disturbance to the geese. The crew will attempt to showcase the scale of the goose colony using a drone (unmanned aerial vehicle). This will be done after egg laying and prior to hatching and fledging when all geese are grounded and on the nest. These flights will only be done at the strict discretion of the research scientists. Take off and landing zones will be >100m from the nesting colony and flights will be conducted at a height which does not illicit any signs of disturbance such as head cocking or leaving the nest. Flights will be conducted at an angle to the birds rather than directly overhead to reduce disturbance. The team will begin at a 100m height above the geese and if no disturbance is seen this height may be reduced. At all times during flight a spotter will watch the behaviour of the geese through binoculars. The aim of these UAV flights will be to showcase the scale of these nesting geese and so generally flight will be high and wide.The team are staying with the Karrak Lake research station who have a pre-existing waste management plan; Dry garbage is burned, food waste is buried, recyclables returned to Cambridge Bay, human waste is buried, grey water released away from

open water Potential environmental impacts and mitigation measures The camera operators have worked with arctic foxes before and are familiar with their behaviour and how to identify signs of disturbance and or stress. The only species at risk that we expect to encounter are Reindeer, Grizzly Bear & Musk Ox. If the opportunities are available, we would also like to film the natural behaviours of these species. If it is safe to do so without disturbing the animal the crew will position themselves downwind and at a safe distance with the camera.Measures to avoid dangerous wildlife encounters - Dangerous animals which may be encountered; Arctic wolf (Canis lupus arctos); Grizzly bear (Ursus arctos); Wolverine (Gulo gulo); Muskox (Ovibos moschatus).Each field team will carry a scare pistol/pencil launcher and cartridges, and each person will carry a canister of bear spray. Field teams will also carry a shotgun if necessary the expedition leader has completed the Canadian Firearms Safety Course, and holds a valid Possession and Acquisition licence,Community consultation and involvement We are contacting the following community groups;•Ekaluktutiak Hunters & Trappers Organization •Gjoa Hunters' and Trappers' Organization•Umingmaktok HTO Due to time constraints it would be very difficult to hold any local talks or events however we will send each community a copy of the final program once the series is shown on television around the globe.We will be staying in Cambridge Bay using local hotels, restaurants and taxis for crew when they pass through and supplies for the research station are also managed through Cambridge Bay.Future plans within the protected area - We have no future plans within the Ahiak Migratory Bird Sanctuary after the completion of this trip. The end of this trip marks the end of filming for the whole series.

Uiviititut: N/A

Inuktitut: ᐄᐊᑯᐄᐊᒡ ᐊᑎᐊBBC-ᓂᑦ – ᓄᓇᔪᐊᑭᑦᑐᑦ – ᐊᐄᐃᐊᒥ ᑎᖏᒥᕆᔪᑦ ᑎᑭᑦᑕᖏᑐᑦ ᓇᔪᓗᐃᑦ (ᐄᐊᓐᓂᖏᓚᔪᖅ) ᑎᓇᖏᓂᐊᑦ.ᑐᖏᓯᕐᑐᒡ ᐊᑎᐊ ᑐᕆᖏᐃᐊᑕᓗ ᓇᐅᓇᐃᕐᔪᐃᑦᓂᐅᑎᑦ ᔪᐊᑕᓐ ᖃᓄᖏᐊᓕᑦᑎSilverback ᖃᓄᖏᐊᓕᑦᑎ ᓕᒥᑎᑦ/ ᓄᓇᔪᐊᑦᑭᑦᑐᑦ ᖃᓄᖏᐊᓕᑦᑎᑦ ᓕᒥᑎᑦ.Silverback ᖃᓄᖏᐊᓕᑦᑎ I St. Augustine’s Yard, Gaunts Lane, Bristol, BSI, SDE, UK.ᖃᓇᑕᐅᔭᓂᑦ ᑎᑎᕆᖏᐊᐊᑦ: nick.jordan@silverbackfilms.tv, ᐄᐃᑯᔭᐅ: +44 (0) 119 992 7257ᓂᐅᕆ–ᕐᓵ ᓂᐊᖅ ᖃᐅᐳᕼᐊᐃᐳ ᓄᓇᐃᓇᖏᒥ ᐃᐅᓂᐊᖅᑎSilverback ᖃᓄᖏᐊᓕᑦᑎ ᓕᒥᑎᑦ ᓄᓇᔪᐊᖏᑭᑦᑐᑦ ᖃᓄᖏᐊᓕᑦᑎᑦ ᓕᒥᑎᑦ.Silverback ᖃᓄᖏᐊᓕᑦᑎ I St. Augustine’s Yard, Gaunts Lane, Bristol BSI, SDE, UKᖃᓇᑕᐅᔭᓂᑦ ᑎᑎᕆᖏᐊᐊᑦ: sarah.walsh@silverbackfilms.tv ᐄᐃᑯᔭᐅ: +44 (0) 117 992 7277ᓇᓪᓗᒥᑦ ᐄᐊᑯᑭᑦ ᑕᑦᓂᐊᓗ ᐅᓐᓂᑦ ᐳᓪᑎᑦ ᐃᖃᔪᖏᑕᐅᓂᐊᑐᑦ ᐱᓐᓇᓚᐊᓕᐅᑎᑦ ᐊᑕᒍᑦᐄᐃᑕᒪᐅᓂᐊᖏᑐᑦ ᖃᓄᖏᐊᓕᐅᑎᑦ ᑕᓪᑯᓂ ᖃᓄᖏᐊᓕᐅᖃᐊᓂᓂᑦ;•ᓯᐅᕆ ᔨᓐ ᐃᐊᖏ - ᓄᓇᐃᓇᒥ ᐃᑲᔾᔨᑎ•ᐊᓚᐃᓐ ᓗᓯᖏᓇᓐ - ᐄᐊᑯᖏᑎᓄᑦ ᐄᐃᐅᓕᖏᑎ•ᐃᐅ ᓄᓇᓐᐳᑲ - ᖃᓄᖏᐊᓕᐅᑎᐅᖏᑲᒪᒡ ᔾᔨᓕ - ᖃᓄᖏᐊᓕᐅᑎᐅᖏᑲᐄᐊᑯᐄᐊᓂᑲ ᐃᓂᕈᒪᓴᐃᑦᓄᓇᔪᐊᑭᑦᑕᑐ ᑕᓕᒪᓂᑲ ᖃᓄᖏᐊᖏᐄᐊᓕᑲ ᐊᖏᔪᑎᐄᐊᓂᑲ ᐅᓂᖏᒪᓴᐃᑦᓄᓇᔪᐊᑭᑦᑕᑐ ᐄᐃᑕᒪᓂᑲ ᐅᑭᐅᓂᑲ ᖃᓄᖏᐊᖏᑕᐄᐊᐅᓪᓗᑲ ᐊᖏᔪᑎᐄᐊᓂᑲ ᐃᓄᕐᓂᑲ, ᖃᓄᖏᐊᓕᐅᑎᐄᐃᒪᓕᔪᑦ ᐄᐃᑕᒪᓂᑲ ᐅᑭᐅᓂᑲ ᖃᓄᖏᐊᖏᑕᐄᐊᐅᓪᓗᑲ BBC 1-ᒥ 2020 ᖏᔪᖏᑲᑦ. ᐄᐃᓐᓂᑲ ᖃᓄᖏᐊᓚᐅᐄᐊᑲ ᐅᓂᖏᓗᓄᐊᖏᒪᓴᐃᑦ ᐊᓪᖏᔪᔪᓕᐊᔪᑦ ᐄᐃᓱᓄᑲ ᓄᓇᔪᐊᑭᒥ ᐃᖏᕐᔪᑦᑕᐅᔪᓂᑲ ᐊᖏᔪᑎᐄᐊᓂᑲ ᐃᓄᕐᓂᑲ ᐊᖏᔪᑎᐄᐊᓂᑲ ᐊᐅᓪᓚᕐᔪᐊᓂᑲ ᐄᐃᐃᓐᓂᑲ ᐊᐅᓪᓚᕐᔪᐊᓂᑲ ᐄᐃᐃᓱᓄ

ᐄᐊᑯᖅᐃᓄᑦ ᐊᑐᕆᑕᐅᓕᑐᑎᓪ ᖃᖅᑎᐊᓕᐅᕐᖏᑐᑦ ᑎᓇᖅᓄᓂᐊᖅ ᐄᐃᑎᐄᐃᐅᕈᑎᑕᓕᑦᓯᓪᖁᑦ.ᐄᐊᑯᖅᑎ
1ᐊᐅᓚᖅᑎᐃᐊᑦ: ᒪᑦᕈᓪ ᑎᖅᒥᐊᖅ ᐃᖃᓗᖅᑐᑎᐊᒥᑦ ᐄᐊᓂᖅᓚᔪᖏᑦᒧᑦ – ᐱᖅᓚᐄᐅᓂᖅ ᐊᖏᑯᓂᖅᓗ ᐃᖃᓗᓂᓂ
ᑎᖅᒥᔪᖅᐄᐊᑦ.ᐅᑎᖏᓗᑎᖅ: ᐄᐊᓕᓚᖅᑕᑯᑦ ᐄᐊᓐᓂᖅᓚᔪᒥᑦ ᑯᔪᐊᒧᑦ, ᑕᑦᑯᖅᓚ ᒪᑦᕈᓪᑯᑦ ᑯᔪᐊᖏᒥᑦ
ᐃᖃᓗᓕᑐᑎᐊᒧᒧᖅᓚᑎᖅ. ᑯᔪᔪᐊ ᓂᖏᓗᖅᓓᓕᓭᔪᐊᑕᑯᑦ ᐊᑯᐓᖅᓚᓂ ᒪᓂᑐᑦᑕᓂᑦᓂᑕᐅᓕᓕᓪᓂᑕ ᐄᐊᓕᓚᖅᑕᑦ ᐊᑭᖏᐄᐊᐃᓂᖅ.
ᒪᑦᕈᓗᓂ ᑎᖅᒥᐊᖅ ᒥᑕᖏᑐᐃᒪᑦ ᐄᐊᓂᖅᓚᔪᖏᑦ ᒥᐲᖅᑎᒥᑦ.ᐄᐊᑯᖅᑎ ᕿᐊᐅᖅᑎᖅ: ᐄᐊᓕᓚᖅᑕᑯᑦ
ᐃᖃᓗᓕᑐᑎᐊᒥᑦ ᐄᐊᓂᖅᓚᔪᖏᑦᒧᑦ, ᒪᑦᕈᓪᑯᑦ ᑕᑦᑐᖅᓚ ᑭᖅᓯᑎᑦᑕᑐᑦ. ᑎᐅᔪᑦᑕᑦᑐᑦ ᐄᐊᓕᓚᖅᑕᑦ
ᐊᐅᑦᓗᑎᖅ ᐄᐊᓂᖅᓚᔪᖏᑦᒧᑦ, ᐃᖃᓗᓕᑐᑎᐊᒧᑦ.ᐄᐊᑯᖅᑎ ᕿᐊᐅᖅᑎᖅ: ᐄᐊᓕᓚᖅᑕᑯᑦ ᐊᐅᓪᓗᑎᖅ
ᐄᐊᓂᖅᓚᔪᖏᑦᒧᑦ, ᐃᖃᓗᓕᑐᑎᐊᒧᑦ.ᐄᐊᑯᖅᑎ ᐄᐊᑯᖅᑐᑦ ᐊᐅᓪᓗᑎᖅ ᐱᐄᐅᖅᓗᑎᖅ ᒥᑭᔪᖅᓗᑎᖅ
ᖃᖅᔪᑦ (10ᐃᓂᖅ ᑕᑭᔪᖅᑐᖅ 16hp ᖅᖅ ᐃᖅᓂᔪᑎᖅᖅᓗᑎᖅ) ᓇᖅᒥᓂᓴᐅᔪᑦ ᐄᐊᓐᓂᖅᓚᔪᖏᑦᒧᑦ ᖃᐅᔨᐄᐊᐃᐊᓂᑦ
ᐃᐅᑭᑎᖅᐄᐊᐃᑦ ᐊᐄᐃᐊᒧᑦ ᖃᐅᔨᐄᐊᐃᓇᖅᓂᑦ ᑭᖏᖅᑕᒥᑦᑐᒥᑦ. ᖃᐅᔨᐄᐊᐃᔨᑦ ᐄᐊᑯᐃᐊᓂᖅᓚᔪᖏᑦᒧᑦ ᖃᐅᔨᓂ
ᓇᐊᖅᓗᒥᑦ ᑐᑦᔪᒪᑯᑐᑦ ᖃᐅᔨᐄᐊᐃᓇᐊᓂᖅᑦ. ᖃᐃᓇᓪᑦ ᐊᑐᖅᑕᒥᑦᑐᒥᑦ ᐄᐊᑯᖅᑎ 2ᐊᐅᓚᖅᑎᐃᐊᑦ: ᐄᐊᓕᓚᖅᑕᑯᑦ
ᐃᖃᓗᓕᑐᑎᐊᒧᑦ ᐄᐊᓂᖅᓚᔪᖏᑦᒧᑦ, ᒪᑦᕈᓪᑯᑦ ᑕᑦᑐᖅᓚ ᑭᖏᖅᑎ ᐄᐊᓂᖅᓚᔪᖏᑦᒧᑦ ᐊᐅᓪᓗᑎᖅ: ᐄᐊᓕᓚᖅᑕᑯᑦ
ᐊᐅᑦᓗᑎᖅ ᐄᐊᓂᖅᓚᔪᖏᑦᒧᑦ ᐃᖃᓗᓕᑐᑎᐊᒧᑦ.ᐄᐊᑯᖅᐃᐊᓂᑦ ᐄᐊᑯᖅᑐᑦ ᐊᐅᓕᓚᖅᑕᑯᑦ ᐱᐄᐅᖅᓗᑎᖅ ᒥᑭᔪᖅᓗᑎᖅ
ᖃᖅᔪᑦ (10ᐃᓂᖅ ᑕᑭᔪᖅᑐᖅ 16hp ᖅᖅ ᐃᖅᓂᔪᑎᖅᖅᓗᑎᖅ) ᓇᖅᒥᓂᓴᐅᔪᑦ ᐄᐊᓐᓂᖅᓚᔪᖏᑦᒧᑦ ᖃᐅᔨᐄᐊᐃᐊᓂᖅᓚᔪᖏᑦᒧᑦ
ᐃᑲᑭᑎᖅᐄᐊᐃᑦ ᐊᐄᐃᐊᒧᑦ ᖃᐅᔨᐄᐊᐃᓇᖅᓂᑦ ᑭᖏᖅᑕᒥᑦᑐᒥᑦ. ᖃᐅᔨᐄᐊᐃᔨᑦ ᐄᐊᑯᐃᐊᓂᖅᓚᔪᖏᑦᒧᑦ ᖃᐅᔨᓂ
ᓇᐊᖅᓗᒥᑦ ᑐᑦᔪᒪᑯᑐᑦ ᖃᐅᔨᐄᐊᐃᓇᐊᓂᖅᓚᔪᖏᑦᒧᑦ. ᖃᐅᔨᐄᐊᐃᔨᑦ ᐄᐊᑯᐃᐊᓂᖅᓚᔪᖏᑦᒧᑦ ᐃᑲᑭᑎᖅᐄᐊᐃᑦ
ᐊᐄᐃᐊᒧᑦ ᖃᐅᔨᐄᐊᐃᓇᐊᓂᖅᓚᔪᖏᑦᒧᑦ. ᖃᐅᔨᐄᐊᐃᔨᑦ ᐄᐊᑯᐃᐊᓂᖅᓚᔪᖏᑦᒧᑦ ᐃᑲᑭᑎᖅᐄᐊᐃᑦ ᐊᐄᐃᐊᒧᑦ

ᐃᖃᓗᒃᑐᑎᐊᒥᑦ.ᕼᐃᕗᓂᒃᕼᐊᒥ ᐸᕐᓇᐃᔭᐅᑎᑦ ᕼᐊᐳᒻᒥᔭᐅᔪᓄᑦ ᓄᓇᓂᑦᕼᐃᕗᓂᕐᕼᐊᒥ ᐸᖕᓇᐃᔭᐅᑕᐃᑦᑐᒍᑦ ᑕᓪᓕᕆᓂ ᐊᕼᐃᐊᒥ ᑎᖕᒥᑦᔭᑦ ᑎᑭᑦᑕᖅᑐᑦ ᓇᔪᒐᐃᓂᑦ ᕼᐊᑉᑯᐊ ᐃᓂᖅᑕᐅᒃᐸᑕ. ᐃᓂᕐᐱᒃᕼᐊᑦ ᐊᐅᓚᒃᐱᒃᐳᑦ ᕼᐊᒍᖕᒐ ᐃᓂᕈᑕᐅᓂᐊᕐᑐᒃ ᖁᖕᒥᐊᓕᐅᕐᑐᓄᑦ ᑕᒪᖕᓄᑦ ᖁᖕᒥᐊᓕᐅᕐᑕᐃᑦ ᑕᒃᕼᐊᐅᓂᐊᕐᑐᑦ ᖁᖕᒥᐊᕈᑎᓂᑦ ᓄᖕᒍᑎᓐᓇᒍ ᐅᕐᑭᐅᒃ 2020

Inuinnaqtun: Havaagham AtiaBBC-kut Nunaryuatqiktuq – Ahiaqmi Tingmitjat Tikitaqtut Nayugait (Hanningayuq) - TirigianniatTughiraqtum atia turaaqviitalu naunaitkutaitNick Jordan, QunngialiuqtiSilverback Qunngialiuqtit Limitit / Nunaryuatqiktuq Qunngialiuqtit Limitit.Silverback Qunngialiuqtit, 1 St Augustine’s Yard, Gaunts Lane, Bristol, BS1 5DE, UKQaritauyakkut titiraqviat: nick.jordan@silverbackfilms.tv Hivayaut: +44 (0) 117 992 7257Sarah-Jane Walsh, Qauyihaiyi / Nunainnaqmi IkkuaqtiSilverback Qunngialiuqtit Limitit / Nunaryuatqiktuq Qunngialiuqtit.Silverback Qunngialiuqtit, 1 St Augustine’s Yard, Gaunts Lane, Bristol, BS1 5DE, UKQaritauyakkut titiraqviat: sarah.walsh@silverbackfilms.tv Hivayaut: +44 (0) 117 992 7277Naallugit havaktit taapkualu/uniit pulaaqtit ikayuqtauniaqtut piinnarialiutit ataagutHitamauniaqtut qunngialiuqtit talvani qunngialiuqvianit;•Sarah-Jane Walsh – Nunainnaqmi Ikkuaqti•Alain Lusignan – Havaktinut Hivuliqti•Ivo Norenberg – Qunngialiuqtuq•Tom Crowley - QunngialiuqtuqHavaaghanit InirumayaitNunaryuatqiktuq tallimanik qunngiaghalik anngutighanik unipkaaqtut, qunngialiuqhimayut hitamanik ukiunik qunngiaqtaghauplutik BBC1-mi 2020-nguqqat. Hivulliq qunngiagaghaq unipkaalluaqpagait aallannguqpalliayuq hiqinnaarniq nunaqyuami ingilratjutauyunik aulatjutauplutiklu anngutighat inuuhiinut aulatjuhiinullu. Malruk qunngialiuqtaptingnit unipkaarahuat qanuq anngutighat aularaaqpagiaghait hiqinnaaruiraangat hiqinnaanginnaraangallu. Qunngialiuqhimayaqqut nanuit unnuktumi Auyuittumi tajjalu qunngialiurumayaqqut unnuktumi hiqinnaaqtuq Ahiarmi (Ahiam Ikirahaanit) Tingmitjat Tikitaqtut Nayugainit. Hamna nuna ihumagilluaqpaktavut nainmat tallimanik Santiqhiiplutik havakvighaat aputaitillugu nunami imaalu hivikinianik anngutighanut irniuqtunik imaalu ukiaghamut parnaiyaiyunik. Havaaghalluariyumayaqqut qunngialiuqlugit tiriganniat piaraita hitimingnit qunngiaqlugit irniuhaaqtumit anivalliayunut hitimingnit. Ahiagullu qunngialiuqpangniaqtugut amihuaryungnik kangurnik ivayut Hanningayumi naahurilugit qunngialiuqtaghat tirigannianit anguniaqtauyut ahiniklu anngutighanit taapkuatut amaqqunik, qalvingnik agharniklu. Qunngialiurumayaqqullu nunait ahiittut pinniqtut tingmitaqtitaigut (ingniqutilinnuagut) qulaanitlu piksaliuqlutik takughaupkaiyunik upluinik kanguit.Havaaghaita NayugaitAhiaqmi Tingmitjat Tikitaqtut Nayugait Hanningayumi Qauyihaiyit Havakvianit - 67° 13' 59.99 N, -100° 15' 0.00 EHavakvighaat upluq hivitunialu pulaaqvighaat tamangnt munaqtauyunutMalruuniaqtut qunngialiuqtit Hanningayumi talvani Ahiaqmi Tingmitjat Tikitaqtut Nayugainit May 15-mit July 17-mut, 2019-mi ahiillu malruk qunngialiuqtit tikimanahuat June 9-mit July 9-mut 2019-mi. Qunngialiuqtit qauyihaivilluami havagahuat atuqtauhimaghaaqtumi 1991-mit tingmitjanik qauyihaiyunit. Ahiagut tupiqturahuanngittut ikluqpaliulaittutiklu. Qunngialiuqtit tikinniaqtut qauyihaiyit tikitpata nayuqlugillu tupiqtuqviat umighiilugu hivullianit upluanit qauyihaqviinit aullaqlutiklu qauyihaqviat umiktaukpat. Hamnatuaq nuna pulaaqniaqhimayaat kihimi nutqarlutiklu Kuukyuami halikaaptamit tingmiarmunngaqlutik aullaqvighaanit.Qanuq aullaarahuatQunngialiuqtit aullaarahuat angiyukkut tingmiakkut tikivighaanut aullaaqvighaanullu Iqaluktuuttiaqmi, talvanngat saataqlutik tingmiaqmik ilittuqhitihimayutut ataani talvunga qauyihaqvighainut. Tamangnik saataqhimayait tingmiat Iqaluktuuttiaqmit munaqtauyut taapkuninnga Ukiuqtaqtumi Nunaqatigiingnit Aulapkaqtaigut. Tingmiqatiqarniaqtut ikayuqtigiiklutit taapkualu qauyihaiyit havaqatigiit havangniaqhimayullu talvani qauyihaqvianit. Tingmivangniat agyaqtarlugit havaktit ingilrutaitalu havakviinut atuqtaulaittutiklu qunngialiuqtunit tirigannianik hitihiurutigilugilluuniit.Havaktiit 1 Aullaqtiqviat: Malrulik tingmiaq Iqaluktuuttiaqmit Hanningayuqmut – pingahunik avvaaniklu ikaaqninik tingmiyughat. Utiqlutik: Halikaaptakkut Hanningayumit Kuukyuaqmut, talvanngat malrulikkut Kuukyuaqmit Iqaluktuuttiaqmunngaqlutik. Kuukyuaq

nutqaqviginahuaqtaqqut akunngani maniktuqpallaaqtailipluta halikaaptat akighainik. Malrulik tingmiaq mittaqtulainmat Hanningayumi milvighaillamut.Havaktiit 2Aullaqtiqviat: Halikaaptakkut Iqaluktuuttiaqmit Hanningayumut, malrulik tingmilainmat talvunga kinguvaqtinmat.Utiqlutik: Halikaaptakkut aullaqlutik Hanningayumit Iqaluktuuttiaqmut Havakvianit havaktut aullaaqpangniat pihughutik mikiyukkullu qayakkut (10 feet-nik takiyaaqtunik 16 hp-nik ingniqutiqarlutik) nanminiriyauyut Hanningayumi Qauyihaqvianit ikaarutighait ahiarmut qauyiharvingnit, qikiqtamiittumit. Qauyihaiyit havakviat pingahunik qayalgit naallugit tutquumavaktut qauyihaqvianit. Qainnat atuqtauvaktut tahiq hikuiraangat June 10 haniani ikaarutauvaghutik hiniktarviinit qikiqtamit talvunga ahiarmut.Ilittuqhitit havaanginnit naunaitkutalluHanningayuq tahiq qauyihaivilluanguvaktuq Tirigannianik 20 ukiut naallugit. Ilihimattiaqtumik qauyihaiyiqaqhutik, qunngiaghaliuqvitqiktuq nuna nunaqyuami tamaat hitiqarami tirigannia t piarainik. Tirigannia t – uqauhiita qauyihaiyit ayuittut naalakpangniaqtaqqut paqittinahuaqluta hitinik qunngaliuqtaghat. Qunngialiuqpangniat ilitturinnaittumik iiraqturviqarlutik haniani hitiita. Qunngialiuqtit qunngaliuqpangniat ilitturinnaittunik piksaliutikkut qunngialiuriamik qanilruanit hitiit (10 meters avatqutaililugu). Taimaa qauyihaiyit havakpaliqtut talvani nayugaanit imaalu piksaliutait qilamiurahuaqhugit ipirarahuaqpagait, tirigannia t piarait nuitinnatik hitimit kuinginnainnahuaqhutik ilaanilu ihuaqhaqtauvaktughat taapkua patuliit himiqhugit tutquumaviillu aallannguqtiqhugit. Himmiqhivighait taapkuninnga pittiarahuaqpangniat kuinginnainnahuaqhutik uqauhiigut qauyihaiyit.Ivayut kanguit – Atauhiq havaariyumayaat taimaa qunngialiuqlugit angunahuaqtut kangurnik tiriganiat ahiniklu anngutighanik. Qunngialiuqpangniat ungahiaqtumit taapkualu qunngialiuqtut upagahuaqtailivangniarait upluita kuinginnautilugit kanguqnut. Qunngialiuqtut tamatkirahuaqniaqtait piksaliutikkut kanguit nayugait tingmitaqtukkut piksaliutikkut (inuittuq tingmitaqtuq ingilrutik). Taimaa piksaliuqpagahuat ivalirumik maniinik ahiruqtiqtinnagillu manniit tamangnik kanguit upluinit ivalirumik. Taapkua tingmitaqtut piksaliutit atuqtauvangniat pitquyaugumik qauyihaiyinit. Aullaqtitauvangniat mittaqtuqtitaulutik 100 meters haniani upluinit kanguit tingmipkaqtitauvangniallu aktuqtailiplugit niaquinut upluiniklu qimagahuaraangamik. Tingmitaqtunik tingmipkaivangniat haniaguuqhutik qulauhimaittumik kuinginnainnahuaqhutik. Qauyihaivangniat 100 meters-nik qulaagut kanguit imaalu kuinginnaitkumi kangurnut atpaghivangniat. Tingmitaqtuq tingmitillugu munaqtiqaqpangniat qunngiaqtumik kanguqnik qinngutikkut. Tingmitaqtunik UAV-nik ingilrapkaivangniat tautuktittiyaamik amihuaryuita kanguit talvuuna qulvahiktumi tingmivangniat.IqqakuitHavaktiit nayurahuaqtaat Hanningayumi Qauyihaqvik talvani iqqakuiniqmik parnaiyautilgit; paniumayut iqqakuit ikulattiyauvaktut, niqivaluit iqqakuit hauyauvaktut, atuqtautqilaaqtut utiqtitauvaktut Iqaluktuuttiaqmut, annakuit hauyauvaktut, kuvvikuillu immat kuviyauvaktut imariktut ahianitAvatinut mihingnautaulaaqtut ihuaqhautillu havauhiitQunngialiuqtit qunngialiuqhimavagait tiriganniat hivuani talvuuna pitquhiit naluhuiqhimaliqtait taimaalu ilittuqhiyaamik kuinginnautinik ihumaaluutiniklu. Taapkua amirnaqhiyut anngutighat tautungniarahugiyaqqut taapkuanguyut Tuktuit, Aghait Umingmaillu. Qunngialiulaaruptitku, qunngialiurumayaqqut pitquhiita hapkua anngutighat. Amirnaittumik qunngialiulaarupta kuinginnautihimaittumik anngutighanut qunngialiurahuaqpangniat hivuraaniillutik anuqqimit amirnaittumillu piksaliuqlutik.Havauhighat amirnainniqmut anngutighanik paqittinnirumikAmirnaqtunik anngutighanik paqittiniarahugiyut;Amaruq (Canis lupus arctos); Aghaq (Ursus arctos); Qalvik (Gulo gulo); Umingmak (Ovibos moschatus).Tamangnik nunainnaqmi havaktut hiqquutilgiarniat/titirautiqpaluktuniklu hiqquutinik qaryughainiklu, tamangniklu havaktit tigumiaqpangniat agharnut ihilatjutinik. Nunainnaqmi havaktit haatkaalgiaqpangniattauq iharianaqhikpat atuqtaghainik, havaktinut hivuliqti iniqhimaliqtaat taamna Kaniitian Hiqquutiliqiyit Amirnainniqmut Ilihaqtaghaat, tigumiaqtiuliqhuni Tigumialaaliqtuq Piinnarialiutilu laisiutaanik,Nunallaaqnit katimayut ilaupkaiyulluHapkua havakviit

hivayaqpangniaqtavut January-mi hapkua naunaitkutat numiktitautaaqqata;•Iqaluktuuttiami Anguniaqtit Naniriaqtuqtillu Katimayiit •Uqhuqtuumi Anguniaqtit Naniriaqtuqtillu Katimayiit•Umingmaktuuq HTOHavakvighaqqut hivikiyaaramik ayurnaqniaqtuq katimaqatigiyaamik nunallaaqmiut hulilukaaqatigiyaamiklu kihimi tamangnik nunallaat aajjikkutaliuqhimayunik iniqhimayunik havaaghavut naunaitkutainik tuniyauniaqtut qunngiaghat takughauliqqata qunngiarutinik nunaqyuami tamaat.Iqaluktuuttiaqmiinniaqtugut atuqlugit hiniktarviit, niriviit taaksiillu qunngialiuqtinut tikitpata hunaqutighaillu qauyihaqviup havakviat munaqtauvangniat Iqaluktuuttiaqmit.Hivunighami parnaiyautit hapummiyauyunut nunanitHivunighami parnaiyautaittugut talvani Ahiaqmi Tingmitjat Tikitaqtut Nayugainit hapkua iniqtaukpata. Iniqvighaat aullaarvikput hamunga inirutauniaqtuq qunngialiuqtunut tamangnut qunngialiuqtait takughauniaqtut qunngiarutinit nungutinnagu ukiuq 2020

Personnel

Personnel on site: 4
Days on site: 64
Total Person days: 256
Operations Phase: from 2019-05-15 to 2019-07-17

Hulilukaarutit

Inigiya	Hulilukaarut Qanurittuq	Nunannga Qanurittaakhaanik	Initurlinga qanuritpa	Initurlinga utuqqarnitat unaluuniit Ingilraaqnitat Uyarannguqtut akhuurninnga	Qanitqiyauyuq qanitqiamut nunallaat kitulluuniit ahiruqtailiyainnit nuna
Karrak Lake Research Station	Scientific/International Polar Year Research	Crown	The research station at Karrak Lake was establish by Dr Ray Alisauskas and the Canadian Wildlife Service in 1991. It is located on the largest island in Karrak Lake and and it consists of 4 permanent cabins today.	There are lots of inuit artifacts in the region - tent rings, meat caches, inukhuks (stone cairns), stone igloos (which may have been used as caches), kayak racks, blinds, and a stone corral.	Ahiak Migratory Bird Sanctuary (Karrak Lake)

Nunaliin Ilauyun, Aviktuqhimayuniitunullu Ikayuuhiarunguyun

Nunauyuq	Atia	Timiuyuq	Upluani Uqaqatigiyaungmata
Ikaluktuttiak	cambay@kitikmeothto.ca	Ekaluktutiak Hunters & Trappers Organization	2019-01-15
Urhuqtuuq	gjoa@kitikmeothto.ca	Hunters' and Trappers' Organization	2019-01-15
Ikaluktuttiak	Perter Kapolak chimo@kitikmeothto.ca	Umingmaktok HTO	2019-01-15

Angiuttauvaktunik

Naunaiqlugu nunanga talvani havauhikhaq ittuq:

Kitikmeot

Angiuttauvaktunik

Munariniqmut Ayuittiaqtuq	Angirutinga Qanurittuq	Tadja Qanurittaakhaanik	Ublua Tuniyauyuq/Uuktuqtuq	Umikvikhaa Ublua
Kaanatami Huradjat Munariniq	APPLICATION FOR A National Wildlife Area permit or A Migratory Bird Sanctuary Permit	Applied, Decision Pending		
Tingmiliqiyiitkut Kaanatami	Special Flight Operations Certificate - to use unmanned air vehicle (UAV) for filming	Not Yet Applied		
Alaanut	Nunavut Planning Commission	Applied, Decision Pending		

Project transportation types

Transportation Type	Qanuq Atuqtauniarmangaa	Length of Use
Air	Twin Otter and 206 LR Helicopter - transport from Cambridge Bay to Karrak lake	
Water	Boat 10ft aluminium with 16 hp engines - permenant camp is on an island these boats are use to gain access to main land on a daily basis	
Land	Foot	

Project accomodation types

Permanent Camp

Alaanut,

Ihuaqutivaluin Atuqtauyukhan

Hanalrutit atuqtaunahuat (ukuallu ikuutat, pampiutainnik, tingmitinik, akhaluutinik, hunaluuniit)

Hanalrutit Qanurittuq	Qaffiuyut	Aktikkulaanga – Qanurittullu	Qanuq Atuqtauniarmangaa
Aircraft	1	twin otter	The crew will use commercial airlines to reach their point of entry and departure in Cambridge Bay, then charter aircraft as detailed below to reach the research station. All charter aircraft from Cambridge Bay is managed by the Polar Continental Shelf Program. These flights will be shared by the other scientific research teams who will also be working out of the research station. The flights are just used for moving people and equipment in and out of the location and not used for filming .
Boat	1	10ft	On location crew will travel on foot and in small boats (10ft aluminium with 16 hp engines) owned by the Karrak Lake Research Station to reach the mainland from the station, which is situated on an island. The research station have 3 boats in total which are stored permanently on site. The boats can only be used once the lake melts from around the 10th June and are just used for crossing from the accommodation which is situated on an island to the main land.
DJI Inspire Drone	1	60cm	Aerial Filming
Camera equipment	1	various	Filming

Qanurittuq Urhuqyuaq unalu Qayangnaqtut Hunavaluit Aturninnga

Qanurittuq urhuqyuaq hunavaluit aturninnga:	Urhuqyuaq Qanurittuq	Qaffiuyut qattaryut	Qattaryuk Aktikkulaanga	Atauttimut Qaffiuyut	Ilanga	Qanuq Atuqtauniarmangaa
Propane	fuel	1	1	1	Liters	Cooking - this is provided and managed by the Karrak Lake Research Stationwho are providing our crew with cooked meals. Karrak Lake have a Task Hazard Analyses (THA) and Safe Work Procedures (SWP) in place for the use, maintenance and disposal.

Diesel	fuel	1	1	1	Liters	On location crew will travel on foot and in small boats (10ft aluminium with 16 hp engines) owned by the Karrak Lake Research Station to reach the mainland from the station, which is situated on an island. The research station have 3 boats in total which are stored permanently on site. The boats can only be used once the lake melts from around the 10th June and are just used for crossing from the accommodation which is situated on an island to the main land. This diesel is provided by Karrak Lake and there is a Task Hazard Analyses (THA) and Safe Work Procedures (SWP) in place for the use, maintenance and disposal.
Turbo B Fuel	fuel	1	1	1	Liters	The main cabin is heated by an oil stove that burns waste turbo fuel. Turbo B (turbo B is a mixture of ~2/3 kerosene and ~1/3 naptha (the latter also known as white gas)) instead ofkerosene). This is provided by and managed by Karrak Lake Research Station, who have Task Hazard Analyses (THA) and Safe Work Procedures (SWP) in place for the use, maintenance and disposal.

Imaqmik Aturninnga

Ubluq qanuraaluk (m3)	Aturumayain imavaluin utiqtittagaani qanuq	Atulirumayain imavaluin utiqtittagani humi
0	Water is obtained by melting snow/ice or collecting lake water. In spring, pack galvanized pails with snow or ice and placed on the oil stove.	Water is primarily used for water and drinking. Showers are limited to 1 per week

Iqqakuq

Ikkakunik Munakgiyauyunik

Havauhikhaq Hulilukaarut	Qanurittuq Iqqakut	Ihumagiyauyuq Qanuraaluktut Atuqtait	Qanuq Iqqakuurniarmangaa	Halummaqtirarnirutikhan piyutin
Camp	Ikulalaaqtun iqqakuuvaluin	1	Dry garbage is incinerated in the burning barrels east of the cabin.	n/a
Camp	Ikulalimanngittun iqqakuuvaluin	1	All “non-burnables” (tin cans, various metals, glass, etc.) are shipped to Cambridge Bay for disposal.	n/a
Camp	Atakuin (halumaiqtun nunan, iqqakuuvaluillu uyaqqiqivingmin)	1	Compost is dumped into pits near the burning barrels (see below) and then immediately buried, to prevent access by bears. Until we are ready to close a pit, compost bags can be placed in metal trunks, and rockeddown, as for lou bags	n/a
Camp	Anaagun (inuin anaaguin)	2	2kg per day We deposit our biological wastes in a container called the Honey Bucket. This finereceptacle is found, not surprisingly, in the outhouse. Tampons and sanitary napkins are to be burnedand not deposited in the lou. Also, no peeing in the lou, please. Lou bags (and compost bags) aretemporarily stored in metal trunks located near the biffy. Once enough lou and compost bags haveaccumulated to fill a pit dug near the burn barrels, the bags are dumped, the plastic bags themselves areburned, and the pits are filled in with ash and soil.	n/a

Avatiliriniqmut Ayurhautingit:

The only species at risk that we expect to encounter are Rangifer tarandus, Ursus arctos & Gulo gulo. We would also like to opportunistically film these species natural behaviours. If any species at risk are sighted the crew will be sure to establish their location in proximity to where they are currently situated and their direction of travel. If it is safe to do so without disturbing the animal the crew will position themselves downwind and at a safe distance with the camera, we

would expect this would be somewhere between 30-100m from the animals. However, if they seem calm and not disturbed the crew may approach closer if it is safe to do so. Whilst travelling around generally the crew will avoid disturbing any nesting birds, particularly those listed above, the crew will be made aware of all species at risk present. Disturbance of arctic fox den sites - Team will be following the advice of the scientific experts who will help us locate the best dens for filming. The camera operators have worked with arctic foxes before and are familiar with their behavior and how to identify signs of disturbance and or stress. The crew will be working in a hide and will start at a distance of 100m for the den site and progressively move closer should there be no signs of disturbance, the aim would be to reach a distance of around 30m from the den location Disturbance of nesting Ross's and Lesser snow geese - The crew will follow the instruction of research staff regarding moving through, approaching and filming nesting geese.Filming will be conducted at a distance and the crew will not approach the nest at a distance deemed to cause disturbance to the geese. The crew will attempt to film the goose colony using a UAV. This will be done after egg laying and prior to hatching and fledging when all geese will be on the ground and on the nest. These flights will only be done at the strict discretion of the research scientists.

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

Qanurittuq Ittunik Avatinga: Avatingalluanga

Qanurittuq Ittunik Avatinga: Inuuhimayunut Avatinga

Qanurittuq Ittunik Avatinga: Inungit-maniliurutingit Avatinga

Miscellaneous Project Information

Naunaiyainiq ukuninnga Ayurhautingit unalu Piumayaat Ikikliyuumiutinahuarutit

Tamatkiumayunik Ihuikgutivaktunik

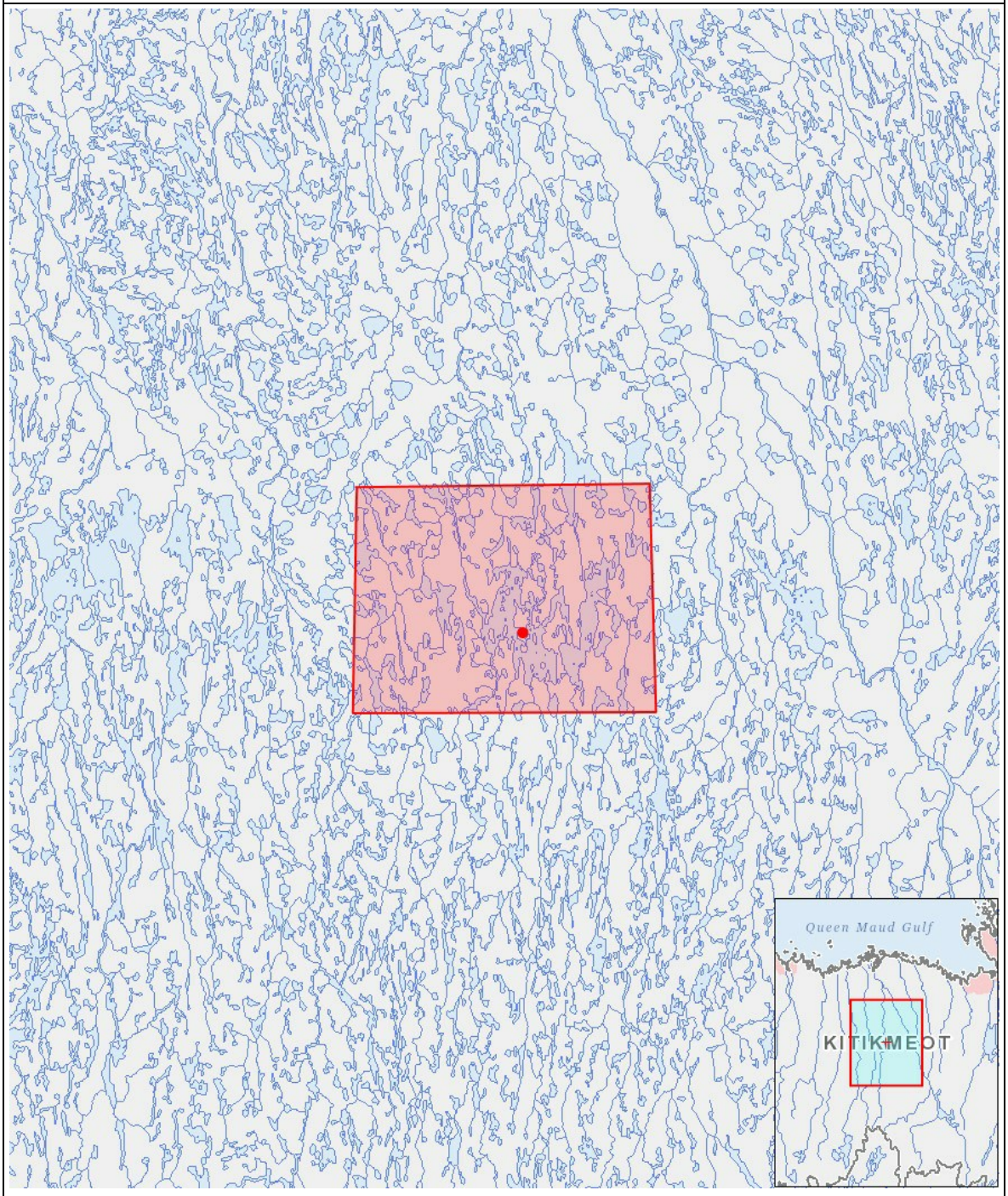
Impacts

Ilitariyauniq Avatiliriniqmut Ayurhautingit

	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
Havakvinga																									
-		-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-		-	-	-	-
Aulapkaininnga																									
Scientific/International Polar Year Research		-	-	-	-	N	-	-	-	-	-	-	-		-	N	N	-	N		P	-	-	-	-
Piiqtauniq																									
-		-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-		-	-	-	-	-

(P = Nakuuyuq, N = Nakuungittut unalu mikhilimaittuq, M = Nakuungittut unalu mikhittaaqtuq, U = Naluyauyuq)

Havaariyauyukhamut Nayugaa



List of Project Geometries

1	polygon	New project geometry
2	point	Karrak Lake Research Station