

PRELIMINARY SCREENING REPORT FORM

PRELIMINARY SCREENER: Tony Morris REFERENCE / FILE NUMBER: S12L3-002 APPLICANT: Plummers Lodges (Great Bear Lake) DATE: June 4, 2012	EIRB REFERENCE NUMBER: TITLE: Regulatory Specialist ORGANIZATION: Sahtu Land & Water Board
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Type of Development: Municipal Undertaking

Type of Development:
(CHECK ALL THAT APPLY)

- New Development
- Amend, EIRB Ref. #
- Renew, EIRB Ref. #
- Requires permit, license or authorization
- Does not require permit, license or authorization

Principal Activities (related to scoping)
(CHECK ALL THAT APPLY)

- Construction
- Installation
- Maintenance
- Expansion
- Operation
- Repair
- Water Intake
- Exploration
- Industrial
- Recreation
- Municipal
- Quarry
- Linear / Corridor
- Sewage
- Decommissioning
- Abandonment
- Aerial
- Harvesting
- Camp
- Scientific / Research
- Solid Waste

Other: _____
(DESCRIBE)

Principal Development Components (related to scoping)
(CHECK ALL THAT APPLY)

- Access Road
 - construction
 - abandonment/removal
 - modification e.g., widening, straightening
- Automobile, Aircraft or Vessel Movement
- Blasting
- Building
- Burning
- Burying
- Channeling
- Cut and Fill
- Cutting of Trees or Removal of Vegetation
- Waste Management
 - disposal of hazardous waste
 - waste generation
- Sewage
 - disposal of sewage
- Geoscientific Sampling
 - trenching
 - diamond drill
 - borehole core sampling
- Bulk soil sampling
- Gravel
- Hydrological Testing

- Dams and Impoundments
 - construction
 - abandonment/removal
 - modification
- Ditch Construction
- Drainage Alteration
- Drilling other than Geoscientific
- Ecological Surveys
- Excavation
- Explosive Storage
- Fuel Storage
- Topsoil, Overburden or Soil
 - fill
 - removal
 - disposal
 - storage

- Site Restoration
 - fertilization
 - grubbing
 - planting/seeding
 - reforestation
 - scarify
 - spraying
 - recontouring
- Slashing and removal of vegetation
- Soil Testing
- Stream Crossing/Bridging
- Tunneling/Underground
- Water Intake
- Other:

NTS Topographic Map Sheet Numbers

(LIST ALL THAT APPLY)

NTS Map Sheet #s: 86L -1:250,000 86L/12- 1:50,000

Latitude / Longitude and UTM System: Latitude: 66° 42' 28" North, Longitude: 119° 40' 24 " West
(DEGREES, MINUTES, SECONDS, MAP SHEET)

Nearest Community and Water Body: Plummer's Great Bear Lake Lodge is located approximately 245 km northeast of the Charter Community of Deline. The lodge is situated on the shore of Dease Arm, Great Bear Lake.

Land Status (consultation information)

(CHECK ALL THAT APPLY)

- Free Hold / Private
- Commissioner's Land
- Federal Crown Land
- Municipal Land

Transboundary Implications

(CHECK ALL THAT APPLY - IF KNOWN & APPLICABLE)

- British Columbia
- Alberta
- Saskatchewan
- Yukon
- Nunavut
- Wood Buffalo National Park
- G'witchin Settlement Region

N/A

Type of Transboundary Implication: Impact / Effect Development

Public Concern _____
(DESCRIBE)

N/A

PHYSICAL - CHEMICAL EFFECTS

<i>IMPACT</i>	<i>MITIGATION</i>
<p>1. Ground Water</p> <p><input type="radio"/> water table alteration</p> <p><input checked="" type="checkbox"/> water quality changes</p> <p><input type="radio"/> infiltration changes</p> <p><input type="radio"/> other: _____</p> <p><input type="radio"/> N/A</p>	<ol style="list-style-type: none"> 1. Fuel spills can impact water quality. 2. Plummer's Great Bear Lake Lodge has a Spill Contingency Plan in place. 3. Sewage sludge and solid waste have the potential to contaminate ground water. 4. Grey water disposal may impact ground water, the effects of which are unknown in this location.

<i>IMPACT</i>	<i>MITIGATION</i>
<p>2. Surface Water</p> <p><input checked="" type="checkbox"/> flow or level changes</p> <p><input checked="" type="checkbox"/> water quality changes</p> <p><input checked="" type="checkbox"/> water quantity changes</p> <p><input type="radio"/> drainage pattern changes</p> <p><input type="radio"/> temperature</p> <p><input type="radio"/> wetland changes / loss</p> <p><input type="radio"/> other: _____</p> <p><input type="radio"/> N/A</p>	<ol style="list-style-type: none"> 1. The level of water withdrawal requested in this application will have a negligible effect on Great Bear Lake. 1. Fuel spills in or near the water can affect water quality. 2. Plummer's Great Bear Lake Lodge has a Spill Contingency Plan in place. 3. Sewage, grey water, and solid waste have the potential to impact surface water quality. 4. The grey water filtration trench is approximately 60m from the shoreline and 23m elevated above the water level. No impact study has been undertaken to date. 5. The solid waste disposal pit is approximately 180m from the shoreline and 45m above the water level. No impact study has been undertaken to date. 1. Plummer's Great Bear Lake Lodge is applying for the use of approximately 650m³ of water per year from Great Bear Lake, thus having a negligible impact.

<i>IMPACT</i>	<i>MITIGATION</i>
<p>3. Noise</p> <p><input type="radio"/> noise increase</p>	

noise in/near water

1. Noise in or around the water will be restricted to the use of boats and will be limited to the summer operating season.

other: _____

N/A

IMPACT

MITIGATION

4. Land

geologic structure changes

soil contamination

1. Soil contamination may occur in the event of a sewage or fuel spill.
2. Plummer's Great Bear Lake Lodge has a Spill Contingency Plan in place.
3. In the event of a spill the NWT Spill Report Line will be notified.
4. Contamination can occur in soils adjacent to the grey water filtration trench and solid waste disposal facility.

buffer zone loss

soil compaction & settling

destabilization / erosion

permafrost regime alteration

1. The solid waste disposal pit and grey water filtration trench could affect any permafrost in the area. No alteration to the permafrost has been noted and no study has been undertaken to date.

other: _____

N/A

IMPACT

MITIGATION

5. Non Renewable Natural Resources

resource depletion

other: _____

N/A

IMPACT

MITIGATION

6. Air / Climate / Atmosphere

Greenhouse gases

1. Only items approved for incineration by Environment Canada are allowed to be burned. All other garbage must be disposed of properly.
2. Vehicles and equipment, using fossil fuels, emit substances that contribute to air pollution and global warming. The cumulative effects of these activities are an unavoidable impact of fossil fuel usage. The cumulative effects are unknown.

N/A

BIOLOGICAL ENVIRONMENT

IMPACT

MITIGATION

1. Vegetation

species composition

1. Vegetation could be impacted in the event of a spill or by wind transported garbage.
2. Burnable garbage is incinerated and all other waste is contained appropriately to limit wind transport.
3. Vegetation adjacent to the grey water filtration trench and/or solid waste disposal pit could be impacted by leachate. No impacts have been identified to date.

species introduction

toxin / heavy accumulation

1. There is a possibility for the accumulation of toxins from the sewage infiltration trench and leaching from the solid waste disposal pit.
2. Monitoring of runoff from the solid waste disposal would identify any potential problems.
3. If a leachate problem is identified, the disposal cell should be lined and capped with a clay-like material to minimize water infiltration.

other: _____

N/A

IMPACT

MITIGATION

2. Wildlife & Fish

effects on rare, threatened or endangered species

fish population changes

1. Fish populations may be affected in the event of a spill or leachate near the shoreline.
2. Fuel shall be stored a minimum of 100m from the ordinary high water mark.
3. A Spill Contingency Plan is in place.
4. A DFO approved screen shall be used on the water intake to ensure no entrainment of fish.

waterfowl population changes

breeding disturbances

population reduction

species diversity change

health changes (identify)

behavioral changes (identify)

habitat changes / effects

game species effects

✓ toxins / heavy metals accumulation

○ forestry changes

○ agricultural changes

○ Other:

○ N/A

1. There is a possibility for the accumulation of toxins from the sewage infiltration trench and leaching from the solid waste disposal pit.
2. If a leachate problem is identified, the disposal cell should be lined and capped with a clay-like material to minimize water infiltration.

INTERACTING ENVIRONMENT

IMPACT

MITIGATION

1. Habitat and Communities

○ predator-prey

✓ wildlife habitat / ecosystem composition changes

1. Displacement of large game animals is not likely, as activity is isolated to a small area and is seasonal.
2. Operations are limited to the summer and therefore will not impact caribou migration.
3. Some scavenging wildlife may frequent the solid waste disposal site.

○ reduction / removal of keystone or endangered species

○ removal of wildlife corridor or buffer zone

○ other: _____

○ N/A

IMPACT

MITIGATION

2. Social and Economic

✓ planning / zoning changes or conflicts

1. The Sahtu Land Use Planning Board has released the Sahtu Land Use Plan – Draft 3. No approved Land Use Plan exists. Great Bear Lake Lodge is located within the proposed Caribou Point Conservation Area.
2. This lodge would meet the requirements of being low impact recreation or tourism operation, which are identified as appropriate activities within the proposed Conservation Area.

○ increase in urban facilities or services use

○ rental house

○ airport operations / capacity changes

✓ human health hazard

1. The release of sewage effluent could impact human health.
2. Incineration of garbage releases harmful toxic substance into the air.

impair the recreational use of water or aesthetic quality

affect water use for other purposes

affect other land use operations

quality of life changes

public concern

other: _____

N/A

1. The Deline Land Corporation has concerns regarding the integrity of the facilities at Great Bear Lake Lodge given their age. They are also concerned with fuel storage and containment. Inspector is intending to visit the site this summer.

IMPACT

MITIGATION

3. Cultural and Heritage

affects to historic property

increased economic pressure

changes to or loss of historic resources

change to or loss of archaeological resources

increased pressure or archaeological sites

change to or loss of aesthetically important site

affects to aboriginal lifestyle

1. Spills have the potential to affect fish and fish habitat; therefore, affecting traditional aboriginal lifestyle.

other: _____

N/A

PRELIMINARY SCREENER / REFERRING BODY INFORMATION
(CHECK ALL THAT APPLY)

	RA or DRA	ADVISE	PERMIT REQUIRED
Federal			
ATOMIC ENERGY CONTROL BOARD	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
CANADIAN HERITAGE	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
CANADIAN TRANSPORTATION AGENCY	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ENVIRONMENT CANADA	<input type="radio"/>	<input checked="" type="checkbox"/>	<input type="radio"/>
FISHERIES & OCEANS	<input type="radio"/>	<input checked="" type="checkbox"/>	<input type="radio"/>
ABORIGINAL AFFAIRS & NORTHERN DEVELOPMENT	<input type="radio"/>	<input checked="" type="checkbox"/>	<input type="radio"/>
INDUSTRY CANADA	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
NATIONAL DEFENSE	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
NATIONAL ENERGY BOARD	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
NATURAL RESOURCES	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
PUBLIC WORKS & GOVERNMENT SERVICES	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
TRANSPORT CANADA	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Territorial			
INDUSTRY, TOURISM & INVESTMENT	<input type="radio"/>	<input checked="" type="checkbox"/>	<input type="radio"/>
MUNICIPAL & COMMUNITY AFFAIRS	<input type="radio"/>	<input checked="" type="checkbox"/>	<input type="radio"/>
PRINCE OF WALES NORTHERN HERITAGE CENTRE	<input type="radio"/>	<input checked="" type="checkbox"/>	<input type="radio"/>
PUBLIC WORKS & GOVERNMENT SERVICES	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ENVIRONMENT AND NATURAL RESOURCES	<input type="radio"/>	<input checked="" type="checkbox"/>	<input type="radio"/>
HEALTH AND SOCIAL SERVICES	<input type="radio"/>	<input checked="" type="checkbox"/>	<input type="radio"/>
SAHTU HEALTH AND SOCIAL SERVICES AUTHORITY	<input type="radio"/>	<input checked="" type="checkbox"/>	<input type="radio"/>
TRANSPORTATION	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Boards			
GWICH'IN LAND & WATER BOARD	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
SAHTU LAND & WATER BOARD	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
MACKENZIE VALLEY LAND & WATER BOARD	<input type="radio"/>	<input checked="" type="checkbox"/>	<input type="radio"/>
MACKENZIE VALLEY EIRB	<input type="radio"/>	<input checked="" type="checkbox"/>	<input type="radio"/>
SAHTU LAND USE PLANNING BOARD	<input type="radio"/>	<input checked="" type="checkbox"/>	<input type="radio"/>
RENEWABLE RESOURCES BOARD	<input type="radio"/>	<input checked="" type="checkbox"/>	<input type="radio"/>
LOCAL HEALTH BOARD	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Aboriginal / First Nation			
SAHTU SECRETARIAT INC.	<input type="radio"/>	<input checked="" type="checkbox"/>	<input type="radio"/>
DELTA LAND CORPORATION	<input type="radio"/>	<input checked="" type="checkbox"/>	<input type="radio"/>
DELTA RENEWABLE RESOURCES COUNCIL	<input type="radio"/>	<input checked="" type="checkbox"/>	<input type="radio"/>
DELTA DENE BAND COUNCIL	<input type="radio"/>	<input checked="" type="checkbox"/>	<input type="radio"/>
ADJOINING LAND CLAIM	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local Government			
_____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(IDENTIFY)			
Communities			
_____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(IDENTIFY)			
Non Governmental Organizations (NGO)			
_____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(IDENTIFY)			

REASONS FOR DECISION

(LIST ALL REASONS AND SUPPORTING RATIONALES FOR PRELIMINARY SCREENING DECISION)

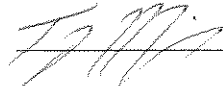
- Potential environmental impacts are minimal and can be mitigated with known technology and are temporary in nature.
- No significant public concerns have been identified in relation to the project activities.

-	PRELIMINARY SCREENING DECISION
✓	Outside Local Government Boundaries
○	The development proposal might have a significant adverse impact on the environment, <i>refer it to the EIRB.</i>
✓	<i>Proceed with regulatory process and/or implementation.</i>
○	The development proposal might have public concern, <i>refer it to the EIRB.</i>
✓	<i>Proceed with regulatory process and/or implementation.</i>
○	Wholly within Local Government Boundaries
○	The development proposal is likely to have a significant adverse impact on air, water or renewable resources, <i>refer it to the EIRB.</i>
○	<i>Proceed with regulatory process and/or implementation.</i>
○	The development proposal might have public concern, <i>refer it to the EIRB.</i>
○	<i>Proceed with regulatory process and/or implementation.</i>

Preliminary Screening Organization

Sahtu Land & Water Board _____

Signatures

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