



### Visitor experience at the Erebus Wreck Site

## DETAILS

English:	Project Description Visitors will be brought into the 10 x 10 National Historic Site by small, motorized vessel (including but not limited to: dingy, life boat, motor yacht, inflatable, cuddly boat, etc). The goal is to view the wreck of HMS Erebus from the surface. There will be no opportunity to dive down to the wreck site itself. For this year, it is proposed that there will be 2 small boats carrying 12 passengers each (including driver and guide) directly above the wreck at any given time, plus at least 1 auxiliary boat to provide safety support and emergency response. Over the course of 8 hours, a maximum of 200 visitors (100 is more likely) will visit the wreck by zodiac, in shifts. Additional small vessels (up to 17) may be present in the 10x10 National Historic Site, shuttling staff and visitors to the temporary camp. On-site activities will include: o Visiting the temporary camp on a nearby island (as described in NIRB #15YN037). This will act as a staging area for in boat, and in water activities. Changing and warming tents will be provided, as well as a portable toilet tent. o snorkelling above the wreck according to guidelines provided by PCA Underwater Archaeology Team (below) o use of bathyscopes from small vessels, over the wreck site o viewing, on iPad, of PCA UAT-manned ROV footage There will be no permanent structures, excavation, or site modification. No waste will be left on site.
French:	Les visiteurs seront introduits dans les 10 x 10 lieu historique national par petit bateau motorisé (y compris mais sans s'y limiter: miteux, bateau de sauvetage, yacht à moteur, bateau gonflable, cuddly, etc.). L'objectif est de voir l'épave du HMS Erebus de la surface. Il n'y aura pas possibilité de plonger vers le site de l'épave elle-même. Pour cette année, il est qu'il y aura proposé deux petits bateaux transportant chacun 12 passagers (y compris chauffeur et guide) Directement au-dessus de l'épave à tout moment, plus au moins un bateau auxiliaire pour assurer la sécurité et le soutien des interventions d'urgence. Au cours de 8 heures, un maximum de 200 visiteurs (100 est plus probable) visitera l'épave en zodiac, en quarts de travail. D'autres petits vaisseaux (jusqu'à 17) peuvent être présents dans le lieu historique national 10x10, la navette personnel et des visiteurs au camp temporaire. Activités sur place comprendront: • ou en visitant le camp temporaire sur une île voisine (comme décrit dans NIRB # 15YN037). Ceci agira comme une zone de transit pour en bateau, et les activités nautiques. Changement et tentes de réchauffement seront fournis, ainsi qu'une tente de toilettes portatives. • ou la plongée au-dessus de l'épave selon les directives fournies par l'APC sous-marine de l'équipe d'archéologie (ci-dessous) • ou l'utilisation de bathyscopes de petits vaisseaux, sur le site de l'épave • ou l'affichage, sur iPad, de PCA UAT-Manned ROV images Il n'y aura pas de structures permanentes, l'excavation ou modification du site. Aucun déchet ne sera laissé sur place.
Inuktitut:	><90< ><J0N0<D>0< <90<'<9< 10 x 10 <6<G <9<'<9<'<A<P<9< G<'<J< ><G<9<9<. <D<e<P0N<'<J<' (<'<P<P0N<J< <'<e<9<'<-<e<e<e<e<

Personnel on site: 210  
Days on site: 1  
Total Person days: 210  
Period of operation: from 2017-09-09 to 2017-09-09  
Proposed term of operation: from 2017-09-08 to 2017-09-11

## Activities

### Activities

Location	Activity Type	Land Status	Site history	Site archaeological or paleontological value	Proximity to the nearest communities and any protected areas
WET National Historic Site	Marine Based Activities	Marine	10 x 10 is part of Wrecks of HMS Erebus and HMS Terror National Historic Site	home of the wreck of HMS Erebus	Gjoa Haven and Cambridge Bay are the communities associated with the National Historic Site.
WET National Historic Site	Camp	Crown	While the water column of the 10x10 are fall under the protection of Parks Canada, the islands in this area are administered under INAC. Application for their use is with NIRB project #15YN037	Govt of Nunavut Dept of Culture and Heritage is advising on cultural sites in the area and we are avoiding them.	The National Historic Site is associated with Gjoa Haven and Cambridge Bay

### Community Involvement & Regional Benefits

Community	Name	Organization	Date Contacted
Gjoa Haven		Franklin Interim Advisory Committee	2016-08-31
Gjoa Haven		Franklin Interim Advisory Committee	2016-12-07
Gjoa Haven		Franklin Interim Advisory Committee	2017-02-23
Gjoa Haven		Franklin Interim Advisory Committee	2017-01-24
Gjoa Haven		Community and other organizations	2017-06-05
Gjoa Haven		Franklin Interim Advisory Committee	2017-05-04
Gjoa Haven		Franklin Interim Advisory Committee	2017-06-13

## Authorizations

### Indicate the areas in which the project is located

Kitikmeot

### Authorizations

Regulatory Authority	Authorization Description	Current Status	Date Issued / Applied	Expiry Date
Parks Canada	Field unit approved in principle, pending NIRB screening.	Applied, Decision Pending		
Aboriginal Affairs and Northern Development Canada	Access to INAC lands applied to through separate project NIRB file # 15YN037.	Applied, Decision Pending		

Material Use

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

Equipment Type	Quantity	Size - Dimensions	Proposed Use
Bathyscopes	10	15x24 inches	to see underwater
snorkels, mask, drysuit	30	6' x 2'	for people to wear in the water to see the wreck

Detail Fuel and Hazardous Material Use

Detail fuel material use:	Fuel Type	Number of containers	Container Capacity	Total Amount	Units	Proposed Use
Gasoline	fuel	20	18	360	Liters	for zodiacs

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
Camp	Sewage (human waste)	10L	Wag Bags	To be disposed of in Gjoa Haven landfill if required.

Environmental Impacts:

Predicted impacts are minimal. Zodiacs will be in the area for a few hours each, and people will be in the water for an even shorter time. Please see Details part 2 for mitigation measures for protection of cultural resource.

## Details Part 2

### Project General Information

The Wrecks of the HMS Erebus and HMS Terror National Historic Site (WET NHS) is a marine environment with no terrestrial resources. Travel by boat is consequently the most feasible, and lowest impact, method of accessing the site. Because wave action and light refraction from the surface obstructs visibility from above, bathyscope and mask and snorkel are required in order to see below the water's surface to the wreck itself. The Franklin Interim Advisory Committee (FIAC) has provided direction to explore visitor experience opportunities that could provide benefits to Inuit while providing opportunities for public to learn about the cultural heritage values of the site and promoting conservation and protection of those values. They have recommended a 2017 pilot project to bring visitors to the Wrecks of the HMS Erebus to test the visitor experience and inform future site management. Because of changes to the research portion of Parks Canada's capabilities this year, the original plans are no longer possible. FIAC has subsequently recommended that snorkelling be permitted as part of the 2017 pilot (minutes of FIAC June 14, 2017). This is an opportunity for PCA to evaluate future potential of small vessel visits to the WET NHS, and to assess the feasibility and merits of snorkelling above the wreck site. Lessons learned from this visit will inform future management decisions. Community members from Gjoa Haven will be involved providing interpretation, safety backup, and on-the-land support and emergency response from a temporary Guardian camp established on one of the islands in the 10x10 (NIRB file # 15YN037). The 2017 pilot project will support capacity building for the Guardian program that is currently in development phase. The goal of the guardian program is to hire Inuit to provide both security for the cultural resource and promotion and education around the wrecks to visitors.

### DFO Operational Statement (OS) Conformity

na

### Transportation

up to 20 zodiacs arrival of visitors on Ocean Endeavour (NIRB file # 125040) which will remain in the navigation channel (not entering the 10x10)

### Camp Site

as described in NIRB file # 15NY037

### Equipment

bathyscopes snorkels, masks and dry suits

### Water

na

### Waste Water (Grey water, Sewage, Other)

wag bags to be disposed of in the Gjoa Haven landfill.

### Fuel

gas for zodiacs

### Chemicals and Hazardous Materials

NA

### Workforce and Human Resources/Socio-Economic Impacts

Four community members from Gjoa Haven will be hired to support the underwater archeology team's work this year (NIRB file # 15YN037) and provide advice, interpretation and Inuit knowledge for the visitors as the initiation of the guardian program. The guardian program will eventually train and provide seasonal employment for minimally four people. Our partnership with Adventure Canada includes a training program for Inuit to work as cultural interpreters and cruise ship staff in the future. We are in the process of identifying four candidates from associated Parks Canada communities for this training, which will take place late September, early October. The Adventure Canada ship will visit Gjoa Haven after their visit to the wreck site to participate in the community celebration of the discovery of the wrecks. We are employing 2 community members to support the community celebrations, and visitors will have the opportunity to purchase art from local artists.

### Public Involvement/Traditional Knowledge

The project has been endorsed by the Franklin Interim Advisory Committee - a board created to support management decisions of the site in the absence of both an IIBA and a management plan. This board consists of decision-makers from their respective organizations, including: Gov't of Nunavut Dept of Culture and Heritage, Dept, Economic Development and Transportation; Kitikmeot Inuit Association; Inuit Heritage Trust; Nattalik Heritage Society; Nunavut Tourism; Parks Canada and representatives from the communities of Gjoa Haven and Cambridge Bay. It is co-chaired by Fred Pederson of KitIA and Jarred Picher of Parks Canada. This project has been under discussion with this group since Sept 1, 2016, with regular updates at their monthly meetings. Excerpts of meetings provided in activities section attachments. This management board will continue to be involved in the decision making for the site, until such time as there is a signed IIBA which informs a different strategy for cooperative management. The Guardian Program and their role in protecting and presenting the NHS is a priority of the FIAC committee. The program has been discussed at length with both the Economic Development Officer in Gjoa Haven and the Hunters and Trappers Organization. The program was presented by the Franklin Project Manager during a June 5-10th visit to Gjoa Haven. In all, she met with or presented to over 150 people in person and many more at a distance including at the Nattilik Heritage Centre AGM, a Hamlet Council Meeting, the Hunters and Trappers Association, teachers and the community at large. In general the feedback was positive and community members supported all plans and projects that were presented. The audiences were receptive and appreciative. Key results include: The Hunters and Trappers Association and others in the community were supportive of the Guardian Program. The HTA identified 2 locations for the Guardian camps, one on the east side of Terror Bay and one on an island south east of the Erebus wreck site. Their presence on site this summer will provide additional information on where and how the program will be run.

### SECTION H: Marine Based Activities: Disposal at Sea

up to 20 zodiacs, each with one driver. Route into the 10x10 NHS will depend on which navigation channel (north or west) is selected by the ship captain (NIRB file # 125040)

### Description of Existing Environment: Physical Environment

Visit is inside of National Historic Site. Cultural resource is located on the ocean floor.

### Description of Existing Environment: Biological Environment

### **Description of Existing Environment: Socio-economic Environment**

Site is location of the wreck of HMS Erebus. The wreck site is about 125 km from Gjoa Haven, which is the closest community, and the community has indicated harvesting ringed seal, bearded seal and cod in the area. They are eager to participate in tourism activities at the site through the guardian program. Territorial archeologists are in close contact with us to ensure we stay clear of archeological sites. A site visit of the area was undertaken by FIAC in Sept 2, 2016 and neither of the community members indicated prior visits to or knowledge of traditional use of the area; it was identified that more needs to be learned about the area. An Oral History project - which is in its early stages - will help address this need.

### **Identification of Impacts and Proposed Mitigation Measures**

We see the long term potential socio-economic impact as being positive through the development of Inuit operated tourism business to protect and present the wreck site. This pilot will inform what the opportunities and constraints will be in to the future. As people will simply be getting in the water from small vessels, we see the biological impacts a mostly negligible. Potential for spills are minimal, tanks will not be filled in the region. NO contact with marine life will be permitted. Proposed Mitigation for cultural resource: - Parks Canada staff present at all times. - Anchoring on site is prohibited. - Snorkelling is permitted on the surface only, no breath hold dives or any descent below surface. - The use of any weights that would enable a diver to leave the surface is prohibited. - Any contact with or disturbance of archaeological remains (shipwreck or other), marine life or other part of the surrounding underwater environment is prohibited. - Any item dropped on site is not to be retrieved and will be reported to Parks Canada immediately - Any disturbance whether intentional or accidental will be reported to Parks Canada immediately. - Collection of any archaeological remains, marine life or other souvenirs from the site or nearby islands is prohibited. - Snorkelers must be in visual contact with the boat/tour operator at all times. - NO use of GPS or any positioning devices (GPS function in personal cameras must be off) - Cameras permitted in 10x10, and on-board zodiacs, but not in water - Snorkelling is managed by a snorkel supervisor with experience in cold-water environments

### **Cumulative Effects**

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																										
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Operation																										
Marine Based Activities		M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	U	-	-	-	-	-
Decommissioning																										
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(P = Positive, N = Negative and non-mitigatable, M = Negative and mitigatable, U = Unknown)																										

Project Map

