Ferguson Lake, Nunavut, Winter Route, All Weather Road Route and SeaLink Facility Development Project

Activities	Description
General description of 2024 Activities: Community Engagement, Desktop Assessment, Reconnaissance and Baseline Study Design	The Canadian North Resources Inc. (CNRI) team will work with their supporting consultants that are experienced in environmental training, consultation and engagement in the Kivalliq. Our consultants approach, which is referred to as “Two-Ways of Knowing” is a holistic framework supporting reciprocal training and engagement that goes beyond typical consultation approaches. It integrates Inuit and communities' interests, concerns, cultural priorities, and ways of life into environmental and socio-economic planning and monitoring, and will be used for the Ferguson Lake, NU, Winter Route, All Weather Road (AWR) route and SeaLink Facility Development Project. As part of the 2024 tasks, we will facilitate virtual and in-person meetings, establish an Inuit Advisory Committee, and create plain language newsletters with community input. Workshops, town halls and small focus groups will deepen our collective understanding of human-to-land relationships, identifying areas of significance and blending traditional knowledge with western science through on-the-land workshops. In parallel with consultation and engagement, we will begin evaluating the various road options using technology like GIS (Geographic Information System), LIDAR (Light Detection and Ranging), and our focus will be to complete a thorough desktop analysis to effectively plan and inform Future detailed Baseline Field Studies and Prefeasibility Level Engineering. These tools will help us analyze the land and plan the best routing and SeaLink Facility (SLF) locations. As described in the sub-activities, we will conduct preliminary field studies to; validate our desktop work, inform consultation, create a forum for on-the-land workshops and assist in designing detailed baseline studies that will be undertaken in the future. This will help CNRI make informed decisions about the best road options, while considering the environment, cultural, consultation and engagement with stakeholders. Furthermore, known areas bearing resources and mitigation-sites in the vicinity of proposed AWR routes may be desirable to be accessed. The findings of our work will be swiftly incorporated into CNRI's best practices for baseline studies. The engagement, consultation and community input will shape decision-making frameworks, criteria and weighting of those criteria for the Assessment of Alternatives which may include winter road access or AWR access to a preferred SeaLink Facility. With proper consent, engagement will include note-taking, audio/video recording, photos, and GIS data to capture rights holders' perspectives and inform the future Ferguson Lake Critical Minerals Project.
Consultation and Community Engagement	The CNRI team and its consultants believe the best way to build trust between industry, those identifying as Inuit and other stakeholders, is an approach we call “Two Ways of Knowing.” Most recently, we and the consultants we partner with, draw inspiration from the 2020 publication “Towards Reconciliation: 10 Calls to Action for Natural Scientists Working in Canada,” which calls on scientists to understand and incorporate an Indigenous perspectives on land, to their projects. Lhu'ààn Mân Ku Dań Ashaw, Elder at Kluane First Nation, explains the principle: “In this global change of reconciliation, the first step you’re going to do when looking at the land is ask permission to come here.” She adds, “When you look at this land, lots of people may say, “Gee, nobody lives here.” But the reality is people have walked all through this whole area.” — From the video “Signal Fire,” explaining Towards Reconciliation: 10 Calls for Action. The Two Ways of Knowing approach to engagement is a holistic framework that supports reciprocal training, then moves engagement beyond consultation by integrating Inuit and communities’ interests, concerns, cultural priorities and ways of life into the environment and social planning and monitoring. In doing so, we will facilitate and lead: • Virtual meetings • In-person engagement activities (workshops, small focus groups, town hall style meetings, etc.) • The development of an Inuit Advisory Committee, and

	• Plain language newsletters, review and produced by community members. We will also conduct Two Ways of Knowing workshops to inform a deeper understanding of the human-to-land relationships, and ways of interacting with nature. These workshops will help to: • Identify areas of fisheries, wildlife, heritage and cultural significance; • Learn about local Inuit's traditional data collection techniques. This training will blend traditional ecological knowledge, traditional techniques with western science techniques; • Share information on standard Western science techniques for collecting environmental samples used in aquatic monitoring, terrain, wildlife biology programs, archaeological and land use studies; • Provide an overview and education regarding environmental monitoring; • Ensure endpoints for successful monitoring are aligned with Inuit priorities (i.e. water quality monitoring may include visual surveys of water clarity; fish health may include fish-tasting etc.) As Lhu'ààn Mân Ku Dań Ashaw explains "People can change their relationship with the land and how they're part of the land. How you treat that land and water is really how you're treating yourself." (From the Signal Fire video on the 10 Calls to Action). A diverse group of youth, women and elders will attend these workshops in the community and at the site. Consultations will combine informal discussions and design-thinking tools such as mind-maps, storyboarding, and alternatives assessment exercises to set criteria. Using a design thinking approach, participants will have an opportunity to empathize, define, ideate, prototype CNRI's best practices, ensuring that our project design and environmental assessment concepts are rooted in Traditional Ecological Knowledge and Inuit Qaujimajatuqangit (IQ). Any traditional approaches identified in these sessions can be quickly incorporated into CNRI's best practices. Where necessary, CNRI and our consultants will: • Develop training materials, • Together summarize these materials in newsletters and videos, • Incorporate traditional land use collection methods (ie. ice fishing using gill nets) and locations for monitoring into our environmental baseline programs. Activities and data collection methods suggested by local participants will not necessarily follow the standard "Gantt" or "Waterfall" timeline schedule found in most engineering projects. Nevertheless, by offering a deeper understanding of the region's environment, wildlife, fishery and heritage, Nunavummiut will be actively helping to develop sustainable practices for the Ferguson Lake Critical Mineral Project, specifically related to the AWR and SeaLink facilities. The input will inform the Options Analysis, future Environmental Assessments, supporting regulatory documents and decision-making frameworks for the project. Upon receiving appropriate consent and permission to study the land, the engagement and consultation process will include note taking, audio and video accounts, photos, and GIS data to ensure locations and views of Inuit rights holders are captured. The end goal of our virtual meetings and workshops will be to gather IQ and integrate them into the options analysis and the future baseline study approach.
Wildlife, Terrain & Ecological Land Classification	CNRI will be conducting preliminary wildlife, terrestrial and terrain assessments along the future AWR corridors from the Ferguson Lake project to Baker Lake or Arviat, Kivalliq. Digital data collection is crucial for the activity because we'll be using Geographic Information Systems (GIS) to analyze habitat suitability and Ecological Land Classification (ELC). Digital data currently available for the study area includes: • CanVec Hydrology and Elevation (Natural Resources Canada) • GIS Landcover mapping data from 2000 (1:250,000, provided by GeoBase); • Canadian Digital Elevation Mapping (1:250,000, provided by GeoBase); • Bing Maps aerial imagery web mapping Additionally, if it proves cost-effective, we will obtain LIDAR maps for the corridors and potentially high-resolution satellite imagery to enhance the baseline data collection. Following the preliminary analysis of the various routes, we will conduct on-site investigations to verify the precise location and composition of various ecological communities identified in the Ecological Land Classification (ELC) units for habitat suitability models. During these field activities, we will strategically deploy Reconyx wildlife cameras

	equipped with motion detection capabilities to passively (ie not impact wildlife) and continuously monitor wildlife movements throughout the AWR and SLF project area. Subsequently, we will analyze the comprehensive dataset gathered from both the desktop work and our preliminary fieldwork. Our final step will involve synthesizing this information into a report. This report will provide an initial understanding of terrestrial habitats and recommend optimal locations for ongoing wildlife monitoring and narrow down the routing options. To ensure accuracy and relevance, these findings will be thoroughly discussed and validated through consultations with land users and focus groups. The resulting data will contribute significantly to establishing a baseline understanding of the terrestrial ecosystem along the AWR routing options. We will also collect Wildlife, Terrain & Ecological Land Classification data near Ferguson Lake Camp.
Hydrology, Aquatic & Fisheries	CNRI will be initiating hydrology, aquatic, and fisheries studies for the future AWR routes, focusing on water crossings. Initially, we'll perform a desktop analysis to document and recommend routes with minimal crossings or reduced potential impacts on fisheries, using maps and GIS files. Before going into the field and deploying underwater cameras, we'll present a concise overview of our desktop findings to CNRI and conduct field reconnaissance, including aerial surveys to capture images of all watercourse crossings. As early as possible in August, we plan to install underwater cameras at key crossings and undertaking field data collection and hydrological studies to enhance our understanding of waterways and fisheries habitats. As part of our approach, we will also collect water quality and environmental DNA (eDNA) samples at major watercourses along the potential AWR routes. Following the completion of fieldwork, we will deliver a comprehensive final report summarizing our findings that will inform Activity 2: detailed field baseline studies. We will also collect Fisheries, Habitat and Aquatic data near the Ferguson Lake Camp.
	Anticipated Outcome(s) and Indicator(s)

The following are anticipated outcomes and indicators for Activity 1:

- Facilitate virtual and in-person meetings, establish Inuit Advisory Committee, create plain language newsletters with community members input.
- Host workshops to deepen understanding of human-to-land relationships, blending traditional knowledge and western science.
    - Participation of community members: include youth, women, elders in consultations.
- Narrow AWR options from at least 4 to 2 using GIS, LIDAR, desktop planning, site reconnaissance and field studies.
- Brief field studies validate desktop work and help design detailed baseline studies from 2025 to 2027. Preliminary Baseline Reports will include:
    - Sub-activity – Wildlife, Terrain and ELC Results
    - Sub-activity – Hydrology, Aquatic and Fisheries Results
- Community insights contribute to baseline data, sustainable practices for Ferguson Lake project and IDEA planning:
    - Detailed Engagement includes: consent, note-taking, recording, photos, videos
    - On-the-land Two ways of knowing workshops with elders, youth, biologists, scientists and archaeologists.
    - 30% Nunavummiut employment for all activities and tasks based in Kivalliq.
- Ultimate Outcome: gather and test the cumulative traditional knowledge and western science results for design of detailed baseline studies; all of which will be integrated into prefeasibility level engineering and the assessment of alternatives for the project.