

Activities

Activities

Location	Activity Type	Land Status	Site history	Site archaeological or paleontological value	Proximity to the nearest communities and any protected areas
Pond Inlet- Landing and community visit	Tourism Activities	Municipal	Most recently, Students on Ice has visited the community of Pond Inlet in 2015 and 2017 during our Arctic expeditions. We have built a strong partnership with Parks Canada representatives from Pond Inlet, who help us plan activities in the Hamlet, and coordinate community members joining us onboard for our visit to Sirmilik National Park.	N/A	N/A
Qaiqsut- Landing with Parks Canada staff and Pond Inlet community members	Tourism Activities	Crown	During our 2017 Arctic expedition, Students on Ice visited Qaiqsut for the first time with Parks Canada staff managing onshore activities and interpretation. Elders, youth and community members from Pond Inlet joined us for this excursion and also contributed to interpretation.	Qaiqsut is not a designated archeological site. However, from discussions with Park Canada, we recognize that this is an important cultural site and will conduct our onshore activities accordingly.	Qaiqsut is within the Bylot Island Migratory Bird Sanctuary. Additionally, this site is within the bounds of Sirmilik National Park.
Cape Graham Moore- sail by Bylot Island MBS site	Tourism Activities	Marine	Students on Ice has visited Cape Graham Moore in 2015 and 2017 during our Arctic expeditions. These visits are sail-by or zodiac cruise only and are conducted in accordance with CWS regulations on viewing migratory bird sanctuaries.	N/A	Cape Graham Moore is within the Bylot Island MBS.
Cape Coutts- Landing at archaeological site and zodiac cruise down the North Arm	Tourism Activities	Inuit Owned Surface Lands	Students on Ice visited Cape Coutts for the first time on the 2017 Arctic expedition. Upon landing onshore, our archaeologist, Deborah Webster, recognized a qammaq or sod house. Deborah proceeded to interpret the site with students and instructed them to help her make the appropriate measurements/descriptions of the site to report to Culture and Heritage.	Deborah's archaeology report was submitted to the Department of Culture and Heritage in January of 2018. The site is described as 'Indigenous Historic' with evidence of habitation in 3 qammaqs, 2 tent rings and 1 cache.	Closest community is Pond Inlet.
Cobourg Island- Zodiac cruise around Nirjutiqavvik NWA site	Tourism Activities	Crown	Students on Ice had not visited Cobourg Island before. This year, we intent to conduct zodiac cruises at the island in accordance with CWS regulations on visiting NWAs and MBSs.	N/A	Cobourg Island is a part of the Nirjutiqavvik National Wildlife Area, and is closest to the Hamlet of Grise Fiord.
Grise Fiord- Landing and Community Visit	Tourism Activities	Municipal	Students on Ice has not visited Grise Fiord before.	N/A	N/A
Dundas Harbour-	Tourism	Crown	Students on Ice expedition	Site of RCMP post,	N/A

Landing at RCMP archaeological site	Activities		have visited Dundas Harbour in 2015 and 2016. Our onboard archaeologist provides instruction to students and staff before landing, as well as interpretation while onshore.	graveyard and Thule site.	
Croker Bay-Landing at South Croker Glacier and zodiac cruise	Tourism Activities	Crown	Students on Ice visited this Croker Bay site in 2015 and 2017. Excursions include a shore landing at the South Croker glacier with interpretation/workshops by glaciologists, as well as zodiac cruises within the bay area.	None known.	N/A
Beechey Island-Landing at archaeological site	Tourism Activities	Crown	Our expedition visited Beechey Island in 2015 and 2017. Our onboard archaeologist provides instruction to students and staff before landing, as well as interpretation while onshore. Students are split into two groups and rotate between sites.	Archeology site of Franklin Camp as well as remnants of gravel foundations.	N/A
Prince Leopold Island- Zodiac cruise around MBS site	Tourism Activities	Crown	Students on Ice visited Prince Leopold in 2015 and 2017. These visits are sail-by or zodiac cruise only and are conducted in accordance with CWS regulations on viewing migratory bird sanctuaries. Interpretation is provided during these excursions by CWS scientists.	N/A	Prince Leopold Island is a part of the Prince Leopold Migratory Bird Sanctuary managed by CWS and the Resolute Bay Co-Management Committee.
Resolute Bay-Landing and community visit	Tourism Activities	Municipal	Students on Ice has visited Resolute Bay in 2015 and 2017. In the past, we have worked with the Hamlet as well as the Polar Continental Shelf Project for a half day of community programming in Resolute Bay. This year, Resolute will be the site of our departing charter flight.	N/A	N/A

Community Involvement & Regional Benefits

Community	Name	Organization	Date Contacted
Resolute Bay	Nancy Amarualik	Hunters and Trappers Organization	2018-01-18
Resolute Bay	Mike Stevens	Hamlet Office	2018-01-18
Pond Inlet	Nicole Monchamp	Hamlet Office	2018-01-18
Pond Inlet	Natasha	Hunters and Trappers Organization	2018-01-18
Grise Fiord	Tamera Kakee	Hamlet Office	2018-01-18
Grise Fiord	Terry Noah	Hunters and Trappers Association	2018-01-18

Authorizations

Indicate the areas in which the project is located

Authorizations

Regulatory Authority	Authorization Description	Current Status	Date Issued / Applied	Expiry Date

Parks Canada	Business License from Sirmilik National Park	Not Yet Applied		
Canadian Wildlife Service	Canadian Wildlife Service-Northern Region. Application for a National Wildlife Area and Migratory Bird Sanctuary Permit	Applied, Decision Pending		
Government of Nunavut, Department of Culture, Language, Elders, and Youth	Class 1 Archaeology permit for Coutts Inlet, Dundas Harbour and Beechey Island.	Not Yet Applied		
Qikiqtani Inuit Association	Land use permit for parcels of Inuit Owned Land.	Not Yet Applied		

Project transportation types

Transportation Type	Quantity	Proposed Use	Length of Use
Water	0	Our expedition vessel, the MS Ocean Endeavour, will be used for accommodation and transportation. We intend to enter Nunavut territorial waters on July 30th and disembark the Endeavour in Resolute Bay on August 6th.	

Project accomodation types

Other,

Material Use

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

Equipment Type	Quantity	Size - Dimensions	Proposed Use
MS Ocean Endeavour	1	137x21m	Accommodation and Transport
Zodiac Mark IV	20	14ft	Passenger Transfers

Detail Fuel and Hazardous Material Use

Detail fuel material use:	Fuel Type	Number of containers	Container Capacity	Total Amount	Units	Proposed Use
Gasoline	fuel	5	18	90	Liters	For zodiacs
MGO Fuel	fuel	1	104.5	104.5	Cubic Meters	For ship
MGO Fuel	fuel	1	88.2	88.2	Cubic Meters	For ship
MGO Fuel	fuel	1	806	806	Cubic Meters	For ship
MGO Fuel	fuel	1	37	37	Cubic Meters	For ship
MGO Fuel	fuel	4	52.9	211.6	Cubic Meters	For ship
MGO Fuel	fuel	1	35.3	35.3	Cubic Meters	For ship
MGO Fuel	fuel	2	29.4	58.8	Cubic Meters	For ship
MGO Fuel	fuel	2	28	56	Cubic Meters	For ship
MGO Fuel	fuel	1	44.5	44.5	Cubic Meters	For ship
MGO Fuel	fuel	1	51.1	51.1	Cubic Meters	For ship
MGO Fuel	fuel	1	45.9	45.9	Cubic Meters	For ship
MGO Fuel	fuel	1	33.6	33.6	Cubic Meters	For ship
MGO Fuel	fuel	1	39.1	39.1	Cubic Meters	For ship
MGO Fuel	fuel	2	22.8	45.6	Cubic Meters	For ship
MGO Fuel	fuel	2	21.5	43	Cubic Meters	For ship
MGO Fuel	fuel	2	27.1	54.2	Cubic Meters	For ship
MGO Fuel	fuel	1	81.5	81.5	Cubic Meters	For ship

Water Consumption

Daily amount (m3)	Proposed water retrieval methods	Proposed water retrieval location
700	Ship will retrieve fresh water from designated ports	Greenland

Waste

Waste Management

Project Activity	Type of Waste	Projected Amount Generated	Method of Disposal	Additional treatment procedures
Tourism Activities	Non-Combustible wastes	approx 8cbm per week	Per ship's plan in accordance with Marpol Annex V	n/a
Tourism Activities	Other, Oil	Approx .3 cbm per week	Per ship's plan in accordance with Marpol Annex I	n/a
Tourism Activities	Sewage (human waste)	20cbm per week	Per ship's plan in accordance with Marpol Annex IV	n/a

Environmental Impacts:

The greatest potential for disturbance and adverse effects on Students On Ice is improper wildlife viewing protocol, and insufficient monitoring during shore landings. (Note that expedition activities will not involve any research - we will not kill or interfere in any way

with the species. Participants will strictly be visiting for educational purposes only. No materials nor animals will be removed from the sites nor harmed.) All steps will be taken to avoid damage to land, water, flora and fauna. Prior to all zodiac cruises, shore landings and community visits, expedition staff will give a briefing to all participants on the environmental aspects and impacts of our visits to each site. Building on the feedback from previous expeditions, we will be more adamant about dividing our participant body into smaller groups during shore landings. Each of these groups will include multiple expedition field staff to ensure onshore activity/behaviour is respectful and minimizes disturbance. The SOI Expedition Field Staff team includes a senior CWS representative, a number of polar scientists, botanists, marine biologists, migratory bird specialists, archaeologists and Inuit Elders. We will consult and work closely with our staff team to ensure that there are no adverse effects on the species during our visit. Specific members of the expedition staff team are licensed gun holders and will be bringing firearms on the expedition as a safety measure during our shore landings. There will be 10 shotguns and 7 rifles. The safety and wellbeing of any bears we encounter is of paramount importance to us, second only to the safety of our party.

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

Description of Existing Environment: Biological Environment

We will follow the Federal proposal that there should be a 100 metre buffer zone between wildlife and the people who watch them. Students on Ice will comply with the Guidelines for Seabird Colony Viewing for Cruise Ships set out by Environment Canada and will comply with the Canadian Wildlife Service Guidelines for Migratory Bird Sanctuaries. The ship will anchor at least 500m from the breeding cliffs and nesting islands and will be approached by zodiac only. We will also respect the regulations specified by individual Area Co-Management Committees through various permitting processes.

Description of Existing Environment: Socio-economic Environment

Identification of Impacts and Proposed Mitigation Measures

Cumulative Effects

