



## **NIRB Application for Screening #125359**

### **Stream occupancy of young-of-year arctic grayling (*Thymallus arcticus*) and the associated impact from the wastewater treatment facility in Baker Lake**

**Application Type:** New

**Project Type:** Scientific Research

**Application Date:** 6/19/2018 4:24:47 PM

**Period of operation:** from 0001-01-01 to 0001-01-01

**Proposed Authorization:** from 0001-01-01 to 0001-01-01

**Project Proponent:** Jared Ellenor  
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Canada  
Phone Number:: 6042408269, Fax Number::

## **DETAILS**

### **Non-technical project proposal description**

English: Please see attached document.

French: N/A

Inuktitut: Please see attached document.

Inuinnaqtun: N/A

### **Personnel**

Personnel on site: 2

Days on site: 60

Total Person days: 120

Operations Phase: from 2018-07-01 to 2021-10-01

## Activities

Location	Activity Type	Land Status	Site history	Site archaeological or paleontological value	Proximity to the nearest communities and any protected areas
Region encompassing wastewater system and potential reference systems	Researching	Municipal	N/A	N/A	Wastewater treatment system is in the community of Baker Lake. Research conducted on land ranging in status, and includes municipal, Inuit owned surface and sub-surface, and crown land.

## Community Involvement & Regional Benefits

Community	Name	Organization	Date Contacted
Information is not available			

## Authorizations

Indicate the areas in which the project is located:

Kivalliq

### Authorizations

Regulatory Authority	Authorization Description	Current Status	Date Issued / Applied	Expiry Date
Kivalliq Inuit Association	Research exemption application	Active		
Nunavut Research Institute	Conformity determination	Active	2018-06-18	

### Project transportation types

Transportation Type	Proposed Use	Length of Use
Air	Helicopter use will be dependent on site access, and is anticipated to be minimal	
Water	Travel by boat may be required , but is anticipated to be infrequent	
Land	Travel by truck will occur along the Agnico Eagle all weather access road from Baker Lake to Amaruq Camp. Travel by foot is also anticipated.	

### Project accomodation types

Community

Other,

## Material Use

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

Equipment Type	Quantity	Size - Dimensions	Proposed Use
Pick-up Truck	1	6m x 2m x 3m	Travel to site
Boat	1	6m x 2m x 3m	Travel to site
Helicopter	1	11m x 4m x 2m	Travel to site
Flow meter	1	1.5m x 0.25m x 0.25m	Measure stream discharge
Stopwatch	1	0.2m x 0.2m x 0.1m	Measure sampling effort
GPS	1	0.25m x 0.1m x 0.1m	Locate/mark sites
Range Finder	1	0.2m x 0.2m x 0.05m	Measure distances
Tape Measure	1	0.25m x 0.25m x 0.05m	Measure stream properties
Camera	1	0.2m x 0.2m x 0.05m	Record site conditions
In-situ water quality meter	1	0.4m x 0.4m x 0.2m	Record in situ water quality parameters

## 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	42	42	Gallons	Transport to and from sites
Gasoline	fuel	10	120	1200	Liters	Transport to and from site

## 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
Researching	Non-Combustible wastes	Minimal	Daily waste (e.g. food and equipment packaging) will be packed out each day and disposed of at Agnico Eagle sites.	N/A

## Environmental Impacts:

No materials are to be moved or removed during this project, so impacts are anticipated to be minimal.

# **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**

Please refer to attached supporting document.

**Description of Existing Environment: Biological Environment**

Please refer to attached supporting document.

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

Please refer to attached supporting document.

**Miscellaneous Project Information**

N/A

**Identification of Impacts and Proposed Mitigation Measures**

No impacts are anticipated

**Cumulative Effects**

N/A



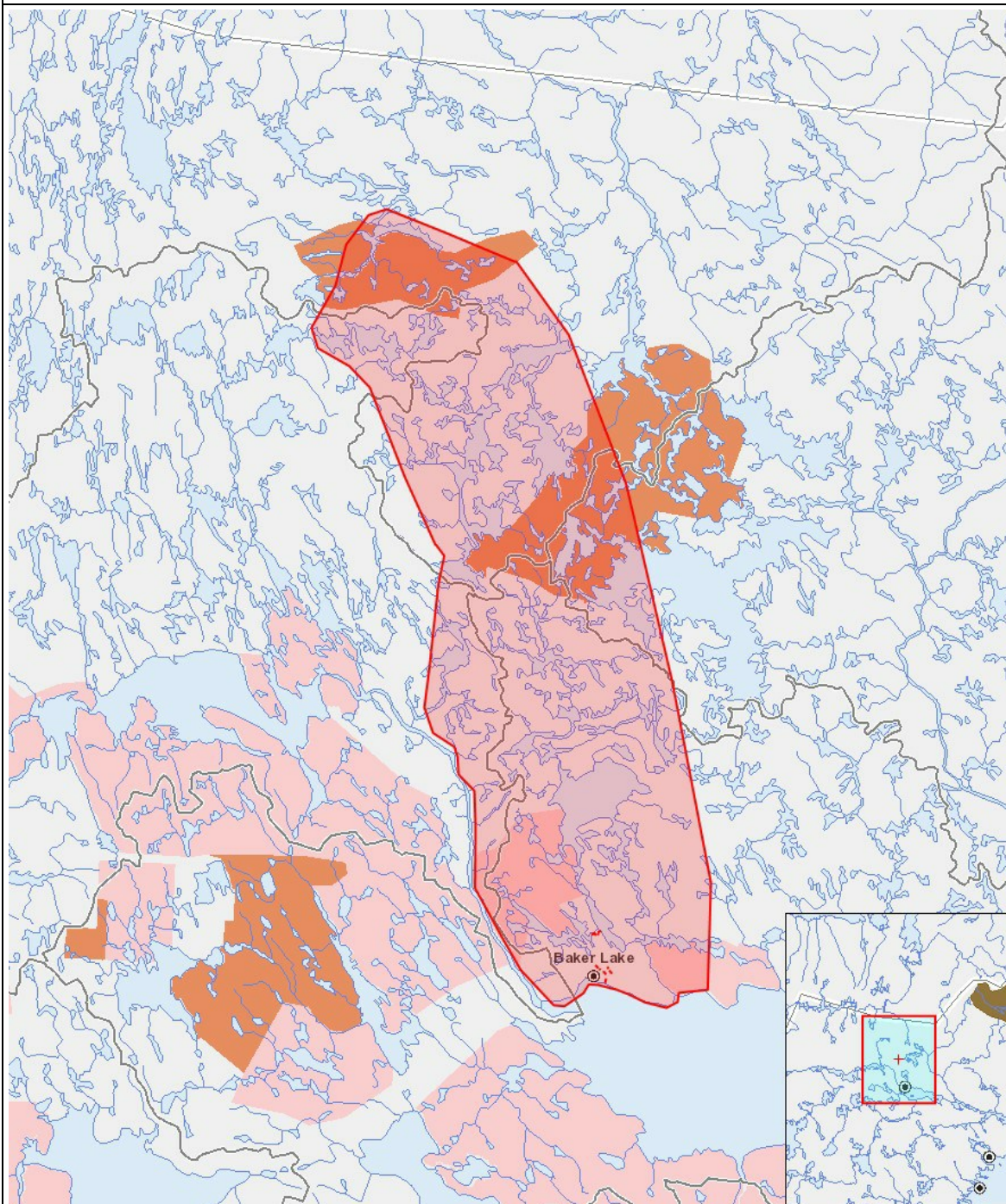
# Impacts

## 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
<b>Construction</b>																										
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<b>Operation</b>																										
Researching		-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	P	-		-	-	-	-	-
<b>Decommissioning</b>																										
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(P = Positive, N = Negative and non-mitigatable, M = Negative and mitigatable, U = Unknown)

## PROJECT MAP



### LIST OF PROJECT GEOMETRIES:

- |   |          |   |
|---|----------|---|
| 1 | polygon  | Region encompassing wastewater system and potential reference systems |
| 2 | polyline | Wastewater system streams   |
| 3 | polyline | R02 reference stream  |