



## **NIRB Application for Screening #125461 Blue Star Gold Corp.**

**Application Type:** New  
**Project Type:** Mineral Exploration  
**Application Date:** 4/8/2019 1:54:59 PM  
**Period of operation:** from 0001-01-01 to 0001-01-01  
**Proposed Authorization:** from 0001-01-01 to 0001-01-01  
**Project Proponent:** Peter Kuhn  
Blue Star Gold Corp.  
1125-595 Howe St.  
Vancouver BC V6C 2T5  
Canada  
Phone Number:: 778-379-1433, Fax Number::

# DETAILS

## Non-technical project proposal description

English: Please see attached. The purpose of the Hood River Gold Project (the Project) is to conduct exploration-related activities to assess previously identified gold targets, to conduct prospecting to locate new gold targets and to explore these targets. Exploration activities may include airborne surveys, drilling, sampling, mapping and prospecting. Environmental and heritage resources baseline studies may be undertaken to inform future project planning and mitigate potential program impacts. Works will be based either regionally, or out of a camp to be established on the property, or out of a camp established on nearby properties, should permitting and availability exist (the Program). Current and past authorizations exist for exploration related activities on the property, including mapping, sampling, geophysics, drilling, prospecting, operating a camp, conducting archaeology and environmental baseline studies. These authorizations are: •NIRB screening 07EN067, 14EN033; •NWB water licence 2BE-HRP1419; •KIA Land use licences KTL307C014 and KTL314C010 (expired); •NTI Mineral Exploration Agreement HOODRIVER-001. The purpose of this application is to: •Renew the existing water licence 2BE-HRP1419; •Amend the existing water licence to allow for establishment of a temporary camp and the related domestic water use and waste deposit; •Renew the expired land use licence to allow for exploration, temporary camp establishment and future potential environmental and heritage resources baseline studies. The study area indicated on the maps provided is the Hood River watershed boundary. Should the Applicant commence baseline studies, it is reasonable to expect that they may include sampling upstream and downstream of the exploration area. The Exploration area is currently delineated according to the existing Agreement with NTI, and occurs in an area immediately adjacent to the Ulu property. While the exploration area boundaries may change in the future based on prospecting results, exploration is expected to occur in the general vicinity of the existing Hood River and Ulu parcels. Related, a temporary camp is proposed, for a suitable location within the current Hood River parcel. Based on exploration results, it is possible that the camp may be relocated over the life of the program, to an area proximal to drilling.

French: n/a

Inuktitut: Please see attached.

Inuinnaqtun: Please see attached.

## Personnel

Personnel on site: 60

Days on site: 750

Total Person days: 45000

Operations Phase: from 2019-06-26 to 2019-07-05

Operations Phase: from 2019-06-26 to 2024-06-25

Post-Closure Phase: from to

## Activities

Location	Activity Type	Land Status	Site history	Site archaeological or paleontological value	Proximity to the nearest communities and any protected areas
Approximate exploration area. Exploration activities, including a temporary camp (location to be confirmed), will occur in this area. The boundaries of this area may change in the future, based on prospecting results. Any changes will remain within the Study Area.	Drilling	Inuit Owned Sub-Surface Lands	Exploration has occurred in the vicinity in the past.	N/A	Kugluktuk is approximately 200 km northwest.
Study Area, Hood River Watershed. Environmental baseline studies may occur throughout the watershed.	Airstrip use or construction	Inuit Owned Surface Lands	There is an existing airstrip south of the Ulu property, which the Project may make use of. Alternately, an adjacent lake may be used for landing resupply aircraft on floats. No new airstrip construction is planned.	None.	Kugluktuk is approximately 200 km northwest.
Study Area, Hood River Watershed. Environmental baseline studies may occur throughout the watershed.	Baseline data	Crown	Studies have occurred throughout the watershed in the past, in support of other exploration projects.	Unknown. Studies may be undertaken.	Kugluktuk is approximately 200 km northwest.
Study Area, Hood River Watershed. Environmental baseline studies may occur throughout the watershed.	Baseline data	Inuit Owned Surface Lands	Studies have occurred throughout the watershed in the past, in support of other exploration projects.	Unknown. Studies may be undertaken.	Kugluktuk is approximately 200 km northwest.
Approximate exploration area. Exploration activities, including a temporary camp (location to be confirmed), will occur in this area. The boundaries of	Camp	Inuit Owned Surface Lands	Exploration camps have been established in the vicinity in the past. There is currently a camp on the adjacent Ulu property. However, this	Unknown. Studies will be undertaken.	Kugluktuk is approximately 200 km northwest.

<p>this area may change in the future, based on prospecting results. Any changes will remain within the Study Area.</p>			<p>camp is currently unavailable for use.</p>		
<p>Approximate exploration area. Exploration activities, including a temporary camp (location to be confirmed), will occur in this area. The boundaries of this area may change in the future, based on prospecting results. Any changes will remain within the Study Area.</p>	<p>Drilling</p>	<p>Inuit Owned Surface Lands</p>	<p>Exploration has occurred in the vicinity in the past.</p>	<p>Unknown. Studies may be undertaken.</p>	<p>Kugluktuk is approximately 200 km northwest.</p>
<p>Approximate exploration area. Exploration activities, including a temporary camp (location to be confirmed), will occur in this area. The boundaries of this area may change in the future, based on prospecting results. Any changes will remain within the Study Area.</p>	<p>Fuel and chemical storage</p>	<p>Inuit Owned Surface Lands</p>	<p>Fuel caches have been established in the vicinity in the past, to support exploration and camp operation.</p>	<p>Unknown. Studies will be undertaken.</p>	<p>Kugluktuk is approximately 200 km northwest.</p>
<p>Study Area, Hood River Watershed. Environmental baseline studies may occur throughout the watershed.</p>	<p>Mineral Exploration</p>	<p>Crown</p>	<p>Exploration has occurred in the vicinity in the past.</p>	<p>Unknown. Studies may be undertaken.</p>	<p>Kugluktuk is approximately 200 km northwest.</p>
<p>Study Area, Hood River Watershed. Environmental baseline studies may occur throughout the watershed.</p>	<p>Mineral Exploration</p>	<p>Inuit Owned Surface Lands</p>	<p>Exploration has occurred in the vicinity in the past.</p>	<p>Unknown. Studies may be undertaken.</p>	<p>Kugluktuk is approximately 200 km northwest.</p>
<p>Approximate exploration area. Exploration activities, including a temporary camp (location to be confirmed), will occur in this area. The boundaries of this area may change in the</p>	<p>Waste disposal</p>	<p>Inuit Owned Surface Lands</p>	<p>Waste disposal from camp activities (grey water) and drilling (cuttings) have occurred in the vicinity in the past.</p>	<p>Unknown. Studies may be undertaken.</p>	<p>Kugluktuk is approximately 200 km northwest.</p>

future, based on prospecting results. Any changes will remain within the Study Area.					
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### Community Involvement & Regional Benefits

Community	Name	Organization	Date Contacted
Kugluktuk	Geoff Clark	KIA-Lands	2019-01-08
Kugluktuk	Geoff Clark	KIA-Lands	2019-01-24
Kugluktuk	Geoff Clark	KIA_Lands	2018-10-26
Kugluktuk	Geoff Clark	KIA-Lands	2018-11-05
Kugluktuk	Geoff Clark, Tannis Bolt	KIA-Lands	2019-03-19
Kugluktuk	Geoff Clark	KIA-Lands	2019-04-02
Cambridge Bay	Stanley Anablak, Paul Emingak, Fred Pedersen, Michelle Gillis, John Roesch, Geoff Clark	KIA	2019-03-02
Kugluktuk	Amanda Dumond	Kugluktuk Angoniatit Association	2019-01-10
Kugluktuk	Amanda Dumond	Kugluktuk Angoniatit Association	2019-01-23
Kugluktuk	Amanda Dumond	Kugluktuk Angoniatit Association	2019-03-20
Cambridge Bay	Sam Angohiatok	Burnside & Omingmaktok Hunters' & Trappers' Organizations	2019-02-04
Cambridge Bay	Sam Angohiatok	Burnside & Omingmaktok Hunters' & Trappers' Organizations	2019-02-11
Cambridge Bay	Sam Angohiatok	Burnside & Omingmaktok Hunters' & Trappers' Organizations	2019-03-21
Kugluktuk	Matt Stadnyk	Hamlet of Kugluktuk	2019-01-24
Kugluktuk	Don Leblanc	Hamlet of Kugluktuk	2019-03-19
Kugluktuk	Public	Public meeting, morning	2019-03-20
Kugluktuk	Public	Public meeting-evening	2019-03-20
Kugluktuk	Baba Pedersen	CIRNAC	2019-01-25
Kugluktuk	Lisa-Marie LeClerc, Kevin Methuen	GN-DOE	2019-01-24
Kugluktuk	Lisa-Marie LeClerc, Kevin Methuen	GN-DOE	2019-03-13
Iqaluit	Erika Zell, Paul Budkewich, David Kunuk	GN-Minerals, DOE	2019-01-30
Iqaluit	Erika Zell, Paul Bedkewich, Natalie O'Grady	GN-DOE, Minerals	2019-04-05
Iqaluit	Tineka Simmons, Adrian Paradis	CanNor	2019-01-15
Iqaluit	Tineka Simmons, Adrian Paradis	CanNor	2019-01-31
Iqaluit	Tineka Simmons, Adrian Paradis	CanNor	2019-03-04

Iqaluit	Godwin Okonkwo, Felexce Ngwa	CIRNAC-Waters, EA	2019-02-19
Iqaluit	Godwin Okonkwo, Felexce Ngwa	CIRNAC-Waters, EA	2019-04-04
Cambridge Bay	Public	Public Meeting	2019-03-21
Iqaluit	Public	Public Meeting	2019-03-22
Cambridge Bay	Ryan Barry, Teresa Meadows	NIRB	2019-01-30
Cambridge Bay	Natasha Lear, Jaida Ohokannoak	NIRB	2019-03-22
Cambridge Bay	Tara Arko	NIRB	2019-02-12
Gjoa Haven	Dave Baines, Derek Donald, Teresa Meadows	NWB	2019-01-29
Gjoa Haven	Karen Kharatyan, Assol Kubeisinova, Derek Donald, Teresa Meadows	NWB	2019-04-04
Cambridge Bay	Jonathon Savoy	NPC	2019-02-12
Cambridge Bay	Carson Gillis, Jorgan Aitoak	NTI-Lands	2019-01-30
Cambridge Bay	Carson Gillis	NTI_Lands	2018-10-01
Iqaluit	Matt Senkow, Karen Dunphy	CIRNAC	2018-10-01
Kugluktuk	Baba Pedersen	CIRNAC	2018-10-09
Iqaluit	Justin Hack	CIRNAC	2018-10-10
Iqaluit	Jeremy Fraser	CIRNAC	2018-01-16
Cambridge Bay	Carson Gillis	NTI-Lands	2018-10-22
Cambridge Bay	Carson Gillis, Jorgan Aitoak	NTI_Lands	2019-11-19

# Authorizations

Indicate the areas in which the project is located:

Kitikmeot

## Authorizations

Regulatory Authority	Authorization Description	Current Status	Date Issued / Applied	Expiry Date
Nunavut Water Board	2BE-HRP1419 Application for renewal and amendment will be submitted to the NWB shortly.	Active	2014-11-03	2019-11-02
Kitikmeot Inuit Association	Application for a Land Use Licence II will be submitted to the KIA shortly.	Not Yet Applied		
Government of Nunavut, Nunavut Research Institute	An application for a scientific research licence will be applied for in subsequent years to support baseline environmental data collection	Not Yet Applied		
Government of Nunavut, Department of Culture, Language, Elders, and Youth	An application for a Class I Archaeology and Palaeontology Research Permit has been submitted	Applied, Decision Pending		
Fisheries and Oceans Canada	An application for a fish collection permit may be submitted in subsequent years to support baseline data collection	Not Yet Applied		

## Project transportation types

Transportation Type	Proposed Use	Length of Use
Air	The site is accessible by air only. Crews may access site by fixed or rotary wing, and use regional or local airstrips, such as the existing airstrip at Ulu, or a lake adjacent to the camp.	

## Project accommodation types

Temporary Camp

Community

## Material Use

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

Equipment Type	Quantity	Size - Dimensions	Proposed Use
Drills	tbd	tbd	Exploration drilling
Helicopters	tbd	tbd	Access, drill support
Fixed wing aircraft	tbd	tbd	Access, camp and drill support
Generators	tbd	tbd	Power for camp and drills
Water Pump	tbd	tbd	Pump water for domestic and industrial use
Snowmobiles	tbd	tbd	Access
Snow cat	tbd	tbd	Camp and drill support
Watercraft	tbd	tbd	Access
Compressors	tbd	tbd	Camp and drill support
ATV	tbd	tbd	Access
Skidsteer	tbd	tbd	Camp support
Incinerator	tbd	tbd	Waste management

### 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	150	220	33000	Liters	Aircraft fuel
Diesel	fuel	220	220	48400	Liters	Camp and equipment fuel
Gasoline	fuel	15	220	3300	Liters	Equipment fuel
Propane	fuel	20	100	2000	Lbs	Camp fuel
Lubricants, greases	hazardous	36	5	180	Gallons	Equipment and drill maintenance
Drilling additives	hazardous	36	5	180	Gallons	Drill support
Salt	hazardous	500	50	25000	Lbs	Drilling additives
Acetylene	hazardous	2	100	200	Lbs	Welding for equipment repair
Oxygen	hazardous	3	100	300	Lbs	First aid, welding for equipment repair

### Water Consumption

Daily amount (m3)	Proposed water retrieval methods	Proposed water retrieval location
150	Pump with screened intake	Lakes adjacent to camp and drill targets

# Waste

## Waste Management

Project Activity	Type of Waste	Projected Amount Generated	Method of Disposal	Additional treatment procedures
Camp	Combustible wastes	Various	Incinerate or open burn clean materials.	-
Drilling	Combustible wastes	Various	Incinerate or open burn clean materials.	-
Camp	Greywater	30 m3/day	Discharge to a sump	Grease trap
Camp	Hazardous	Various	Backhaul to certified waste receiver	-
Fuel and chemical storage	Hazardous	Various	Water that has accumulated in secondary containment will be discharged to tundra following treatment if needed.	Activated carbon filter and/or oil/water separator
Drilling	Hazardous	Various	Backhaul to certified waste receiver	-
Camp	Non-Combustible wastes	Various	Wastes are segregated and backhauled for reuse, recycling or disposal at an approved facility	-
Camp	Sewage (human waste)	30 m3/day	Incinerate or backhaul	-

### Environmental Impacts:

See attached.

# **Additional Information**

## **SECTION A1: Project Info**

## **SECTION A2: Allweather Road**

## **SECTION A3: Winter Road**

## **SECTION B1: Project Info**

Gold exploration

## **SECTION B2: Exploration Activity**

•Constructing and operating a seasonal temporary camp able to support up to 60 people; •Staking and prospecting;•Drilling both on land and on ice using diamond and/or rotary air-blast/reverse circulation drilling;•Mobilization, drill support and access via helicopter and fixed wing aircraft;•Diesel and jet fuel to be cached at several locations proximal to drill targets and at the camp, and propane to be cached at the camp site;•Staging to occur via the local existing Ulu airstrip, a regionally accessible airstrip and/or sea lift;•Local overland winter access for camp and drill support;•Temporary use of regionally available accommodations and support services;•Archaeological overview and site assessments, where required;•Baseline environmental studies.

## **SECTION B3: Geosciences**

Geophysical and other airborne surveys may be undertaken in the future if needed.

## **SECTION B4: Drilling**

Drill hole locations and depths are to be determined based on ongoing analysis of historic exploration activities, and results of new exploration activities. It is expected that drilling will be limited to the area in the vicinity of the Ulu claim and the existing Hood River claim. Based on future prospecting results, claim boundaries may change in the future, however, it is reasonable to expect that drilling will occur in an area contiguous with that already delineated. Drill additives will be used where required, to the minimum extent possible. Additives vary depending on the nature of the ground encountered. Salt may be used, along with other non-toxic materials. Cuttings will be dewatered to the greatest extent possible and deposited in an adjacent upland sump. Drill water will be recirculated and reused to the greatest extent possible. Excess drill water will be deposited in an adjacent upland sump. Drill equipment will be mobilized by helicopter. Drill holes will be abandoned by cutting the drill stems off at ground level and backfilling any areas of subsidence around drill stems in such a manner as to prevent water accumulation.

## **SECTION B5: Stripping**

n/a

## **SECTION B6: Underground Activity**

n/a

## **SECTION B7: Waste Rock**

n/a

## **SECTION B8: Stockpiles**

n/a

## **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**

The Project is located within the Southern Arctic Ecozone and the Takijuk Lake Upland Ecoregion. Much of this region is composed of unvegetated rock outcrops, in the Hood River watershed. Cryosols are the dominant soils in the lowlands and permafrost is deep and continuous. None of the following protected sites were found within the Project area or immediately adjacent: •Important Bird Areas (IBA) (IBA Canada 2019); •Key Habitat Sites for migratory birds (Latour et al. 2008); •Wetlands of International Importance (RAMSAR) (The Ramsar Sites 2019); •Migratory Bird or Wildlife Sanctuaries (Government of Canada 2019); or •Heritage Rivers (Canadian Heritage Rivers System 2019).

**Description of Existing Environment: Biological Environment**

The Project is located within the Southern Arctic Ecozone and the Takijuk Lake Upland Ecoregion. Vegetative cover is characterized by shrub tundra, consisting of dwarf birch, willow, northern Labrador tea, avens species and blueberry species. Characteristic wildlife includes caribou, muskoxen, grizzly bear, wolverine, Arctic hare, Arctic fox, red fox and wolf. Small mammals (e.g., Arctic ground squirrel, voles, and lemmings) are distributed throughout the region and provide an important food source for predators. Many species of migratory birds are present in the area during the summer season, including waterfowl, raptors, songbirds, and shorebirds, while some bird species are present year round (e.g., ptarmigan, gyrfalcon, and common raven). According to the Species at Risk Public Registry, the following species at risk could be found within the Project area:•Barren-ground caribou;•Grizzly bear;•Wolverine;•Peregrine Falcon;•Short-eared Owl; and•Red-necked Phalarope.

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

The Project is located approximately 210 km southeast of Kugluktuk in the Kitikmeot Region of Nunavut on Inuit-owned land and is immediately adjacent to the Ulu property. Past archaeology studies indicated 1 site within the vicinity of the project; additional studies are proposed for the upcoming season. Engagements with 3 different HTOs indicate that land and resources use in the area, other than exploration, is limited.

### **Miscellaneous Project Information**

Refer to attached files.

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

Refer to attached Impact Assessment.

### **Cumulative Effects**

None.

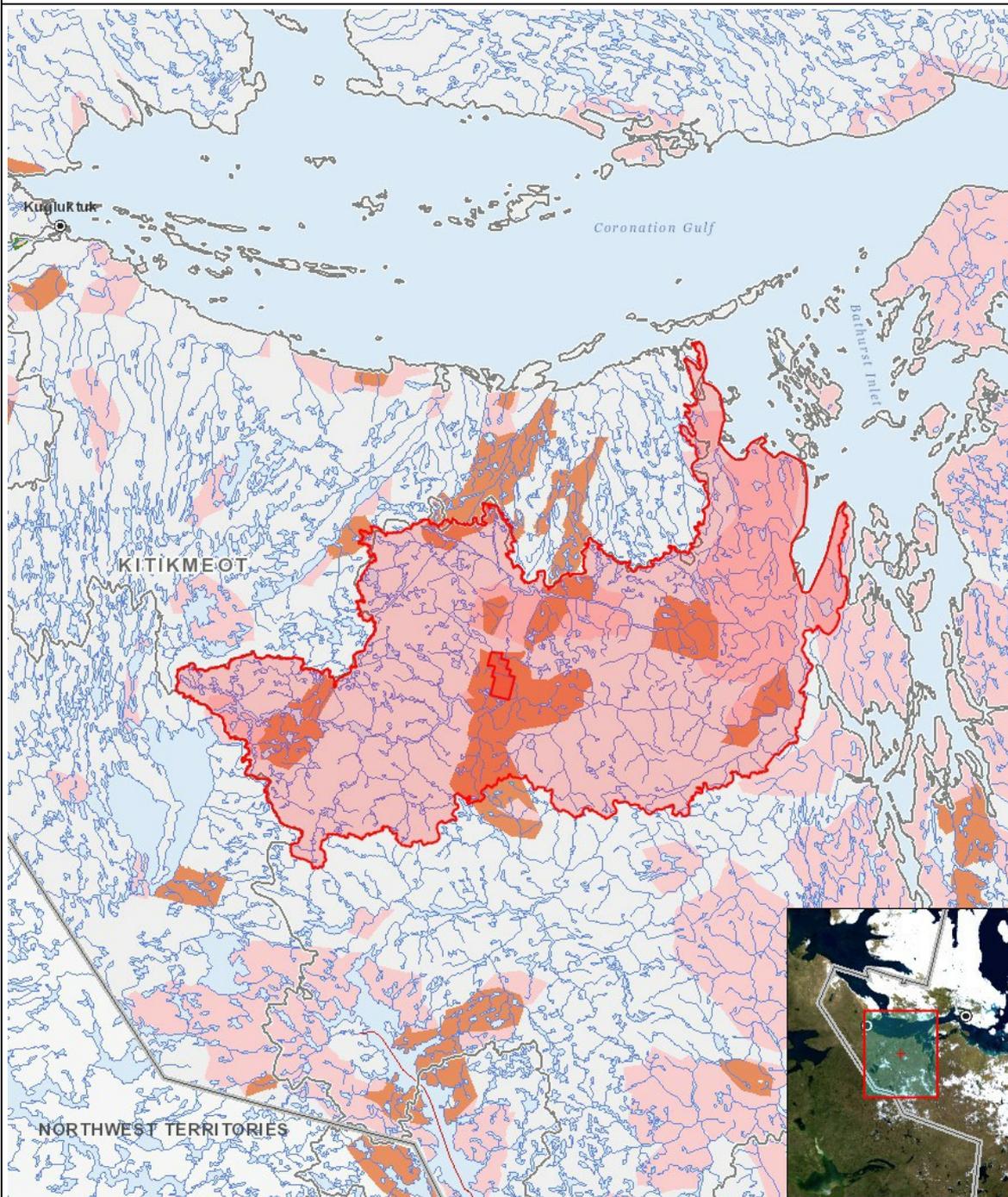
# Impacts

## Identification of Environmental Impacts

	PHYSICAL													BIOLOGICAL				SOCIO-ECONOMIC						
	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	Vegetation	Wildlife, including habitat and migration patterns	Birds, including habitat and migration patterns	Aquatic species, incl. habitat and migration/spawning	Wildlife protected areas	Archaeological and cultural historic sites	Employment	Community wellness	Community infrastructure	Human health		
<b>Construction</b>																								
Camp	-	N	N	-	N	-	-	-	N	-	N	N		M	N	N	N	-		P	-	-	-	-
Fuel and chemical storage	-	N	-	-	-	-	-	-	N	-	-	-		N	N	N	-	-		N	-	-	-	-
Waste disposal	-	-	-	-	N	-	-	-	N	-	N	-		-	N	-	-	-		P	-	-	-	-
<b>Operation</b>																								
Airstrip use or construction	-	N	-	-	-	-	-	-	-	-	-	-		-	N	-	-	-		P	-	-	-	-
Baseline data	-	P	P	-	P	P	P	P	P	-	P	P		P	P	P	P	-		P	-	-	-	-
Camp	-	-	-	-	N	-	-	-	N	-	N	N		-	N	N	N	-		P	-	-	-	-
Drilling	-	N	N	-	N	-	-	-	N	-	N	N		N	N	N	N	-		N	-	-	-	-
Fuel and chemical storage	-	-	-	-	N	-	-	-	N	-	-	-		-	-	-	-	-		P	-	-	-	-
Waste disposal	-	-	-	-	N	-	-	-	N	-	N	-		-	N	-	-	-		P	-	-	-	-
Mineral Exploration	-	N	N	-	N	-	-	P	N	-	N	N		N	N	N	N	-		P	-	-	-	-
<b>Decommissioning</b>																								
-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-		-	-	-	-	-

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

## Project Location



## List of Project Geometries

- 1 polygon      Approximate exploration area. Exploration activities, including a temporary camp (location to be confirmed), will occur in this area. The boundaries of this area may change in the future, based on prospecting results. Any changes will remain within the Study Area.
- 2 polygon      Study Area, Hood River Watershed. Environmental baseline studies may occur throughout the watershed.