

The purpose of screening is provided for under s. 88 of the *NuPPAA*:

NuPPAA, s. 88: The purpose of screening a project is to determine whether the project has the potential to result in significant ecosystemic or socio-economic impacts and, accordingly, whether it requires a review by the Board...

To determine whether a review of a project is required, the NIRB is guided by the considerations as set out under s. 89(1) of *NuPPAA*:

NuPPAA, s. 89(1): The Board must be guided by the following considerations when it is called on to determine, on the completion of a screening, whether a review of the project is required:

- (a) a review is required if, in the Board's opinion,
 - i. the project may have significant adverse ecosystemic or socio-economic impacts or significant adverse impacts on wildlife habitat or Inuit harvest activities,
 - ii. the project will cause significant public concern, or
 - iii. the project involves technological innovations, the effects of which are unknown; and
- (b) a review is not required if, in the Board's opinion,
 - i. the project is unlikely to cause significant public concern, and
 - ii. its adverse ecosystemic and socioeconomic impacts are unlikely to be significant, or are highly predictable and can be adequately mitigated by known technologies.

It is noted that s. 89(2) of the *NuPPAA* provides that the considerations set out in paragraph 89(1)(a) prevail over those set out in paragraph 89(1)(b) of the *NuPPAA*.

As set out under s. 92(1) of the *NuPPAA*, upon conclusion of the screening process, the Board must provide its written report the Minister:

NuPPAA, s. 92(1): The Board must submit a written report to the responsible Minister containing a description of the project that specifies its scope and indicating that:

- (a) a review of the project is not required;
- (b) a review of the project is required; or
- (c) the project should be modified or abandoned.

Where the NIRB determines that a project may be carried out without a review, the NIRB has the discretion to recommend specific terms and conditions to be attached to any approval of the project proposal pursuant to paragraph 92(2)(a) of *NuPPAA* as follows:

NuPPAA, s. 92(2) In its report, the Board may also

- (a) recommend specific terms and conditions to apply in respect of a project that it determines may be carried out without a review.

PROJECT REFERRAL

On April 9, 2018 the NIRB received a referral to screen North Country Gold Corp.'s (NCGC) "Gibson MacQuoid Gold Project" project proposal from the Nunavut Planning Commission (NPC or Commission), with an accompanying positive conformity determination with the Keewatin Regional Land Use Plan. The NPC noted that the previous conformity determination issued on February 21, 2017 for the activities associated with the current proposal continues to apply and determined that the project proposal is a significant modification to the project because of the inclusion of a new, temporary, but large camp.

Pursuant to Article 12, Sections 12.4.1 and 12.4.4 of the *Nunavut Agreement* and section 87 of the *NuPPAA*, the NIRB commenced screening this project proposal. Due to the proposal containing activities that were sufficiently related to previously assessed activities under NIRB file number **17EN029**, the NIRB viewed this project proposal as an amendment to the previously screened project and assigned this proposal with this previous file number. A summary of the previously screened project activities can be found in **Appendix A**.

PROJECT OVERVIEW & THE NIRB ASSESSMENT PROCESS

1. Project Scope

The "Gibson-MacQuoid" project activities as previously screened by the NIRB (File No. 17EN029) included an early stage exploration program for gold mineralization in the Gibson-MacQuoid Region based out of Baker Lake. A complete description of the scope of activities previously approved has been included within **Appendix A**.

NCGC is currently proposing the "Gibson MacQuoid Gold Project" which would be located in the same area as previously approved and would be located within the Kivalliq region, approximately 100 kilometres (km) southeast from Baker Lake. The Proponent intends to amend the scope of previously approved activities to include a temporary camp with fuel cache to support the ongoing mineral exploration activities. The program is proposed to take place from August through September 2018.

As required under s. 86(1) of the *NuPPAA*, the Board accepts the scope of the Gibson MacQuoid Gold Project as set out by NCGC in the proposal. The scope of the project proposal includes the following undertakings, works, or activities:

- Construction and use of a temporary camp (between 30 and 40 personnel) to support exploration program;
- Collection of additional regional and detailed till samples;
- Ongoing daily collection of high resolution imagery with the use of a drone;
- Geological mapping and ground magnetic geophysical surveys at eight (8) significant gold till anomalies identified from the 2017 program;
- Use of a helicopter for daily transportation to and from the camp and the sample sites;
- Use of an aircraft for transportation of all personnel, equipment and supplies at the beginning and end of the field season to and from Baker Lake;
- Use of water from nearby waterbodies for domestic purposes;
- Incineration of combustible wastes (dual-chamber) at the temporary camp;

- Removal of hazardous wastes from site for proper disposal at an accredited facility;
- Disposal of greywater in an excavated sump;
- Disposal of sewage in pits or incinerated on-site with the use of Pacto System;
- Storage and use of chemicals; and
- Storage and use of 15,375 Litres (L) of aviation fuel, 4,100 L of diesel, 1,205 L of gasoline, and 1000 pounds of propane.

2. Inclusion or Exclusion to Scoping List

The NIRB has identified no additional works or activities in relation to the project proposal. As a result, the NIRB proceeded with screening the project based on the scope as described above.

3. Key Stages of the Screening Process

The following key stages were completed:

Date	Stage
April 9, 2018	Receipt of project proposal and positive conformity determination (Keewatin Land Use Plan) from the NPC
April 9, 2018 & April 19, 2018	Information requests
April 30, 2018	Proponent responded to information requests
April 30, 2018	Scoping pursuant to s. 86(1) of the <i>NuPPAA</i>
May 8, 2018	Public engagement and comment request
May 29, 2018	Receipt of public comments
June 4, 2018	Proponent provided with an opportunity to address comments/concerns raised by public
June 5, 2018	Proponent responded to comments/concerns raised by public
June 13, 2018	Ministerial extension requested from the Minister of Crown – Indigenous Relations and Northern Affairs

4. Public Comments and Concerns

Notice regarding the NIRB’s screening of this project proposal was distributed on May 8, 2018 to community organizations in Rankin Inlet, Baker Lake and Chesterfield Inlet, as well as to relevant federal and territorial government agencies, Inuit organizations and other parties. The NIRB requested that interested parties review the proposal and provide the Board with any comments or concerns by May 29, 2018 regarding:

- Whether the project proposal is likely to arouse significant public concern; and if so, why;
- Whether the project proposal is likely to cause significant adverse eco-systemic or socio-economic effects; and if so, why;
- Whether the project proposal is likely to cause significant adverse impacts on wildlife habitat or Inuit harvest activities; and if so, why;

- Whether the project proposal is of a type where the potential adverse effects are highly predictable and mitigable with known technology, (and providing any recommended mitigation measures); and
- Any matter of importance to the Party related to the project proposal.

The following is a summary of the comments and concerns received by the NIRB:

Government of Nunavut (GN)

- Noted that a large proportion of the project is located within calving and post-calving grounds for the Qamanirjuaq caribou herd and that caribou are especially vulnerable to disturbance during the calving periods.
- Noted that habitat modification through permanent works and infrastructure could be detrimental to calving caribou and impact overall health and productivity.
- Noted that wildlife disruption and cumulative fragmentation of caribou habitats could lead to negative impacts to herd demography and could negatively affect Inuit harvesting rights.
- Strongly recommended that no activities associated with the proposed project take place within 14 km of calving grounds from June 9 to June 22, and further, that activities in post-calving grounds take place outside the dates of June 22 to July 3
- Recommended that no permanent infrastructure (including roads, trails, airstrips, permanent buildings and/or other site modifications) be installed in caribou migration corridors, calving grounds, and post calving grounds.
- Recommended that all exploration materials be completely removed and remediated upon completion of the proposed project.
- Noted that the temporary camp would require review under the Public Health Act and recommended the Proponent submit information regarding the food and water services and facilities provided to the project workers to the GN Department of Health Environmental Health Officer.

Fisheries and Oceans Canada (DFO)

- Noted it is not aware of any significant public concern at this stage of review and has no concerns with the Project as proposed.
- Requested further details of the waterbodies from which water would be taken, including their location, volume, fish and fish habitat.
- Referred the Proponent to DFO's "Freshwater Intake End-of-Pipe Fish Screen Guideline".
- Noted that DFO must be notified if the project has caused or is about to cause serious harm to fish that are part of or support a commercial, recreational, or Aboriginal fishery.

Environment and Climate Change Canada (ECCC)

- Recommended the Proponent the Spill Prevention and Response Plan to reflect that the NT-NU 24 hour Spill hotline should be contacted in the event of a spill.

Indigenous and Northern Affairs Canada (INAC)

- Recommended the Proponent update the Spill Prevention and Response Plan to include the following mitigation measure: re-fueling of any equipment should occur at a minimum of thirty-one (31) metres away from the high water mark of any water body.

Kangiqliniq Hunters and Trappers Organization (Kangiqliniq HTO)

- Noted strong opposition to the proposed project.
- Noted that the project lies within calving ranges of the Qamanirjuaq herd.
- Noted that the proponent plans on doing the work outside of calving season but, seasonal restrictions do protect from habit loss and habitat modification caused by exploration activities.
- Noted that a continued decline will affect ecosystems across the Qamanirjuaq range and will have severe effects on Inuit harvesting activities throughout the region.
- Noted that the community of Rankin Inlet has not been meaningfully consulted regarding the project.
- Recommended that the project is abandoned and that regulators stop signing mineral exploration agreements within critical caribou habitat throughout the Kivalliq region.

Baker Lake Hunters and Trappers Organization (Baker Lake HTO)

- Expressed concern that mining and exploration activities are being proposed within critical wildlife areas and re-iterated their ongoing opposition to mining and exploration activities being established within boundaries of caribou calving and post calving grounds of the Kivalliq Region; and requested that calving and post calving grounds, as well as water crossings be protected through a ban on these industrial activities.
- States that as inland Inuit country food, such as caribou, is critical to their ongoing physical and cultural well-being.
- States that historically Inuit of the Kivalliq region experienced times when wildlife was scarce. During those times there as little industrial activity on the land and, after a time of follow, the caribou returned.
- States that today industrial expansion and a changing climate within the Kivalliq region places food security as a leading issue for the community of Baker Lake.
- States that without caribou, Inuit in Baker Lake do not have access to an equally healthy and affordable protein source.
- Notes that there have been changes to critical caribou habitats as a result of; vegetation disturbance, noise, fragmentation from access roads and trenches and in some instances long term storage of waste and by-products have lasting effects on the behaviour and health of caribou. This in turn impacts the health of Inuit; these effects become more pronounced through the accumulation of impacts within these areas critical to caribou.
- The HTO is skeptical that there will be sufficient funding available to support implementation of an effective and responsive monitoring and surveillance program as envisioned under the Mobile Caribou Conservation Measures.
- The HTO is of the view that habitat protection, in addition to Mobile Caribou Protection Measures are critical components that must work together to ensure the long-term health of caribou in the Kivalliq region.
- States that a moratorium should be in place until there is evidence that the caribou her populations are no longer in decline.

- In closing, the HTO believes that this application, where it includes caribou water crossings or caribou calving grounds should be abandoned.

Beverly and Qamanirjuaq Caribou Management Board (BOCMB)

- Expressed concern with the proposal expanding into the core calving and post-calving habitats of the Qamanirjuaq caribou herd, especially with this herd declining.
- Noted that the project proposal is likely to arouse significant public concern as a result of activities proposed in the core calving and post-calving areas of the Qamanirjuaq herd.
- Expressed concerns about cumulative effects on the Qamanirjuaq herd from industrial development activities.
- Noted that the project proposal is likely to cause significant adverse eco-systemic and socio-economic effects due to:
 - Proposed activities could produce disturbance to caribou cows and calves during late summer and early fall, which is a vulnerable period when they need to be undisturbed to maximize their energy intake in preparation for the demands of winter;
 - Permitting exploration on the core calving and post-calving areas would set a precedent for allowing other exploration and development projects to occur elsewhere in these areas, initiating a situation in which negative cumulative effects on the herd from disturbance will accelerate over time; and
 - Increasing the level of cumulative effects experienced by the herd by increasing human-caused disturbance will contribute to continuing the decline of the herd, which could have severe ramifications for the food security of people who have traditionally harvested barren-ground caribou, should the herd decline to levels below which harvest is no longer sustainable.
- Noted that the project proposal is likely to lead to significant adverse impacts on crucial caribou habitat.
- Noted that the proposed Mobile Caribou Conservation Measures and other measures may reduce disturbance but the only certain method for avoiding negative effects on calving and post-calving caribou is to exclude development activities from these crucial areas.
- Recommended the NIRB apply a precautionary approach and not allow the Project to proceed on the core calving and post-calving areas of the Qamanirjuaq caribou herd.

Lutsel K'e Dene First Nation

- Noted that the proposal is likely to cause significant adverse eco-systemic or socio-economic effects.
- Stated that the Qamanirjuaq caribou herd requires protection from industrial activity causing noise and traffic during calving.
- Noted that the calving and post-calving grounds require habitat protection from industrial activities at all times of the year.
- Recommended the NIRB apply a precautionary approach and not allow the Project to proceed on the core calving and post-calving areas of the Qamanirjuaq caribou herd.

5. Comments and Concerns with respect to Inuit Qaujimaningit, Traditional, and Community Knowledge

The following is a summary of the comments and concerns received with respect to Inuit Qaujimaningit, traditional and community knowledge:

Kangiqliniq Hunters and Trappers

- Noted that the proposed project lies within calving ranges of the Qamanirjuaq herd.
- Noted that there has been a massive decline in caribou numbers since 1994.
- Noted that a continued decline will affect ecosystems across the Qamanirjuaq range and will have severe effects on Inuit harvesting activities throughout the region.

Baker Lake Hunters and Trappers Organization

- States that as inland Inuit country food, such as caribou, is critical to their ongoing physical and cultural well-being.
- States that historically Inuit of the Kivalliq region experienced times when wildlife was scarce. During those times there as little industrial activity on the land and, after a time of follow, the caribou returned.
- States that today industrial expansion and a changing climate within the Kivalliq region places food security as a leading issue for the community of Baker Lake.
- States that without caribou, Inuit in Baker Lake do not have access to an equally healthy and affordable protein source.
- Notes that there have been changes to critical caribou habitats as a result of; vegetation disturbance, noise, fragmentation from access roads and trenches and in some instances long term storage of waste and by-products have lasting effects on the behaviour and health of caribou. This in turn impacts the health of Inuit; these effects become more pronounced through the accumulation of impacts within these areas critical to caribou.

Beverly and Qamanirjuaq Caribou Management Board (BOCMB)

- Noted that the Qamanirjuaq is critical to the food security and cultures of Indigenous peoples in Nunavut, Manitoba, Saskatchewan, and the Northwest Territories.

Lutsel K'e Dene First Nation (LKDFN)

- Noted that the Bathurst herd has declined, that the Beverly herd has changed its migration, and thus the Qamanirjuaq herd is the only herd left for the LKDFN to harvest.

6. Proponent's Response to Public Comments and Concerns

The following is a summary of the Proponent's response to concerns as received on June 5, 2018:

- In response to concerns regarding potential adverse impacts to caribou calving and post-calving grounds for the Qamanirjuaq caribou herd, the Proponent:
 - Acknowledged that its mineral exploration activities are partly located in caribou calving ranges.
 - Agreed to postpone all activities in the caribou calving and post-calving zones until August 1, with no activities to occur between May 1st and July 31st within designated calving grounds.

- Minimizing the duration of activities in caribou calving ranges to approximately 8 weeks.
- Recognized that caribou calving and post-calving grounds are of critical importance for maintaining healthy caribou populations and that special care and consideration needs to be made for cows and calves before, during and after calving to ensure these critical life periods are not impacted.
- Committed to apply the *Mobile Caribou Conservation Measures* produced by the Kivalliq Inuit Association.
- Ensure aircraft flights over occupied calving and post-calving areas will be at least 610 metres above ground.
- Undertake daily wildlife monitoring and annual wildlife monitoring reporting with the potential of hiring Inuit monitors.
- Emphasized that the proposed activities are non-invasive and low impact and consequently highly unlikely to have a negative impact on caribou or their habitats.
- Full reclamation so that any minor disturbances are restored to original conditions so there is no impact to habitat.
- Clarified that its proposed activities on calving ranges would be limited to soil sampling (by foot) and drone-based surveys, incorporating timing windows, environmental monitors, adaptive management and other best practices.
- Noted that the change from previous programs is to utilize a temporary camp outside of the caribou calving ranges to reduce helicopter flights and potentially associated impacts to wildlife.
- In response to the Kangiqliniq HTO's opposition to the Project, the Proponent noted it is attempting to arrange meetings in early June with the Kangiqliniq HTO to further clarify and discuss the proposed activities and mitigation and to listen to the Kangiqliniq HTO comments and suggestions.
- In response to the concerns regarding Rankin Inlet not being meaningfully consulted, the Proponent noted that community meetings were held in Rankin Inlet (April 23, 2018), Chesterfield Inlet (April 24, 2018), and Baker Lake (April 25, 2018). The Proponent added that it is open to further discussion and that efforts are being made to arrange meetings with Kangiqliniq HTO and other community meetings for early June.
- In response to concerns with respect to lack of information on the watercourses and potential impacts to fish and fish habitat, the Proponent noted that it will:
 - Notify DFO if any operations have caused, or have the potential to cause, serious harm to fish.
 - Include the location of the water source used for the camp within the annual reports submitted to INAC, NWB and the Kivalliq Inuit Association.
 - Ensure that the capacity of the watercourse or waterbody will be sufficient enough to allow for camp water usage and will have no impact on lake level or flow.
- In response to concerns regarding camp food and water services, the Proponent noted that it will submit all information regarding the food, water services and facilities provided to the GN Department of Health Environmental Health Officer for the Kivalliq Region.
- In response to comments on the Spill Contingency Plan, the Proponent noted that it has updated the plan to include the appropriate contact numbers, and included "re-fuelling"

of any equipment should occur at a minimum of thirty-one (31) metres away from the high water mark of any waterbody.

7. Time of Report Extension

As a result of the time required to allow the Proponent to respond to comments raised by parties, the NIRB was not able to provide its screening decision report to the responsible Minister within 45 days as required by Article 12, Section 12.4.5 of the *Nunavut Agreement* and subsection 92(3) of the *NuPPAA*. Therefore, on June 13, 2018 the NIRB wrote to the Minister of Crown – Indigenous Relations and Northern Affairs, Government of Canada seeking an extension to the 45-day timeline for the provision of the Board’s Report.

ASSESSMENT OF THE PROJECT PROPOSAL IN ACCORDANCE WITH PART 3 OF *NUPPAA*

In determining whether a review of the project is required, the Board considered whether the project proposal had potential to result in significant ecosystemic or socio-economic impacts.

Accordingly, the assessment of impact significance was based on the analysis of those factors that are set out under s. 90 of the *NuPPAA*. The Board took particular care to take into account Inuit Qaujimaningit, traditional and community knowledge in carrying out its assessment and determination of the significance of impacts.

The following is a summary of the Board’s assessment of the factors that are relevant to the determination of significant impacts with respect of this project proposal:

1. *The size of the geographic area, including the size of wildlife habitats, likely to be affected by the impacts.*

The proposed early-stage exploration activities for gold mineralization will occur in an area approximately 100 kilometres (km) from Baker Lake. The total area of the mineral claims to be explored is approximately 3,290 square kilometres (km²). The project footprint also includes helicopter-assisted travel routes from the temporary camp to prospecting areas on the mineral claims. The proposed project activities may take place within habitat for caribou, muskox, wolf, wolverine, Arctic fox, Arctic hare, migratory and non-migratory birds, fish, and Species at Risk such as Polar Bear, as identified by the Proponent, the Government of Nunavut and Nunavut Planning Commission mapping sources. The project may potentially affect animal migratory patterns.

2. *The ecosystemic sensitivity of that area.*

The proposed project may occur in an area with ecosystemic sensitivity, including the potential for overlap of portions of the project footprint with habitat for caribou and other wildlife. Specifically, the footprint of the proposed project may overlap areas identified as having value and priority to local communities for:

- i. Abundance of caribou, muskox, wolves, and wolverine;
- ii. Caribou migration routes; and
- iii. Arctic char and lake trout.

3. *The historical, cultural and archaeological significance of that area.*

Neither the Proponent nor any parties that submitted comments for this project identified any known areas of historical, cultural and archaeological significance associated with the project. Should the project be approved to proceed, the Proponent would be required to contact the Government of Nunavut-Department of Culture and Heritage if any sites of historical, cultural or archaeological significance are encountered.

4. *The size of the human and the animal populations likely to be affected by the impacts.*

The proposed project would occur at locations approximately 100 km from Baker Lake, the nearest community. There is the potential for impacts to community members in the Kivalliq region that may use areas in proximity to the proposed project area for traditional activities such as hunting, fishing and camping activities. Further, the project proposal may overlap with seasonal home ranges for caribou herds and other wildlife species. No other specific animal populations have been identified as likely to be affected by potential project impacts.

During the public comment period, the Kangiqliniq Hunters and Trappers Organization, Beverly and Qamanirjuaq Caribou Management Board, Lutsel K'e Dene First Nation and Baker Lake Hunters and Trappers Organization raised concerns regarding caribou calving ranges of the Qamanirjuaq herd. As a result, a term and condition has been recommended to ensure the Proponent minimize interference with the migration or calving of caribou during the Project activities.

5. *The nature, magnitude and complexity of the impacts; the probability of the impacts occurring; the frequency and duration of the impacts; and the reversibility or irreversibility of the impacts.*

As the "Gibson MacQuoid Gold Project" is a proposed mineral exploration program involving staking, prospecting, soil sampling, aerial photography, and the development of a temporary camp the nature of potential impacts is considered to be well-known. Potential adverse impacts are likely to be localized, of low magnitude, and restricted to the period of project activities (eight (8) weeks). Due to the proximity of portions of the mineral claims to caribou habitat, specific mitigation measures for the protection of critical life stages of caribou herds in the area may be necessary. Based on past evidence of similar scope of activities, potential adverse impacts will be reversible and mitigable with due care.

6. *The cumulative impacts that could result from the impacts of the project combined with those of any other project that has been carried out, is being carried out or is likely to be carried out.*

The proposed project would take place within a 100 kilometre radius to a number of other projects that are currently active, in addition to other projects recently completed or currently undergoing assessment by the Board as listed in Table 1 below. However, it is noted that this project is not likely to result in residual or cumulative impacts. The potential for cumulative impacts to caribou and caribou migration routes resulting from the exploration activities and

other projects occurring in the region has been identified and considered in the development of the NIRB's recommendations. Terms and conditions recommended for each of these projects are expected to reduce any residual impacts, and as such would limit or eliminate the potential for cumulative effects to occur.

Table 1: Project List

NIRB Project Number	Project Title	Project Type
<i>Active Projects</i>		
08EN043	Meliadine East Project	Mineral Exploration (<i>seasonal</i>)
10EA018	Meliadine Gold Underground Exploration and Bulk Sampled Extension	Mineral Exploration (<i>seasonal</i>)
10EN006	Federal Claim PB1 (F69574) Drilling – Meliadine West Gold Project	Mineral Exploration (<i>seasonal</i>)
11EN016	Peter Lake	Mineral Exploration
11MN034	Meliadine Gold Mine	Mine Development and associated shipping activities (<i>year round</i>)
15EN028	Kahuna Property Field Camp and Project	Mineral Exploration (<i>seasonal</i>)
15EN049	Peter Lake, Fox Lake and Parker Lake	Mineral Exploration (<i>year round</i>) and Winter Road access (<i>seasonal</i>)
15FN027	Fuel Supply Pipeline Replacement – Rankin Inlet	Fuel
18YN016	Churchill Marine Observatory – Environmental Observing (CMO-EO) System	Research
18YN019	Impacts of Wastewater at Baker Lake	Research
<i>Past Projects</i>		
15EN052	Luxx Project	Mineral Exploration
16YN067	Synthesis of Glacial History and Dynamics in the Rae Geological Province	Research

7. *Any other factor that the Board considers relevant to the assessment of the significance of impacts.*

No other specific factors have been identified as relevant to the assessment of this project proposal.

In considering the factors as set out above in the screening of the project proposal, the NIRB has identified a number of issues below and respectfully provide the following views regarding whether or not the proposed project has the potential to result in significant impacts. In addition, the NIRB has proposed terms and conditions that would mitigate the potential adverse impacts identified.

Administrative Conditions:

To encourage compliance with applicable regulatory requirements and assist the Board and responsible authorities with compliance and effects monitoring for project activities, the Board has previously recommended terms and conditions 1 through 4 which continue to apply to the current project proposal. The Board is also recommending term and condition 35 to ensure complete reference to applicable regulatory requirements.

The Board would also note that, as justified in its previous decision (NIRB File No. 17EN029 dated May 18, 2017), terms and conditions 5 through 34 remain applicable to the original project exploration activities, while the additional impacts identified for the new components of the exploration activities and temporary camp warrant mitigation measures as justified below.

Ecosystem, wildlife habitat and Inuit harvesting activities:

Issue 1: Potential adverse impacts to caribou and caribou habitat from noise generated from the establishment of the temporary camp, and the associated exploration activities including prospecting, helicopter traffic and drone use.

Board views: The activities associated with the project include a temporary camp, helicopter-assisted travel, drone flights, and on-land prospecting and related exploration activities. Although some components of proposed project activities may be in proximity to habitat for critical life stages of caribou (calving and post-calving), the potential impacts from noise associated with these proposed activities are considered to be infrequent and short-term (up to 8 weeks). The Proponent has also committed to placing its temporary camp outside of caribou calving grounds, to follow the Kivalliq Inuit Association's Mobile Caribou Conservation Measures and implement its Corporate and Social Responsibility Action Plan, which includes specific mitigation measures for potential impacts to caribou such as suspension of project activities until any caribou cows and calves are a minimum of one (1) km away from the project area. The Proponent has also committed to ceasing all field activities that may interfere with caribou migration until the species have left the project area. In addition, the Proponent has committed to consulting the communities of Rankin Inlet.

The Proponent would also be required to follow the *Species at Risk Act*, the *Wildlife Act (Nunavut)* and the *Canadian Aviation Regulations* (see Regulatory Requirements section).

Noted Traditional Knowledge or Inuit Qaujimaningit: The Kangiqliniq Hunters and Trappers, Baker Lake Hunters and Trappers, Beverly and Qamanirjuaq Caribou Management

Board and the Lutsel K'e Dene First Nations noted that the proposed project lies within calving ranges of the Qamanirjuaq herd. Further, parties noted that Inuit, Athabasca Denesuline and other Indigenous groups have traditionally depended upon caribou as an important food source, and caribou are central to the cultural and physical well-being of these groups.

Recommended Mitigation Measures: It is recommended that the potential adverse impacts may be mitigated by measures such as requiring the Proponent to cease activities that may interfere with the migration or calving of caribou until the caribou have left the area, as well as measures to avoid attracting wildlife. The Board has previously recommended the following terms and conditions to mitigate the potential adverse impacts to caribou and caribou habitat from the proposed exploration activities: 6, 7, 14 through 17, and 21 through 28.

Issue 2: Potential adverse impacts to other terrestrial wildlife including muskox and birds from noise and land disturbance associated with the establishment of the temporary camp and the associated exploration program.

Board views: There is potential for disturbance of wildlife, such as muskoxen, wolves, wolverines, and migratory and non-migratory birds from the establishment of the temporary camp, from the use of the helicopter and drone, and land disturbance associated with the proposed project. However, the potential adverse impact(s) of the project to terrestrial wildlife and birds is considered to be minimal due to the scale (early-stage mineral prospecting) and duration (up to 8 weeks) of the exploration program. The Proponent has committed implementing its Corporate and Social Responsibility Action Plan. The Proponent has previously committed to avoiding low-level helicopter flights in identified nesting and denning habitat and to not disturbing eggs, nests and migratory birds are not to be disturbed by any activities. The adverse impacts to terrestrial wildlife and migratory birds are considered to be of low magnitude and reversible.

The Proponent would be required to follow the *Species at Risk Act*, the *Wildlife Act (Nunavut)*, the *Migratory Birds Convention Act*, the *Transportation of Dangerous Goods Act*, the *Canadian Environmental Protection Act* and the *Canadian Aviation Regulations* (see Regulatory Requirements section).

Recommended Mitigation Measures: It is recommended that the potential adverse impacts may be mitigated by measures such as requiring the Proponent to ensure no damage to wildlife habitat and minimize activities during periods when birds are particularly sensitive to disturbance especially during migration, nesting and moulting. The Board has previously recommended the following terms and conditions to mitigate the potential adverse impacts to wildlife and birds: 6, 7, and 14 through 25. In addition, the Board is recommending term and condition 39 to mitigate noise.

Issue 3: Potential adverse impacts on fish and fish habitat, and surface water quality from erosion associated with land disturbance activities such soil sampling, from fuel spill incidents from exploration activities and from the establishment of a temporary camp.

Board Views: The project may adversely impact fish and fish habitat and surface water quality, from potential fuel spills, from the establishment of a temporary camp, and potential erosion and deposition of contaminated soil into or in proximity to the aquatic environment, including fish-bearing water bodies from the exploration activities. However, the magnitude of potential adverse impacts to fish and fish habitat, including water quality, from soil erosion is considered to be low due the level of land disturbance (early-stage prospecting, till and soil sampling). The Proponent will continue to implement the Fuel Management Plan and a Spill Prevention and Response Plan for the project and has committed to establishing temporary berms at fuel caches to prevent the spread of any fuel spill incidents. As a result, the potential adverse impacts to water quality, fish and fish habitat are considered to be of low magnitude, infrequent, and reversible.

The Proponent may require a water licence from the Nunavut Water Board for the water usage activities and fuel storage and for the usage of water for domestic purposes. In addition, the Proponent would also be required to follow the *Fisheries Act*, the *Transportation of Dangerous Goods Regulations*, the *Transportation of Dangerous Goods Act* and the *Canadian Environmental Protection Act* (see Regulatory Requirements section).

Recommended Mitigation Measures: It is recommended that the potential adverse impacts to fish and fish habitat, and water quality resulting from exploration activities may be mitigated by implementing erosion and sediment suppression measures, and by ensuring fuel storage and refuelling occurs a minimum of thirty-one (31) metres from the high water mark of water bodies, and having spill kits available. The Board has previously recommended the following terms and conditions to mitigate potential adverse impacts to fish and fish habitat, including water quality: 5, 8 through 11, 13, and 29 which continues to apply.

Issue 4: Potential adverse impacts to ground stability and soil quality from the establishment of a temporary camp, soil sampling and on-site fuel storage in support exploration activities.

Board views: The activities proposed for the project, including soil sampling and the establishment of a temporary camp and fuel cache, may result in soil erosion and degradation of permafrost which would negatively affect ground stability and soil quality. However, the potential for impacts is limited to the footprint of a temporary camp, fuel cache and prospecting sites within the mineral claims, which are also temporary in nature (up to 8 weeks). To mitigate potential impacts to soil quality, the Proponent will continue to follow its Corporate and Social Responsibility Plan to ensure that land disturbance activities associated with the project do not promote rutting and erosion. As a result, the potential adverse impacts to ground stability and soil quality are considered to be of low magnitude, short-term and reversible.

The Proponent would also be required to follow the *Transportation of Dangerous Goods Regulations*, the *Transportation of Dangerous Goods Act* and the *Canadian Environmental Protection Act* (see Regulatory Requirements section).

Recommended Mitigation Measures: It is recommended that potential adverse impacts to soil quality and ground stability be mitigated by measures such as requiring the Proponent implement suitable erosion and sediment suppression measures on all areas before, during and after conducting proposed activities. The Board previously recommend terms and conditions: 8 through 14, and 29 through 31, which continue to apply. In addition, terms and conditions 39 and 40 are recommended to ensure the land use area is kept clean and tidy at all times and the camp is located on durable land.

Issue 5: Potential negative impacts to air quality from engine exhaust and emissions from the use of equipment and incinerator activities at the temporary camp.

Board views: There is potential for negative impacts to air quality from emissions from the use of equipment and incineration activities, which would be limited to the project footprint and the temporary camp site, and with a low probability of extending beyond the geographic area. The potential negative impacts to air quality are considered to be of low magnitude, short-term, and reversible.

Recommended Mitigation Measures: The Board recommends the following terms and conditions to mitigate the potential negative impacts to air quality from the incineration activities: 36 through 38.

Issue 6: Potential adverse impacts to public and traditional land use pursuits from noise associated with aircraft use and the use a drone for aerial photography.

Board Views: The proposed project is located in an area used by the Qamanirjuaq caribou herd. The Board notes that numerous concerns have been raised with respect to caribou and the potential decline of the herd and it is noted that the animals are important to the way of life of Inuit and Indigenous persons over a broad area. There is potential for disruption to caribou habitat and caribou migration routes as a result of the exploration activities and as a result of the noise generated from activities associated with the temporary camp operations, which may reduce local caribou populations and availability of caribou as country food. It is possible that the project could result in other terrestrial wildlife avoidance that may change the distribution of wildlife species commonly harvested which may in turn affect personal enjoyment of the land, and the social and cultural activities practiced in the region.

The Proponent has committed to implementing wildlife mitigation measures to minimize disturbance to caribou, including seasonal restrictions on activity. The Proponent has also committed to conducting additional community consultation. Such additional community engagement may help identify potential resource use conflicts and inform the execution of the project. As a result of concerns raised during the public commenting period regarding disturbance to caribou habitat and caribou movement, the NIRB has included recommendations that the Proponent conduct the operations outside of May 15 to July 15 in project areas in proximity to natural ranges for caribou migration to calving and post-calving areas. In addition, terms and conditions have been recommended so that the Proponent plans operations to avoid disturbance to key

wildlife, birds, and humans, and to minimize negative impacts to traditional land use activities by ensuring ongoing consultation with the community and community organizations.

Noted Inuit Qaujimaningit, traditional or community knowledge: As noted during the commenting period and as summarized above, Inuit, Lutsel K'e Dene First Nations and other Indigenous groups have traditionally depended upon caribou as an important food source, and caribou are central to the cultural and physical well-being of these groups.

Recommended Mitigation Measures: Term and condition 32 is recommended to ensure that the affected communities and organizations are informed about the project proposal to ensure that project activities and term and condition 34 is recommended to ensure activities do not interfere with Inuit wildlife harvesting or traditional land use activities in the area. Terms and conditions 7, 14 through 21, and 26 through 28 have been recommended to minimize impacts on wildlife, including caribou, muskox, and migratory and non-migratory birds.

Socio-economic effects on northerners:

Issue 7: Potential adverse impacts to historical, cultural and archaeological sites from land disturbance as a result of the early-stage exploration activities.

Board Views: The Proponent has not identified sites of historical, cultural and archaeological importance in the proposed project area. The probability of impacts to historical, cultural and archaeological sites is considered to be low due to the anticipated minimal land disturbance from the proposed early-stage exploration activities and the establishment of a temporary camp.

The Proponent is required to follow the *Nunavut Act* (as recommended in the Regulatory Requirements section) and would be required to contact the Government of Nunavut-Department of Culture and Heritage if sites of historical, cultural and archaeological importance are encountered.

Recommended Mitigation Measures: It is recommended that the potential adverse impacts may be mitigated by measures such requiring the Proponent to solicit available Inuit Qaujimaningit from local residents. The Board has previously recommended term and condition 32 to mitigate the potential adverse impacts to historical, cultural and archaeological resources, which continues to apply.

Issue 8: Potential positive impacts to the local community from the sourcing of accommodations for personnel within the community when rotating in and out at the beginning and end of the exploration activities, purchasing of local goods and services, and hiring locally in support of exploration activities.

Board Views: It is noted that the Proponent has committed to consulting with the Kivalliq Inuit Association as well as the Kangiqliniq Hunters and Trappers in Rankin Inlet about

potential local employment and business opportunities in support of the exploration program, which may result in a positive impact to the local economy. Further, the Proponent has noted that personnel will be sourcing accommodations in the local community prior to and at the end of the exploration activities which would be a positive impact to the local economy. In addition, the Proponent has noted its plans to hire locally which is considered a positive impact to the community.

Recommended Mitigation Measures: Term and condition 33 has been previously recommended by the Board to ensure the Proponent meets its commitments to support the local economy in executing the project by considering hiring locally.

Significant public concern:

Issue 9: Public concern was expressed during the public commenting period for this project proposal, specifically in relation to potential project effects on the Qamanirjuaq caribou herd and the resultant adverse impacts on communities which rely on harvesting of this herd.

Board Views: The Board notes that several parties, in particular the Lutsel K'e Dene First Nations, the Beverly and Qamanirjuaq Caribou Management Board, and Kangiqliniq Hunters and Trappers, raised concerns with respect the potential impacts of the proposed activities taking place within the calving and post-calving grounds of the Qamanirjuaq caribou herd. The Proponent has agreed to conduct community consultation; and follow up consultation.

Recommended Mitigation Measures: Term and condition 32 has been previously recommended to ensure that the affected communities and organizations are informed about the project proposal, and to provide the Proponent with an opportunity to proactively address or mitigate any concerns that may arise from the project activities. The Board is recommending that the Proponent conduct ongoing public consultation and provide an annual report that includes wildlife observations and an evaluation of the success of the mitigative measures applied (see Monitoring and Reporting Requirements section below).

Technological innovations for which the effects are unknown:

No specific issues have been identified associated with this project proposal.

In considering the above factors and subject to the Proponent's compliance with the terms and conditions necessary to mitigate against the potential adverse environmental and social effects, the Board is of the view that the proposed project is unlikely to cause significant public concern and its adverse ecosystemic and socioeconomic impacts are unlikely to be significant, or are highly predictable and can be adequately mitigated by known technologies.

The following terms and conditions were previously issued by the NIRB in the May 18, 2017 Screening Decision Report for File No. **17EN029**, *and continue to apply to the Gibson MacQuoid Gold Project:*

General

1. North Country Gold Corp. (the Proponent) shall maintain a copy of the Project Terms and Conditions at the site of operation at all times.
2. The Proponent shall forward copies of all permits obtained and required for this project to the Nunavut Impact Review Board (NIRB) prior to the commencement of the project.
3. The Proponent shall operate in accordance with all commitments stated in correspondence provided to the Nunavut Planning Commission (Application to Determine Conformity, February 21, 2017), and the NIRB (Online Application Form, March 8, 2017; and the Proponent's supplementary application information, April 11, 2017).
4. The Proponent shall operate the site in accordance with all applicable Acts, Regulations and Guidelines.

Water Use

5. The Proponent shall not extract water from any fish-bearing waterbody unless the water intake hose is equipped with a screen of appropriate mesh size to ensure that there is no entrapment of fish. Small lakes or streams should not be used for water withdrawal unless approved by the Nunavut Water Board.

Waste Disposal

6. The Proponent shall keep all garbage and debris in bags placed in a covered metal container or equivalent until disposed of at an approved facility. All such wastes shall be kept inaccessible to wildlife at all times.

Fuel and Chemical Storage

7. The Proponent shall store all fuel and chemicals in such a manner that they are inaccessible to wildlife.
8. Unless otherwise authorized by the Nunavut Water Board, the Proponent shall locate all fuel and other hazardous materials a minimum of thirty-one (31) metres away from the high water mark of any water body and in such a manner as to prevent their release into the environment.
9. The Proponent shall ensure that re-fueling of all equipment occurs a minimum of thirty-one (31) metres away from the high water mark of any water body, unless otherwise authorized by the Nunavut Water Board.
10. The Proponent shall use adequate secondary containment or a surface liner (e.g., self-supporting insta-berms and fold-a-tanks) when storing barreled fuel and chemicals at all locations.

11. The Proponent shall ensure that appropriate spill response equipment and clean-up materials (e.g., shovels, pumps, barrels, drip pans, and absorbents) are readily available during any transfer of fuel or hazardous substances, and at all fuel storage sites.
12. The Proponent shall remove and treat hydrocarbon contaminated soils on site or transport them to an approved disposal site for treatment.
13. The Proponent shall ensure that all personnel are properly trained in fuel and hazardous waste handling procedures, as well as spill response procedures. All spills of fuel or other deleterious materials of any amount must be reported immediately to the 24 hour Spill Line at (867) 920-8130.

Wildlife - General

14. The Proponent shall ensure that there is no damage to wildlife habitat in conducting this operation.
15. The Proponent shall not harass wildlife. This includes persistently circling, chasing, hovering over pursuing or in any other way harass wildlife, or disturbing large groups of animals.
16. The Proponent shall not hunt or fish, unless proper Nunavut authorizations have been acquired.
17. The Proponent shall ensure that all project personnel are made aware of the measures to protect wildlife and are provided with training and/or advice on how to implement these measures.

Migratory Birds and Raptors Disturbance

18. The Proponent shall not disturb or destroy the nests or eggs of any birds. If nests are encountered and/or identified, the Proponent shall take precaution to avoid further interaction and or disturbance (e.g., a 100 metres buffer around the nests). If active nests of any birds are discovered (i.e., with eggs or young), the Proponent shall avoid these areas until nesting is complete and the young have left the nest.
19. The Proponent shall minimize activities during periods when birds are particularly sensitive to disturbance such as migration, nesting and moulting.
20. The Proponent shall ensure its aircraft avoid excessive hovering or circling over areas where bird presence is likely.

Aircraft Flight Restrictions

21. The Proponent shall restrict aircraft/helicopter activity related to the project to a minimum altitude of 610 metres above ground level unless there is a specific requirement for low-level flying, which does not disturb wildlife and migratory birds.
22. The Proponent shall ensure that aircraft maintain a vertical distance of 1000 metres and a horizontal distance of 1500 metres from any observed groups of wildlife or colonies of migratory birds. Aircraft should avoid critical and sensitive wildlife areas at all times by choosing alternate flight corridors.
23. The Proponent shall ensure that aircraft/helicopter do not, unless for emergency, touch-down in areas where wildlife are present.

24. The Proponent shall advise all pilots of relevant flight restrictions and enforce their application over the project area, including flight paths to/from the project area.
25. The Proponent shall ensure that drone activities do not disturb wildlife and migratory birds.

Caribou and Muskoxen Disturbance

26. The Proponent shall cease activities that may interfere with the migration or calving of caribou or muskox, until the caribou or muskox have passed or left the area.
27. The Proponent shall not block or cause any diversion to caribou migration, and shall cease activities likely to interfere with migration such as airborne geophysics surveys, or movement of equipment or personnel until such time as the caribou have passed.
28. During the period of May 15 to July 15, when caribou are observed within one (1) kilometre of project operations, the Proponent shall suspend all operations, including low-level over flights, outside the immediate vicinity of personnel pick up/drop off locations. Following July 15, if caribou cows or calves are observed within one (1) kilometre of project operations, the Proponent shall also suspend all operations in the vicinity, including low-level over flights, until caribou are no longer in the immediate area.

Ground Disturbance

29. The Proponent shall implement suitable erosion and sediment suppression measures on all areas before, during and after conducting activities in order to prevent sediment from entering any waterbody.

Restoration of Disturbed Areas

30. The Proponent shall remove all garbage, fuel and equipment upon abandonment.
31. The Proponent shall complete all clean-up and restoration of the lands used prior to the end of each field season and/or upon abandonment of site.

Other

32. The Proponent should consult with local residents regarding their activities in the area and solicit available Inuit Qaujimaningit and information that can inform project activities.
33. The Proponent should, to the extent possible, hire local people.
34. The Proponent shall ensure that project activities do not interfere with Inuit wildlife harvesting or traditional land use activities.

In addition to the previously issued terms and conditions, the Board recommends the following project-specific terms and conditions:

General

35. The Proponent shall operate in accordance with all commitments stated in correspondence provided to the Nunavut Planning Commission (NPC File No.: 148787) and the NIRB (Online Application Form, April 30, 3018).

Waste Disposal/Incineration

36. The Proponent shall incinerate all combustible wastes daily, and remove the ash from incineration activities and non-combustible wastes from the project site to an approved facility for disposal.
37. The Proponent shall ensure that the incineration of combustible camp wastes comply with the *Canadian Wide Standards for Dioxins and Furans*, and the *Canadian Wide Standards for Mercury*.
38. The Proponent shall ensure that no waste oil/grease is incinerated on site.

Temporary Camps

39. The Proponent shall ensure that all camps are located on gravel, sand or other durable land.
40. The Proponent shall ensure that the land use area is kept clean and tidy at all times.

MONITORING AND REPORTING REQUIREMENTS

The Board has previously recommended the following on May 18, 2017:

Community Consultation Report

1. The Proponent shall submit a public consultation report to the Nunavut Impact Review Board, Indigenous and Northern Affairs Canada, and the Kivalliq Inuit Association prior to the commencement of project activities. The report shall include a copy of materials presented to community members, a description of issues and concerns raised, and advice offered to the company as well as any follow-up actions that were required or taken to resolve any concerns expressed about the project proposal.

Wildlife Mitigation and Monitoring Plan

2. Prior to the start of project activities, the Proponent shall submit a Wildlife Mitigation and Monitoring Plan (WMMP), informed by community consultation, to the Nunavut Impact Review Board, Government of Nunavut, Department of Environment and the Kivalliq Inuit Association. At a minimum, this plan should include proposed template for a wildlife log/record of observations and proposed mitigation measures for caribou, migratory birds, grizzly bear and other sensitive species that may be encountered within the project area. The Proponent is encouraged to consult with the Government of Nunavut's Regional Biologists in developing the WMMP, regarding project schedule and timelines so as to ensure adequate mitigation of potential wildlife impacts.

In addition to the previously recommended monitoring and reporting requirements, the Board is recommending the following:

Annual Report

3. The Proponent shall submit a comprehensive annual report to the Nunavut Impact Review Board by March 31st of each year of permitted activities beginning March 31, 2019. The annual report must contain at least the following information:
 - a) A summary of activities undertaken for the year, including:

- a map showing the approximate location of sampling locations;
 - a map showing the location of the fuel cache;
 - a description of local hires, contracting opportunities and initiatives;
 - flight altitudes, frequency of flights and anticipated flight routes;
 - information on the frequency of use of the unmanned air vehicles or non-recreational drones including altitudes, frequency of flights and flight routes completed;
 - site photos;
- b) A work plan for the following year, including descriptions of any planned progressive reclamation work;
- c) A summary of community consultations undertaken throughout the year, providing copy of materials presented to community members, a description of issues and concerns raised, discussions with community members and advice offered to the company as well as any follow-up actions that were required or taken to resolve any concerns expressed about the project proposal;
- d) A log of instances in which residents from nearby communities occupy or transit through the project area for the purpose of traditional land use or harvesting. This log should include the location and number of people encountered, activity being undertaken (e.g., berry picking, fishing, hunting, camping, etc.), date and time; and any mitigation measures or adaptive management undertaken to prevent disturbance;
- e) A record of wildlife observations, including observed locations (i.e., latitude and longitude), species, number of animals, a description of the animal activity, and a description of the gender and age of animals if possible. A map of known sensitive wildlife sites such as denning sites, caribou crossing sites, and raptor nests in the area should accompany the report.
- f) A summary of any wildlife mitigation actions undertaken, including the number of cease-work orders required as a result of proximity to caribou and any other wildlife;
- g) An analysis of the effectiveness of mitigation measures for wildlife, and identification of adaptive mitigation that will be implemented if mitigation measures were unsuccessful;
- h) Summary of any heritage sites encountered during the exploration activities, any follow-up action or reporting required as a result and how project activities were modified to mitigate impacts on the heritage sites;
- i) Summary of its knowledge of Inuit land use in/near the project area and explain how project activities were modified to mitigate impacts on Inuit land use; and
- j) A summary of how the Proponent has complied with conditions contained within this Screening Decision, and all conditions as required by other authorizations associated with the project proposal.

OTHER NIRB CONCERNS AND RECOMMENDATIONS

In addition to the project-specific terms and conditions, the Board has previously recommended the following on May 18, 2017:

Change in Project Scope

1. Responsible authorities or Proponent shall notify the Nunavut Planning Commission (NPC) and the NIRB of any changes in operating plans or conditions, including phase advancement, associated with this project prior to any such change.

Bear and Carnivore Safety

2. The Proponent should review the Government of Nunavut's booklet on Bear Safety, which can be downloaded from this link: http://gov.nu.ca/sites/default/files/bear_safety_-_reducing_bear-people_conflicts_in_nunavut.pdf. Further information on bear/carnivore detection and deterrent techniques can be found in the "Safety in Grizzly and Black Bear Country" pamphlet, which can be downloaded from this link: http://www.enr.gov.nt.ca/sites/default/files/web_pdf_wd_bear_safety_brochure_1_may_2015.pdf.
3. There are polar bear and grizzly bear safety resources available from the Bear Smart Society with videos on polar bear safety available in English, French and Inuktitut at <http://www.bearsmart.com/play/safety-in-polar-bear-country/>. Information can also be obtained from Parks Canada's website on bear safety at the following link: <http://www.pc.gc.ca/eng/pn-np/nu/quttinirpaaq/visit/visit6/d.aspx> or in reviewing the "Safety in Polar Bear Country" pamphlet, which can be downloaded from the following link: http://www.pc.gc.ca/eng/pn-np/nu/quttinirpaaq/visit/visit6/~/_media/pn-np/nu/auyuittuq/pdf/shared/PolarBearSafety_English.ashx.
4. Any problem wildlife or any interaction with carnivores should be reported immediately to the local Government of Nunavut, Department of Environment Conservation Office (Conservation Officer of Baker Lake, phone: (867) 793-2944).

Species at Risk

5. The Proponent review Environment and Climate Change Canada's "Environment Assessment Best Practice Guide for Wildlife at Risk in Canada", available at the following link: http://www.sararegistry.gc.ca/virtual_sara/files/policies/EA%20Best%20Practices%202004.pdf. The guide provides information to the Proponent on what is required when Wildlife at Risk, including *Species at Risk*, are encountered or affected by the project.

Migratory Birds

6. The Proponent review Canadian Wildlife Services' "Key migratory bird terrestrial habitat sites in the Northwest Territories and Nunavut", available at the following link: <http://publications.gc.ca/site/eng/317630/publication.html> and "Key marine habitat sites for migratory birds in Nunavut and the Northwest Territories", available at the following link: <http://publications.gc.ca/site/eng/392824/publication.html>. The guide provides information to the Proponent on key terrestrial and marine habitat areas that are essential to the welfare of various migratory bird species in Canada.
7. For further information on how to protect migratory birds, their nests and eggs when planning or carrying out project activities, consult Environment and Climate Change Canada's Incidental Take web page and the fact sheet "Planning Ahead to Reduce the Risk

of Detrimental Effects to Migratory Birds, and their Nests and Eggs” available at <http://www.ec.gc.ca/paom-itmb/>.

Transport of Waste/Dangerous Goods and Waste Management

8. Environment and Climate Change Canada recommends that all hazardous wastes, including waste oil, receive proper treatment and disposal at an approved facility.
9. The Proponent shall ensure that a waste manifest or the appropriate transportation of dangerous goods (TDG) documentation accompany all potential hazardous samples and/or materials that are transported off site. Further, the Proponent shall ensure that the shipment of waste is registered with the Government of Nunavut Department of Environment (GN-DoE). Contact the Manager of Pollution Control and Air Quality at (867) 975-7748 to obtain a manifest if hazardous waste will be generated during project activities.
10. The Proponent shall provide an authorization or letter of conformation of disposal be obtained from the owner/operator of the landfill to be used for disposal of project-related wastes.

Aircraft Identification

11. The Proponent shall provide the community of Baker Lake the planned helicopter activities, including photo(s) of the helicopter to be used, approximate flight paths, plans and times as available prior to commencement of activities to ensure community members are aware of the planned activities.

Unmanned Air Vehicles (UAV) or Non-Recreational Drones

12. The Proponent should review Transport Canada’s site on Drone Safety which can be found at the following link: <https://www.tc.gc.ca/eng/civilaviation/drone-safety.html>
13. The Proponent should review Transport Canada’s “Do I have permission to fly my drone?” which can be downloaded from which can be downloaded from this link: [https://www.tc.gc.ca/media/documents/ca-opssvs/Infographic-Do I need permission to fly my drone.pdf](https://www.tc.gc.ca/media/documents/ca-opssvs/Infographic-Do_I_need_permission_to_fly_my_drone.pdf). The document provides information on whether or not a Special Flight Operations Certificate (SFOC) would be required or whether the operator of an unmanned air vehicle qualifies to operate under one of the exemptions to conduct lower risk operation in more remote areas without the need to apply for an SFOC.

Caribou Management

14. Territorial and federal government agencies in Nunavut should work together with Regional Inuit Associations, co-management boards and industry to develop an action plan to identify and mitigate potential cumulative effects of human land use activities, including mineral exploration, on barren-ground caribou. This assessment of cumulative effects should occur at a regional scale (i.e., larger than individual project areas).
15. Territorial and federal government agencies update the Caribou Protection Map with updated data and information from the Beverly Qamanirjuaq Caribou Management Board (BQCMB).
16. As a result of expressed concerns regarding mineral exploration and the associated potential for cumulative effects on caribou and caribou habitat within the Kivalliq region, the Nunavut Planning Commission, territorial and federal government agencies should work together with Regional Inuit Associations, co-management boards, the public, and industry to develop a

plan that identifies appropriate land use in these areas prior to potential mineral exploration. The plan should identify and mitigate potential cumulative effects of human land use activities on barren-ground caribou on both localized and regional scales.

17. The Nunavut Planning Commission should be aware of the public concerns regarding a perceived lack of protection for caribou and caribou habitat within the Kivalliq Region of Nunavut. In developing a Nunavut-wide land use plan, the Nunavut Planning Commission may wish to consider formalized protection of important caribou habitat, and seasonal restrictions on potentially disruptive activities in these areas to minimize disturbance to caribou lifecycles and Inuit harvesting activities.

Indigenous and Northern Affairs Canada

18. Indigenous and Northern Affairs Canada (INAC) impose mitigation measures, conditions and monitoring requirements pursuant to the Federal Land Use Permit, which require the Proponent to respect the sensitivities and importance of the area. These mitigation measures, conditions and monitoring requirements should be in regard to the location and area; type, location, capacity and operation of facilities; use, storage, handling and disposal of chemical or toxic material; wildlife and fisheries habitat; and petroleum fuel storage.
19. INAC consider the importance of conducting regular Land Use Inspections, pursuant to the authority of the Federal Land Use Permit, while the project is in operation. The Land Use Inspections should be focused on ensuring the Proponent is in compliance with the conditions imposed through the Federal Land Use Permit.

Kivalliq Inuit Association

20. The Kivalliq Inuit Association impose strict mitigation measures and/or conditions upon the Proponent pursuant to the Inuit Owned Lands License in regard to fuel and chemical storage, water conditions, ground disturbance and wildlife on Inuit owned land.

Nunavut Water Board

21. If a Type “B” Water Licence is required for this project proposal, the Nunavut Water Board should impose mitigation measures, conditions and monitoring requirements pursuant to the Water Licence, which require the Proponent to respect the sensitivities and importance of water in the area. These mitigation measures, conditions and monitoring requirements should be in regard to use of water, snow and ice; waste disposal; spill contingency planning; abandonment and restoration planning; and monitoring programs.

Indigenous and Northern Affairs Canada – Water Resources Division

22. INAC – Water Resources Division should consider the importance of conducting regular inspections, pursuant to the authority of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*, while the project is in operation. Inspectors should focus on ensuring the Proponent is in compliance with the conditions imposed through the Water Licence.

The Board is currently also recommending the following:

Incineration of Wastes

23. The Proponent review Environment and Climate Change Canada’s “Technical Document for Batch Waste Incineration”, available at the following link: <http://www.ec.gc.ca/gdd->

[mw/default.asp?lang=En&n=F53EDE13-1](#). The technical document provides information on appropriate incineration technologies, best management and operational practices, monitoring and reporting.

24. The Proponent review the Canadian Council of Ministers of the Environment's "Guidance Document for Canadian Jurisdictions on Open-Air Burning", available at the following link: http://www.ccme.ca/files/Resources/air/wood_burning/pn_1548_CCME%20Guidance%20Document%20on%20Open%20Air%20Burning%20FINAL.pdf as a guidance document for best practices associated with open-air burning.

REGULATORY REQUIREMENTS

The Board previously recommended in the May 18, 2017 Screening Decision Report for the Gibson MacQuoid Gold Project the following legislation, which continues to apply to the current proposal:

Acts and Regulations

1. The *Fisheries Act* (<http://laws-lois.justice.gc.ca/eng/acts/F-14/index.html>).
2. (updated) The *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (<http://laws-lois.justice.gc.ca/eng/acts/n-28.8/>).
3. The *Migratory Birds Convention Act* and *Migratory Birds Regulations* (<http://laws-lois.justice.gc.ca/eng/acts/M-7.01/>).
4. The *Species at Risk Act* (<http://laws-lois.justice.gc.ca/eng/acts/S-15.3/index.html>). Attached in **Appendix B** is a list of Species at Risk in Nunavut.
5. (updated) The *Wildlife Act* and its corresponding regulations (<http://www.canlii.org/en/nu/laws/stat/snu-2003-c-26/latest/snu-2003-c-26.html>).
6. The *Nunavut Act* (<http://laws-lois.justice.gc.ca/eng/acts/N-28.6/>). The Proponent must comply with the proposed terms and conditions listed in the attached **Appendix C**.
7. (updated) The *Transportation of Dangerous Goods Regulations* (<http://www.tc.gc.ca/eng/tdg/clear-tofc-211.htm>), *Transportation of Dangerous Goods Act* (<http://laws-lois.justice.gc.ca/eng/acts/t-19.01/>), and the *Canadian Environmental Protection Act* (<http://laws-lois.justice.gc.ca/eng/acts/C-15.31/>).
8. The *Aeronautics Act* (<http://laws-lois.justice.gc.ca/eng/acts/A-2/>) and the Interim Order No. 9 Respecting the Use of Model Aircraft (<http://www.gazette.gc.ca/rp-pr/p1/2018/2018-06-16/html/notice-avis-eng.html#ne6>).
9. The *Canadian Aviation Regulations* (<https://www.tc.gc.ca/eng/acts-regulations/regulations-sor96-433.htm>).

CONCLUSION

The foregoing constitutes the Board's screening decision with respect to the North Country Gold Corp.'s "Gibson MacQuoid Gold Project". The NIRB remains available for consultation with the Minister regarding this report as necessary.

Dated June 29, 2018 at Whale Cove, NU.



Elizabeth Copland, Chairperson

Attachments: Appendix A: Previously-Screened Project Proposals
Appendix B: Species at Risk in Nunavut
Appendix C: Archaeological and Palaeontological Resources Terms and Conditions for Land Use
Permit Holders

APPENDIX A: PREVIOUSLY-SCREENED PROJECT PROPOSALS

The original project proposal NIRB (File No. 17EN029), was received by the NIRB from the Nunavut Planning Commission (NPC or Commission) on February 21, 2017 and was screened by the Board in accordance with Part 4, Article 12 of the *Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada (Nunavut Agreement)* and Section 3 of the *Nunavut Planning and Project Assessment Act*, S.C. 2013, c. 14, s. 2 (*NuPPAA*). On May 18, 2017 the NIRB issued a screening decision pursuant to paragraph 92(2)(a) of the *NuPPAA* to the Minister of Crown – Indigenous and Relations and Northern Affairs which indicated that the proposed project could proceed subject to the NIRB’s recommended project-specific terms and conditions.

The North Country Gold Corp.’s (Proponent) original “Gibson-MacQuoid” project was located in the Kivalliq region, approximately 100 kilometres (km) from Baker Lake. The Proponent indicated that it intended to conduct an early stage exploration program for gold mineralization in the Gibson-MacQuoid Region. The program was proposed to take place from July to August 2017.

According to the previously screened project proposal, the scope of the project included the following undertakings, works or activities:

- Use of a helicopter to transport 13 personnel and materials to and from the prospecting site(s);
- Conduct staking, prospecting, and soil sampling;
- Use of a drone for aerial photography in support of prospecting activities;
- Transportation, temporary storage and use of up to 4,000 litres (L) of aviation fuel at the exploration site(s); and
- Use of facilities in Baker Lake for accommodations, water source and waste management.

Appendix B

Species at Risk in Nunavut

Due to the requirements of Section 79(2) of the Species At Risk Act (SARA), and the potential for project-specific adverse effects on listed wildlife species and its critical habitat, measures should be taken as appropriate to avoid or lessen those effects, and the effects need to be monitored. Project effects could include species disturbance, attraction to operations and destruction of habitat. This section applies to all species listed on Schedule 1 of SARA, as listed in the table below, or have been assessed by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), which may be encountered in the project area. This list may not include all species identified as at risk by the Territorial Government. The following points provide clarification on the applicability of the species outlined in the table.

- Schedule 1 is the official legal list of Species at Risk for SARA. SARA applies to all species on Schedule 1. The term “listed” species refers to species on Schedule 1.
- Schedule 2 and 3 of SARA identify species that were designated at risk by the COSEWIC prior to October 1999 and must be reassessed using revised criteria before they can be considered for addition to Schedule 1.
- Some species identified at risk by COSEWIC are “pending” addition to Schedule 1 of SARA. These species are under consideration for addition to Schedule 1, subject to further consultation or assessment.

If species at risk are encountered or affected, the primary mitigation measure should be avoidance. The Proponent should avoid contact with or disturbance to each species, its habitat and/or its residence. All direct, indirect, and cumulative effects should be considered. Refer to species status reports and other information on the species at risk Registry at <http://www.sararegistry.gc.ca> for information on specific species.

Monitoring should be undertaken by the Proponent to determine the effectiveness of mitigation and/or identify where further mitigation is required. As a minimum, this monitoring should include recording the locations and dates of any observations of species at risk, behaviour or actions taken by the animals when project activities were encountered, and any actions taken by the proponent to avoid contact or disturbance to the species, its habitat, and/or its residence. This information should be submitted to the appropriate regulators and organizations with management responsibility for that species, as requested.

For species primarily managed by the Territorial Government, the Territorial Government should be consulted to identify other appropriate mitigation and/or monitoring measures to minimize effects to these species from the project.

Mitigation and monitoring measures must be undertaken in a way that is consistent with applicable recovery strategies and action/management plans.

Schedules of SARA are amended on a regular basis so it is important to check the SARA registry (www.sararegistry.gc.ca) to get the current status of a species.

Updated: September 2017

Terrestrial Species at Risk ¹	COSEWIC Designation	Schedule of SARA	Government Organization with Primary Management Responsibility ²
Migratory Birds			
Buff-breasted Sandpiper	Special concern	Schedule 1	ECCC
Eskimo Curlew	Endangered	Schedule 1	ECCC
Harlequin Duck (Eastern population)	Special Concern	Schedule 1	ECCC
Harris's Sparrow	Special Concern	Pending	ECCC
Horned Grebe (Western population)	Special Concern	Schedule 1	ECCC
Ivory Gull	Endangered	Schedule 1	ECCC
Peregrine Falcon	Special Concern (<i>anatum-tundrius</i> complex ³)	Schedule 1 - Schedule 3	ECCC
Red Knot (<i>islandica</i> subspecies)	Special Concern	Schedule 1	ECCC
Red Knot (<i>rufa</i> subspecies)	Endangered	Schedule 1	ECCC
Red-necked Phalarope	Special concern	Pending	ECCC
Ross's Gull	Threatened	Schedule 1	ECCC
Rusty Blackbird	Special Concern	Schedule 1	ECCC
Short-eared Owl	Special Concern	Schedule 1	ECCC
Vegetation			
Blanket-leaved Willow	Special Concern	Schedule 1	Government of Nunavut
Felt-leaf Willow	Special Concern	Schedule 1	Government of Nunavut
Porsild's Bryum (Moss)	Threatened	Schedule 1	Government of Nunavut
Arthropods			
Traverse Lady Beetle	Special Concern	Pending	Government of Nunavut
Terrestrial Wildlife			
Caribou (Barren-Ground population)	Threatened	Pending	Government of Nunavut
Dolphin and Union Caribou	Special Concern	Schedule 1	Government of Nunavut
Grizzly Bear (Western Population)	Special Concern	Pending	Government of Nunavut
Peary Caribou	Endangered	Schedule 1	Government of Nunavut
Peary Caribou (High Arctic Population)	Endangered	Schedule 2	Government of Nunavut
Peary Caribou (Low Arctic Population)	Threatened	Schedule 2	Government of Nunavut
Wolverine	Special Concern	Pending	Government of Nunavut
Wolverine (Western population)	Non-active	Pending	Government of Nunavut
Marine Wildlife			
Atlantic Walrus	Special Concern	Pending	DFO
Beluga Whale (Cumberland Sound population)	Endangered	Schedule 2	DFO
Beluga Whale (Eastern High Arctic – Baffin Bay population)	Special Concern	Pending	DFO
Beluga Whale (Eastern Hudson Bay population)	Endangered	Pending	DFO

Beluga Whale (Southeast Baffin Island – Cumberland Sound population)	Endangered	Schedule 2	DFO
Beluga Whale (Western Hudson Bay population)	Special Concern	Pending	DFO
Bowhead Whale (Eastern Arctic population)	Endangered	Schedule 2	DFO
Bowhead Whale (Eastern Canada – West Greenland population)	Special Concern	Pending	DFO
Killer Whale (Northwest Atlantic / Eastern Arctic populations)	Special Concern	Pending	DFO
Narwhal	Special Concern	Pending	DFO
Polar Bear	Special Concern	Schedule 1	Government of Nunavut/DFO
Fish			
Atlantic Cod, Arctic Lakes	Special Concern	Pending	DFO
Atlantic Wolffish	Special Concern	Schedule 1	DFO
Bering Wolffish	Special Concern	Schedule 3	DFO
Blackline Prickleback	Special Concern	Schedule 3	DFO
Fourhorn Sculpin	Special Concern	Schedule 3	DFO
Fourhorn Sculpin (Freshwater form)	Data Deficient	Schedule 3	DFO
Northern Wolffish	Threatened	Schedule 1	DFO
Roundnose Grenadier	Endangered	Pending	DFO
Spotted Whitefish	Threatened	Schedule 1	DFO
Thorny Skate	Special Concern	Pending	DFO

¹ The Department of Fisheries and Oceans has responsibility for aquatic species.

² Environment Canada (EC) has a national role to play in the conservation and recovery of Species at Risk in Canada, as well as responsibility for management of birds described in the Migratory Birds Convention Act (MBCA). Day-to-day management of terrestrial species not covered in the MBCA is the responsibility of the Territorial Government. Populations that exist in National Parks are also managed under the authority of the Parks Canada Agency.

Appendix C
Archaeological and Palaeontological Resources Terms and Conditions for Land Use Permit Holders



INTRODUCTION

The Department of Culture and Heritage (CH) routinely reviews land use applications sent to the Nunavut Water Board, Nunavut Impact Review Board and the Indigenous and Northern Affairs Canada. These terms and conditions provide general direction to the permittee/proponent regarding the appropriate actions to be taken to ensure the permittee/proponent carries out its role in the protection of Nunavut’s archaeological and palaeontological resources.

TERMS AND CONDITIONS

- 1) The permittee/proponent shall have a professional archaeologist and/or palaeontologist perform the following **Functions** associated with the **Types of Development** listed below or similar development activities:

	Types of Development (See Guidelines below)	Function (See Guidelines below)
a)	Large scale prospecting	Archaeological/Palaeontological Overview Assessment
b)	Diamond drilling for exploration or geotechnical purpose or planning of linear disturbances	Archaeological/ Palaeontological Inventory
c)	Construction of linear disturbances, Extractive disturbances, Impounding disturbances and other land disturbance activities	Archaeological/ Palaeontological Inventory or Assessment or Mitigation

Note that the above-mentioned functions require either a Nunavut Archaeologist Permit or a Nunavut Palaeontologist Permit. CH is authorized by way of the *Nunavut and Archaeological and Palaeontological Site Regulations*¹ to issue such permits.

- 2) The permittee/proponent shall not operate any vehicle over a known or suspected archaeological or palaeontological site.

¹ P.C. 2001-1111 14 June, 2001

- 3) The permittee/proponent shall not remove, disturb, or displace any archaeological artifact or site, or any fossil or palaeontological site.
- 4) The permittee/proponent shall immediately contact CH at (867) 934-2046 or (867) 975-5500 should an archaeological site or specimen, or a palaeontological site or fossil, be encountered or disturbed by any land use activity.
- 5) The permittee/proponent shall immediately cease any activity that disturbs an archaeological or palaeontological site encountered during the course of a land use operation until permitted to proceed with the authorization of CH.
- 6) The permittee/proponent shall follow the direction of CH in restoring disturbed archaeological or palaeontological sites to an acceptable condition. If these conditions are attached to either a Class A or B Permit under the Territorial Lands Act Indigenous and Northern Affairs Canada directions will also be followed.
- 7) The permittee/proponent shall provide all information requested by CH concerning all archaeological sites or artifacts and all palaeontological sites and fossils encountered in the course of any land use activity.
- 8) The permittee/proponent shall make best efforts to ensure that all persons working under its authority are aware of these conditions concerning archaeological sites and artifacts and palaeontological sites and fossils.
- 9) If a list of recorded archaeological and/or palaeontological sites is provided to the permittee/proponent by CH as part of the review of the land use application the permittee/proponent shall avoid the archaeological and/or palaeontological sites listed.
- 10) Should a list of recorded sites be provided to the permittee/proponent, the information is provided solely for the purpose of the proponent's land use activities as described in the land use application, and must otherwise be treated confidentially by the proponent.

Legal Framework

As stated in Article 33 of the *Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada (Nunavut Agreement)*:

Where an application is made for a land use permit in the Nunavut Settlement Area, and there are reasonable grounds to believe that there could be sites of archaeological importance on the lands affected, no land use permit shall be issued without written consent of the Designated Agency. Such consent shall not be unreasonably withheld. [33.5.12]

Each land use permit referred to in Section 33.5.12 shall specify the plans and methods of archeological site protection and restoration to be followed by the permit holder, and any other conditions the Designated Agency may deem fit. [33.5.13]

Palaeontology and Archaeology

Under the *Nunavut Act*², the federal government can make regulations for the protection, care and preservation of palaeontological and archaeological sites and specimens in Nunavut. Under

² s. 51(1)

the *Nunavut Archaeological and Palaeontological Sites Regulations*³, it is illegal to alter or disturb any palaeontological or archaeological site in Nunavut unless permission is first granted through the permitting process.

Definitions

As defined in the *Nunavut Archaeological and Palaeontological Sites Regulations*, the following definitions apply:

“archaeological site” means a place where an archaeological artifact is found.

“archaeological artifact” means any tangible evidence of human activity that is more than 50 years old and in respect of which an unbroken chain of possession or regular pattern of usage cannot be demonstrated, and includes a Denesuline archaeological specimen referred to in section 40.4.9 of the Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada (Nunavut Agreement).

“palaeontological site” means a site where a fossil is found.

“fossil” includes:

Fossil means the hardened or preserved remains or impression of previously living organisms or vegetation and includes:

- (a) natural casts;*
- (b) preserved tracks, coprolites and plant remains; and*
- (c) the preserved shells and exoskeletons of invertebrates and the preserved eggs, teeth and bones of vertebrates.*

Guidelines for Developers for the Protection of Archaeological Resources in the Nunavut Territory

(**Note:** Partial document only, complete document at: www.ch.gov.nu.ca/en/Archaeology.aspx)

Introduction

The following guidelines have been formulated to ensure that the impacts of proposed developments upon heritage resources are assessed and mitigated before ground surface altering activities occur. Heritage resources are defined as, but not limited to, archaeological and historical sites, burial grounds, palaeontological sites, historic buildings and cairns. Effective collaboration between the developer, the Department of Culture, and Heritage (CH), and the contract archaeologist(s) will ensure proper preservation of heritage resources in the Nunavut Territory. The roles of each are briefly described.

CH is the Nunavut Government agency which oversees the protection and management of heritage resources in Nunavut, in partnership with land claim authorities, regulatory agencies, and the federal government. Its role in mitigating impacts of developments on heritage resources is as follows: to identify the need for an impact assessment and make recommendations to the appropriate regulatory agency; set the terms of reference for the study depending upon the scope of the development; suggest the names of qualified individuals

³ P.C. 2001-1111 14 June, 2001

prepared to undertake the study to the developer; issue an archaeologist or palaeontologist permit authorizing field work; assess the completeness of the study and its recommendations; and ensure that the developer complies with the recommendations.

The primary regulatory agencies that CH provides information and assistance to are the Nunavut Impact Review Board, for development activities proposed for Inuit Owned Lands (as defined in Section 1.1.1 of the *Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada (Nunavut Agreement)*), and the Indigenous and Northern Affairs Canada, for development activities proposed for federal Crown Lands.

A developer is the initiator of a land use activity. It is the obligation of the developer to ensure that a qualified archaeologist or palaeontologist is hired to perform the required study and that provisions of the contract with the archaeologist or palaeontologist allow permit requirements to be met; i.e. fieldwork, collections management, artifact and specimen conservation, and report preparation. On the recommendation of the contract archaeologist or palaeontologist in the field and the Government of Nunavut, the developer shall implement avoidance or mitigative measures to protect heritage resources or to salvage the information they contain through excavation, analysis, and report writing. The developer assumes all costs associated with the study in its entirety.

Through his or her active participation and supervision of the study, the contract archaeologist or palaeontologist is accountable for the quality of work undertaken and the quality of the report produced. Facilities to conduct fieldwork, analysis, and report preparation should be available to this individual through institutional, agency, or company affiliations. Responsibility for the curation of objects recovered during field work while under study and for documents generated in the course of the study as well as remittance of artifacts, specimens and documents to the repository specified on the permit accrue to the contract archaeologist or palaeontologist. This individual is also bound by the legal requirements of the *Nunavut Archaeological and Palaeontological Sites Regulations*.

Types of Development

In general, those developments that cause concern for the safety of heritage resources will include one or more of the following kinds of surface disturbances. These categories, in combination, are comprehensive of the major kinds of developments commonly proposed in Nunavut. For any single development proposal, several kinds of these disturbances may be involved

- *Linear disturbances: including the construction of highways, roads, winter roads, transmission lines, and pipelines;*
- *Extractive disturbances: including mining, gravel removal, quarrying, and land filling;*
- *Impoundment disturbances: including dams, reservoirs, and tailings ponds;*
- *Intensive land use disturbances: including industrial, residential, commercial, recreational, and land reclamation work, and use of heritage resources as tourist developments.*

- *Mineral, oil and gas exploration: establishment of camps, temporary airstrips, access routes, well sites, or quarries all have potential for impacting heritage resources.*

Types of Studies Undertaken to Preserve Heritage Resources

Overview: An overview study of heritage resources should be conducted at the same time as the development project is being designed or its feasibility addressed. They usually lack specificity with regard to the exact location(s) and form(s) of impact and involve limited, if any, field surveys. Their main aim is to accumulate, evaluate, and synthesize the existing knowledge of the heritage of the known area of impact. The overview study provides managers with baseline data from which recommendations for future research and forecasts of potential impacts can be made. A Class I Permit is required for this type of study if field surveys are undertaken.

Reconnaissance: This is done to provide a judgmental appraisal of a region sufficient to provide the developer, the consultant, and government managers with recommendations for further development planning. This study may be implemented as a preliminary step to inventory and assessment investigations except in cases where a reconnaissance may indicate a very low or negligible heritage resource potential. Alternately, in the case of small-scale or linear developments, an inventory study may be recommended and obviate the need for a reconnaissance.

The main goal of a reconnaissance study is to provide baseline data for the verification of the presence of potential heritage resources, the determination of impacts to these resources, the generation of terms of reference for further studies and, if required, the advancement of preliminary mitigative and compensatory plans. The results of reconnaissance studies are primarily useful for the selection of alternatives and secondarily as a means of identifying impacts that must be mitigated after the final siting and design of the development project. Depending on the scope of the study, a Class 1 or Class 2 Permit is required for this type of investigation.

Inventory: A resource inventory is generally conducted at that stage in a project's development at which the geographical area(s) likely to sustain direct, indirect, and perceived impacts can be well defined. This requires systematic and intensive fieldwork to ascertain the effects of all possible and alternate construction components on heritage resources. All heritage sites must be recorded on Government of Nunavut Site Survey forms. Sufficient information must be amassed from field, library and archival components of the study to generate a predictive model of the heritage resource base that will:

- allow the identification of research and conservation opportunities;
- enable the developer to make planning decisions and recognize their likely effects on the known or predicted resources; and
- make the developer aware of the expenditures, which may be required for subsequent studies and mitigation. A Class 1 or 2 permit is required.

Assessment: At this stage, sufficient information concerning the numbers and locations of heritage resources will be available, as well as data to predict the forms and magnitude of impacts. Assessments provide information on the size, volume, complexity and content of a

heritage resource, which is used to rank the values of different sites or site types given current archaeological knowledge. As this information will shape subsequent mitigation program(s), great care is necessary during this phase.

Mitigation: This refers to the amelioration of adverse impacts to heritage resources and involves the avoidance of impact through the redesign or relocation of a development or its components; the protection of the resource by constructing physical facilities; or, the scientific investigation and recovery of information from the resource by excavation or other method. The type(s) of appropriate mitigative measures are dictated by their viability in the context of the development project. Mitigation strategies must be developed in consultation with, and approved by, the Department of Culture and Heritage. It is important to note that mitigation activities should be initiated as far in advance of the construction of the development as possible.

Surveillance and monitoring: These may be required as part of the mitigation program.

Surveillance may be conducted during the construction phase of a project to ensure that the developer has complied with the recommendations.

Monitoring involves identification and inspection of residual and long-term impacts of a development (i.e. shoreline stability of a reservoir); or the use of impacts to disclose the presence of heritage resources, for example, the uncovering of buried sites during the construction of a pipeline.