

DETAILS

Non-technical project proposal description

English: The Canadian Coast Guard Ship (CCGS) 'Sir Wilfrid Laurier' and its crew plans to decommission a redundant CCG Aid to Navigation (ATON) land mark tower during its regular summer arctic work program. The tower is a 30' (9.2m) tall tripod aluminium tower which is located on Mulroak Island in the Queen Maud Gulf (67° 57' 13.2 N 102° 40' 52.9 W). Mulroak Islands are in the Kitikmeot region of Nunavut. The tower is further identified as list of light number LL4530. The aid was established sometime between 1961 and 1967. The main reason for establishing the aid was probably to help guide mariners to and from the Hudson's Bay Company post that was established in 1958 on Perry Island. The post was closed around 1968 which had essentially rendered the aid redundant. The site location of the tower is located in a known and protected migratory bird sanctuary - Akiak (Queen Maud Gulf) Migratory Bird Sanctuary. For this reason, the area is very difficult to get access to which also adds to the redundancy of the aid. The CCGS Laurier will be used to transit to the area but will remain outside the boundary of the bird sanctuary, approximately 10nm (nautical miles) from Mulroak Island; the vessel will serve as a platform for workers and for the Canadian Coast Guard (CCG) helicopter (Bell 429) which will deploy personnel, tools and material between the vessel and the island. The Laurier will position itself in the approximate position 68 06 75N / 102 30W. The helicopter will transport 1 pilot and 2 ground workers to the site. Once the tower is decommissioned and disassembled, all remains of the tower will be removed from the site location via the helicopter. No garbage or waste material will be left at the site. The planned work is expected to take place some time between mid-August to September of 2019. If birds are found to be nesting on the tower, the project will be deferred to a future year and Coast Guard will request an amendment to the permit. If birds are found to be nesting on the island care will be taken to ensure they are not disturbed during the operation.

French: N/A

Inuktitut: N/A

Inuinnaqtun: Tariungani Munaqtiuyut Umiangit (CCGS) "Sir Wilfrid Laurier" ikayuqtingillu ihumaliuqtut piiyariami taimaaqtauyuuq CCG Havaanga Ingilrayumik (ATON) nunami naunaitkutanganik auyami ukiuqtaqtumi havaktillugi, tamna napangayuq naunaitkutanga 30 fiitmik (9.2 m) takiaqtuq napayumik aluuminammik napangayuq naunaitkutaq ittuq uumani Malroak Qikiqtanga Ahiakmi (67° 57' 13.2 Tununngani 102° 40' 52.9 Uataani). Malroak Qikiqtanga ittuq Kitikmeonmi Nunavunmi. Napangayuq naunaitkutaq ilitariyauyuqlu titiraqhimayumik nampanganiq LL4530. Havaanga piliurhimayuq 1961mi 1967milu. Huuq piliurhimayuq havaanga ikayuriami naunaitkutakhanganik qayaqtuqtunut hivulliqpaami Situariyaluanga taiyauyuq Hudson Bay-mik nayuganganut piliurhimayuq 1958mi Perry Qikiqtangani. Tamna nayugaq umiktuq 1968mi ikikliyuumiqtaa havaakhanganik. Nayugaa ittuq napangayuq naunaitkutaq ittuq naunaittumik tammaqtailihimayumiklu tingmianik manningillu pittailimalvik – Ahiakmi Tingmianik Manningillu Pittailimalvik. Talvuuna, tahamna ayurnaqtuq talvungaugiami ilaliutiyuqlu havaakhanganut. Tamna CCGS Laurier atuqtauniaqtuq talvungariami kihimi hilataani inniaqtuq kiklikhanganik tingmianik manningillu pittailimalvik, ittuq 10 nm (ungahiktilaanga) Malroak Qikiqtanganit; tamna umiaq atuqtauniaqtuq tunngavikhanganik havaktunut uumunngalu Tariungani Munaqtiuyut (CCG) halikaaptanga (Bell 429) aturniaqtut havaktunik, hanalrutiniklu hunavalukniklu umiamit qikiqtamullu. Tamna Laurier ihuarhiniaqtuq inmiknik uumunnga 68° 06' 75 Tununngani/102° 30' Uataani. Halikaaptanga agyaqniaqtut atauhiqmik aquttukhamik malruukniklu nunami havaktukhanik. Talvannga napangayuq naunaitkutaq nutqaqtitaugumi piiyaqtaugumilu, tamaita ilakungit uuma napangayuq naunaitkutaq piiyaqtauniaqtuq talvangaanit halikaaptakut. Iqqakut hunavaluilluuniit ikhinnaqtaulimaittut talvani. Ihumaliurhimayuq havaanga ihumagiyauyuq havalinqiaqtait qitqani Niqiliqiviani Apitilirivikmut 2019mi. Tingmiat pikiutaqaliqqata talvani napangayuq naunaitkutaq, tamna havaaq havaariliqniaqtaat aadlami ukiumi unalu Tariungani Munaqtiuyut apiriniaqtut aadlangurlugu laisikhangat. Tingmiat pikiutalirumik qikiqtami munarittiaqtumik piniaqtut naunairiami qimalaktittailigiami havaktillugit.

Personnel

Personnel on site: 3

Days on site: 2

Total Person days: 6

Operations Phase: from 2019-08-01 to 2019-09-30

Activities

Location	Activity Type	Land Status	Site history	Site archaeological or paleontological value	Proximity to the nearest communities and any protected areas
Location of Aid to Decommission - Mulroak Island Daymark	Site Cleanup/Remediation	Crown	Location of current Navigational Daymark that the CCG has deemed redundant and no longer needed. Mulroak Island day beacon is a 30 ft skeleton tower, steadied with three guys, and fitted with two day marks and a radar reflector. Since it appears the aid was last maintained by the Coast Guard in 2007, the condition of the aid at this time is unknown. The aid was most likely established sometime between 1961-1967.	N/A	Mulroak Island Day Beacon is located in the W. Arctic, in the Queen Maud Gulf, 10.7 nm to the south of the northern limit of the Queen Maud Gulf MBS. Mulroak Islands are in the Kitikmeot region of Nunavut. The NAD83 position is as follows: 67° 57' 13.2 N 102° 40' 52.9 W Nearest Point on Mainland: Atkinson Point, 5.7 nm to the WSW. Distance to Nearest Communities: Cambridge Bay = 87 nm by air and 100 nm by sea. Gjoa Haven = 156 nm by air and 175 nm by sea.
Position of CCGS Vessel 'Laurier' - Outside Bird Sanctuary boundary	Staging areas	Marine	N/A	N/A	Location/staging area of CCG Vessel Wilfrid Laurier.

Community Involvement & Regional Benefits

Community	Name	Organization	Date Contacted
Cambridge Bay	N/A	Ahiak Area Co-management Committee (ACMC)	2019-03-16
Gjoa Haven	N/A	Ahiak Area Co-management Committee (ACMC)	2019-03-16

Authorizations

Indicate the areas in which the project is located:

Kitikmeot

Authorizations

Regulatory Authority	Authorization Description	Current Status	Date Issued / Applied	Expiry Date
Canadian Wildlife Service	Migratory Bird Sanctuary Access	Applied, Decision Pending		

Project transportation types

Transportation Type	Proposed Use	Length of Use
Air	Fly from CCGS Wilfrid Laurier via 1 Bell 429 CCG Helicopter.	
Water	Travel to staging area via the CCGS Wilfrid Laurier during regular summer arctic work activities.	
Land	Access to land required for removal of Daymark. Travel on land by foot only. Helicopter to land near Daymark site.	

Project accomodation types

Other,

Material Use

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

Equipment Type	Quantity	Size - Dimensions	Proposed Use
Helicopter (Bell 429)	1	12.7m x 11m (wingspan)	A CCG Bell 429 Helicopter will be used to transport 2 crew members, tools and slinging bags to the tower site. It has been estimated that 2-3 slinging operations will be needed to remove all materials from the site location - approximately 6 trips total to and from the tower location from the CCGS Laurier. The Helicopter will remain at the site while the work is being performed.
Battery Power Saws	2	0.5 m x 0.5 m	To cut and disassemble tower components.
Various Hand Tools	5-10	Nil	To aid in the dissembling of the tower and components.
Remington 700 Shotgun	1	0.75m	Shotgun and slug shells used for Bear watch and worker safety.

Detail Fuel and Hazardous Material Use

Detail fuel material use:	Fuel Type	Number of containers	Container Capacity	Total Amount	Units	Proposed Use
Aviation fuel	fuel	1	500	500	Liters	Used for Helicopter Operations

Water Consumption

Daily amount (m3)	Proposed water retrieval methods	Proposed water retrieval location
0	N/A	N/A

Waste

Waste Management

Project Activity	Type of Waste	Projected Amount Generated	Method of Disposal	Additional treatment procedures
Site Cleanup/Remediation	Non-Combustible wastes	500 lbs	Waste Type = wood, aluminum, galvanized steel, guy cables, SS components Projected Amount = <500 lbs Method of Disposal = All tower waste material will be transported to the CCGS Laurier for salvage or recycling. All waste tower components will be slung out using the helicopter using industry standard slinging nets. The site after dismantling of the tower will be cleaned thoroughly, removing all debris to restore the site back to its natural habitat as possible. If birds are found to be nesting on the island, care will be taken to ensure they are not disturbed during the operation. If birds are found to be nesting on the tower itself, the project will be deferred to a future year and thus, the CCG will request an amendment to all permits.	N/A
Site Cleanup/Remediation	Non-Combustible wastes	500 lbs	See other record	Note, forum would not accept 'other' type of waste, therefore chose non-combustible waste.

Environmental Impacts:

No environmental impacts are assumed or anticipated to take place during this Daymark decommissioning project. If birds are found to be nesting on the tower, the project will be deferred to a future year. If birds are found to be nesting on the island (as previously occurred, during 2007 site visit when Arctic Tern nest was observed) care will be taken to ensure it is not disturbed in any way.

Additional Information

SECTION A1: Project Info

Decommissioning of Coast Guard Aid to Navigation site by removal of tower. The tower is a 30' (9.2m) tall tripod aluminum tower formerly used as an aid to navigation. The daymark is located at Mulroak Island, Queen Maud Gulf (67 57 18N / 102 40 00W). The operation will take place during the Arctic work program of the Canadian Coast Guard Ship (CCGS) 'Sir Wilfrid Laurier' , which is from mid-August to mid-September, 2019. However if birds are found to be nesting on the tower, the project will be deferred to a future year and Coast Guard will request an amendment to the permit. The CCGS 'Sir Wilfrid Laurier' will be used to transit to the area but will remain outside the boundary of the bird sanctuary, approximately 10nm (nautical miles) from Mulroak Island; the vessel will serve as a platform for workers and for the CCG helicopter (Bell 429) which will deploy personnel, tools and material between the vessel and the island.

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

2 Laurier Fleet personnel will clean up the site and return to natural as possible when the work is complete.

SECTION G1: Well Authorization

SECTION G2: Onland Exploration

SECTION G3: Offshore Exploration

SECTION G4: Rig

SECTION H1: Vessel Use

CCGS Wilfrid Laurier used as staging area outside of the MBS limits. No other vessel will be used for this project.

SECTION H2: Disposal At Sea

SECTION I1: Municipal Development

Description of Existing Environment: Physical Environment

Description of Existing Environment: Biological Environment

Description of Existing Environment: Socio-economic Environment

Miscellaneous Project Information

Identification of Impacts and Proposed Mitigation Measures

A permit from the Canadian Wildlife Service has been applied for, so that CCG personnel can enter the Queen Maud Gulf Migratory Bird Sanctuary. Also, if the tower is still standing, with migratory birds nesting on the tower, it is quite possible that no action could be taken, since the Migratory Bird Sanctuary Regulations prohibits the disturbance or destruction of migratory birds' nests. An amendment to our permit would then be required or reapplied for the following year as site activities would not be put into effect should nesting birds be found on the tower. Additionally, if birds are found to be nesting on the island, caution will be taken as to not disturb them. The CCG crew will take care and caution to removal all debris and garbage from the site, leaving the site as natural as possible when then complete their work to limit soil and ground disturbance.

Cumulative Effects

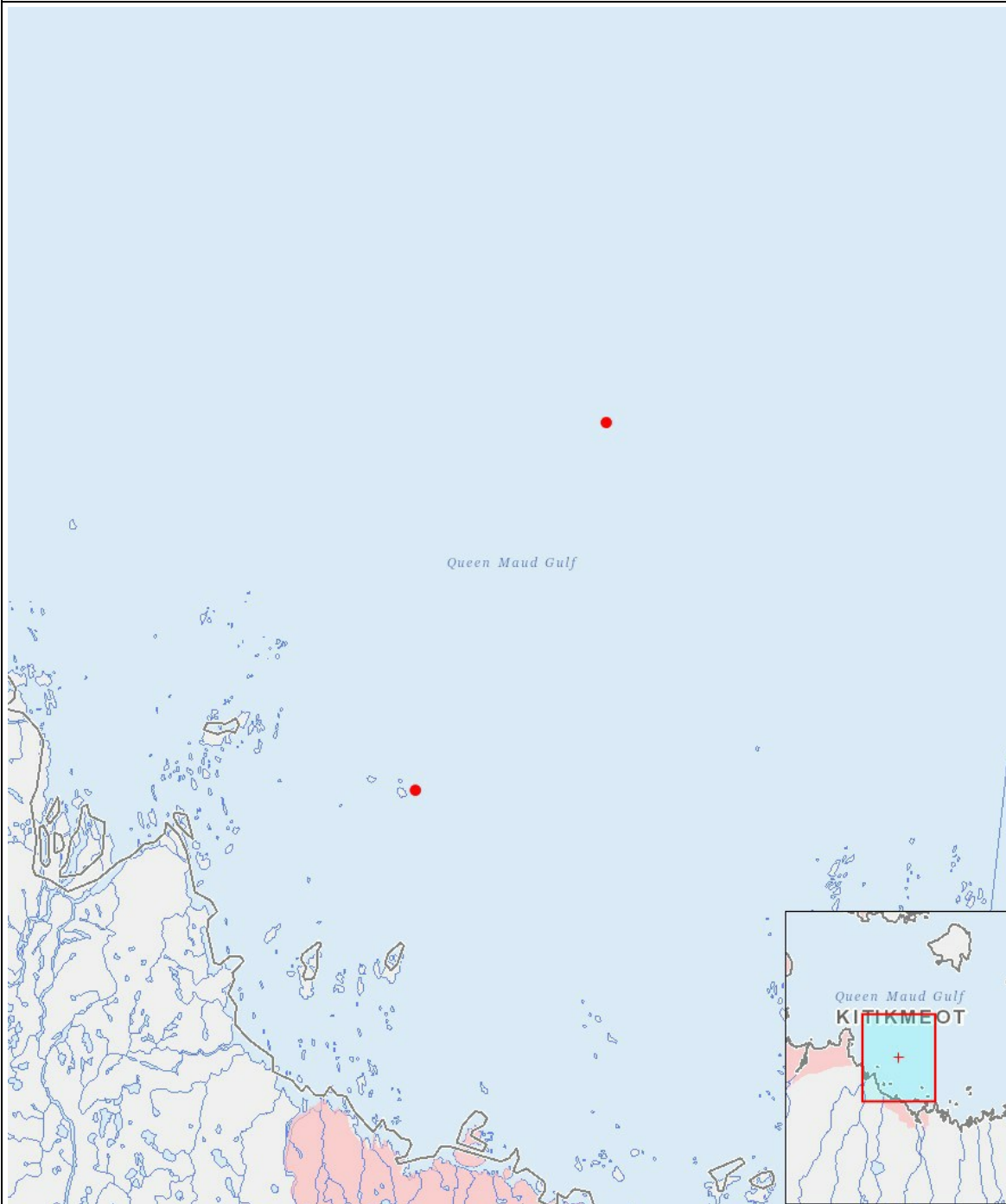
Impacts

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																									
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Operation																									
Staging areas	-	-	-	-	-	-	-	-	-	-	-	-	-	U	-	-	-	-	-	-	-	-	-	-	-
Site Cleanup/Remediation	N	U	-	-	-	-	-	-	-	U	-	-	-	M	-	N	N	-	N	-	-	-	-	-	-
Decommissioning																									
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

Project Location



List of Project Geometries

- | | | |
|---|-------|---|
| 1 | point | Location of Aid to Decomission - Mulroak Island Daymark |
| 2 | point | Position of CCGS Vessel 'Laurier' - Outside Bird Sanctuary boundary |