KINROSS Great Bear

Great Bear Gold Project
Impact Statement

Summary

Table of Contents

Figures

Acronyms and Abbreviations

ALIA	Anishinaabe Led Impact Assessment
ANA	Asubpeeschoseewagong Netum Anishinabek (Grassy Narrows First Nation)
Con	Construction phase
Cl	Closure phase
fVC	Valued component under federal jurisdiction
Great Bear Resources	Great Bear Resources Ltd.
IAAC	Impact Assessment Agency of Canada
LSA	Local study area
LSFN	Lac Seul First Nation
NWOMC	Northwestern Ontario Métis Community
Project	Great Bear Project
Property	Great Bear Property
pVC	Pathway valued component
WFN	Wabauskang First Nation

1 Introduction and Overview

1.1 Proponent and Project Location

The Great Bear Gold Project (Project) is being proposed by Great Bear Resources Ltd. (Great Bear Resources), a subsidiary of Kinross Gold Corp., with the aim of developing an open pit and underground gold mine and processing facility. Kinross Gold Corp. is a Canadian-based, senior gold and silver mining company listed on the Toronto Stock Exchange and New York Stock Exchange. Kinross Gold Corp. proposes to develop and operate the Project in order to provide shareholders with a reasonable return on investment.

The Project is located in northwestern Ontario, southeast of Red Lake and northwest of Ear Falls (Figure 1). The Great Bear Property (Property) is located within Treaty No. 3 territory and Métis Nation of Ontario - Region 1. There are no Project facilities proposed on or near reserve lands. The focus of Indigenous consultation and engagement activities with the Project to date has been with identified potentially affected Indigenous communities. The following Indigenous Nations were engaged Great Bear Resources prior to, and during preparation of this Impact Statement:

- Asubpeeschoseewagong Netum Anishinabek (Grassy Narrows First Nation; ANA)
- Lac Seul First Nation (LSFN)
- Northwestern Ontario Métis Community (NWOMC)
- Wabauskang First Nation (WFN).

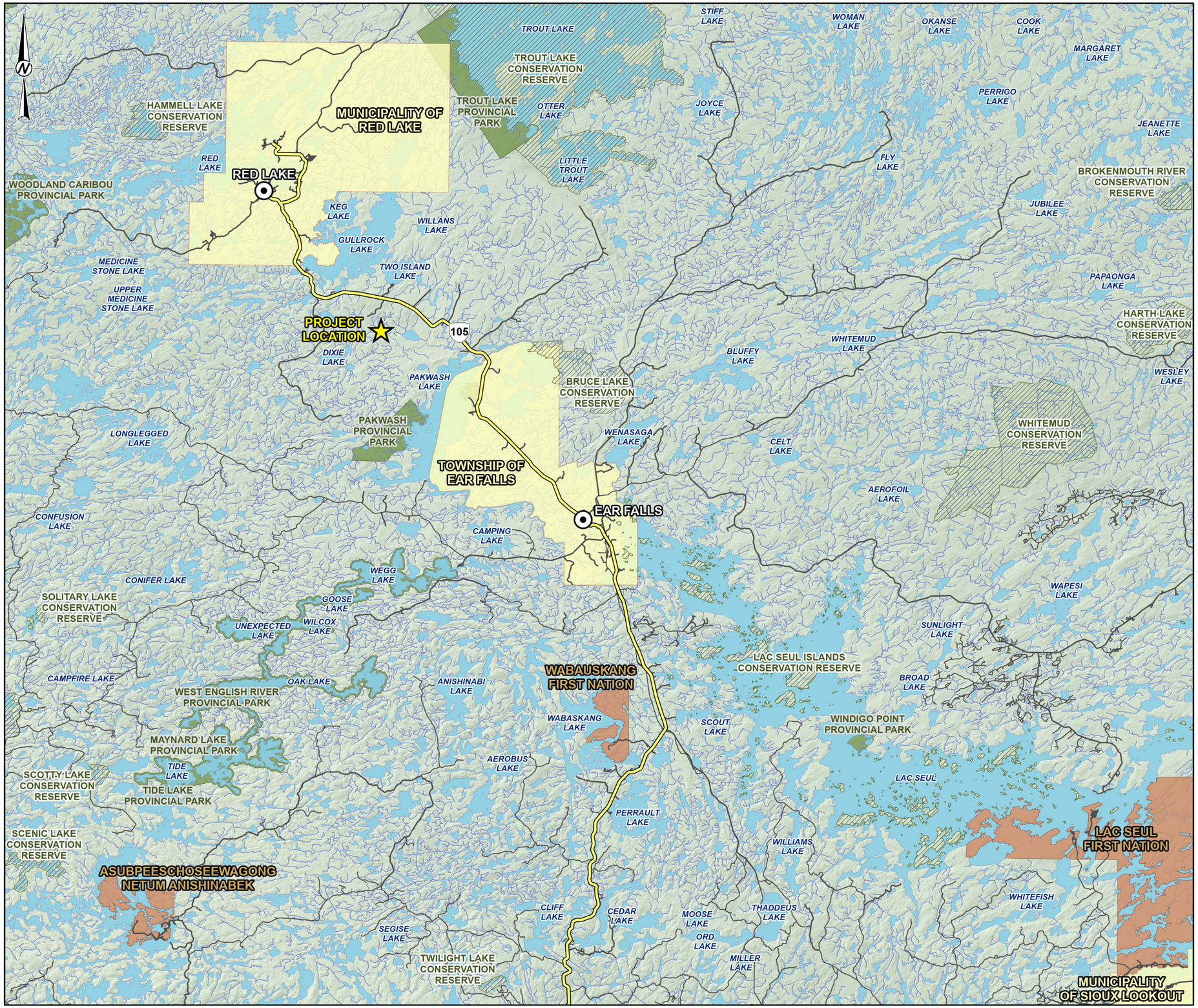
1.2 Project Overview

The Project seeks to establish a long-term presence in the region, guided by Great Bear Resources' core values: putting people first, outstanding corporate citizenship, high performance culture and rigorous financial discipline. The Project is expected to generate significant economic benefits, including $18.9 billion in gross domestic product, over 113,000 person-years of employment and substantial government revenues. The majority of the workforce will be sourced locally, with a focus on Indigenous hiring.

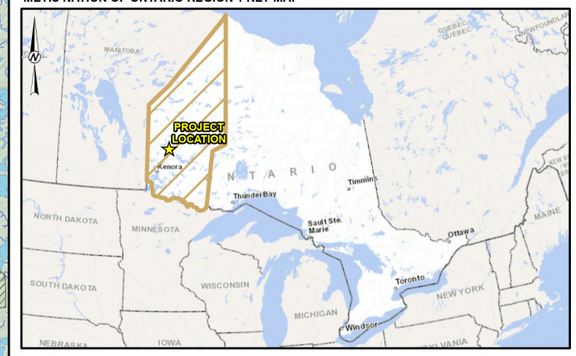
The Project will include underground workings, two open pits, processing facilities and supporting infrastructure on the Property. Ore extraction and processing will occur at up to 15,000 tonnes per day for approximately 26 years.

1.3 Regulatory Framework

The Impact Assessment Agency of Canada (IAAC) determined that a federal Impact Assessment is required for the Project due to the scale of mining and milling activities. Submission of this Impact Statement is part of the Impact Assessment process intended to meet the requirements of the Tailored Impact Statement Guidelines for the Project. The Project must also meet other applicable provincial and other federal regulatory requirements.



MÉTIS NATION OF ONTARIO REGION 1 KEY MAP



SCALE: 1:500,000

LEGEND

- PROJECT LOCATION
- TOWN
- LOWER TIER MUNICIPAL BOUNDARY
- FIRST NATION RESERVE
- MÉTIS NATION OF ONTARIO REGION 1 (SHOWN IN KEY MAP)
- CONSERVATION RESERVE
- PROVINCIAL PARK
- HIGHWAY
- LOCAL ROAD
- RESOURCE / RECREATION ROAD
- WATERCOURSE
- WATERBODY

0 5 10 20
1:500,000 KILOMETRES

NOTE(S)
1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)
1. CONTAINS INFORMATION LICENSED UNDER THE OPEN GOVERNMENT LICENCE - ONTARIO
2. COORDINATE SYSTEM: NAD 1983 UTM ZONE 15N

CLIENT
GREAT BEAR RESOURCES

PROJECT
GREAT BEAR PROJECT

TITLE
PROJECT LOCATION AND LOCAL COMMUNITIES

CONSULTANT
wsp

YYYY-MM-DD	2026-03-31
DESIGNED	----
PREPARED	MD
REVIEWED	----
APPROVED	SD

PROJECT NO.	CONTROL	REV.	FIGURE
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1.4 Valued Components

The Impact Statement is required to identify valued components to focus the Impact Statement when characterizing changes to the environment. Valued components are components of the natural and human environment that are of particular concern or value to participants and that may be affected by the Project. The federal Impact Assessment process is intended to prevent or mitigate significant adverse effects within federal jurisdiction and significant direct or incidental adverse effects. Two types of valued components have been identified:

- Valued components within federal jurisdiction (fVCs): fish and fish habitat, migratory birds, Indigenous Peoples (including community services, land use, heritage, well-being and health).
- Valued components that provide a pathway through which the Project may affect fVCs, termed pathway valued components (pVCs): air quality, sound, vibration, groundwater, surface water flows and levels, water quality, vegetation, Wild Rice, Moose, Species at Risk, other wildlife, land and resource use, cultural heritage, archaeology and economy.

This framework allows for an integration of environmental aspects under both federal and provincial jurisdiction, with other components of interest to better accommodate an ecosystem approach.

1.5 Impact Statement Structure

The Impact Statement provides:

- Background information (Sections 1, 2 and 3)
- Assessment of alternatives (Section 4)
- Description of the Project (Section 5)
- Characterization of potential changes to the environment (Section 6 to Section 18)
- Framework for confirming assessment of changes (Section 19 and Section 20)
- Conclusions and author qualifications (Section 21 and Section 22).

Appendices provide further information, such as environmental baseline reports, technical documents such as modelling and assessment reports and copies of information intended to support the progression of environmental approvals in parallel with federal Impact Assessment process.

2 Environmental Setting

2.1 Land Use

The Project is situated in the unorganized territory, District of Kenora, in northwestern Ontario. Great Bear Resources is the 100% owner of the 11,780 hectare Property consisting of mining claims and leases. There are three major regional infrastructure facilities that are nearby or overlap portions of the Property:

- Provincial Highway 105
- Enbridge Gas regional natural gas pipeline
- Hydro One Networks Inc. 115 kilovolt transmission line and local distribution lines.

The Crown Land Use Policy Atlas identifies the Project site as within land use code General Use Area G2514 (Red Lake – General Use Area). Mining-related land use activities are permitted within this area, subject to provincial review and evaluation.

2.2 Topographic, Ground Water and Surface Water

Topography across the Property is rugged as is typical of northern Ontario. A local higher ridge within the Property runs approximately northwest to southeast, parallel to Highway 105. The elevation range on the Property is roughly 350 to 455 metres above sea level.

The hydrogeologic system at the Property consists of bedrock that is overlain by Quaternary deposits (overburden) of varying thickness. Groundwater flow is toward lower elevations, and occurs mainly within the more permeable portions of the overburden (sand deposits, glaciolacustrine clay and silt, and glacial till) with relatively little groundwater movement occurring in the bedrock.

The Project is located within the Chukuni River watershed above Pakwash Lake, which is part of the greater English River watershed. The Project is situated mainly in the Dixie Creek subwatershed, with a large portion of the Property located to the north of Dixie Creek. Dixie Creek is situated in the most pronounced low-lying area within the Property, meandering through a flat low-lying area towards its confluence with the Chukuni River outside the eastern Property boundary, and upstream of Pakwash Lake.

Multiple years of water quality data are available from many of the local waterbodies and watercourses. Existing groundwater and surface water quality is representative of a natural, mineralized area in northern Ontario. pH is typically near neutral in the samples collected. Some metals are higher at some monitoring stations at some times of the year, including arsenic, cobalt, copper and iron at times. Total and dissolved mercury concentrations are very low in the PA and were often below detection limits.

2.3 Fisheries and Terrestrial Resources

Fish habitat assessments across local waterbodies and watercourses identified diverse fish communities, including species common in northern Ontario, such as Walleye, Northern Pike, Yellow Perch, White Sucker, and others including small-bodied fish like shiner minnow species. Mercury concentrations in fish tissue generally fall below consumption guidelines for the general public, but exceed thresholds for sensitive groups in some locations. Sediment quality shows

elevated organic carbon and metals like arsenic, chromium and nickel. Benthic invertebrate communities vary in abundance and diversity, with some natural fluctuations observed.

The Property is dominated by boreal upland conifer and deciduous forests, conifer swamps, and wetlands including meadow marshes and shore fens. Wildfire and development have influenced forest age distribution. A total of 331 vascular plant species, including 42 non-native species, and 77 fungi species have been documented. Wild Rice stands are present at Unnamed Waterbody 1 and Unnamed Waterbody 6. Wild Rice stands are culturally significant to Indigenous Nations.

Wildlife habitats are diverse and reflect a northern Ontario, boreal ecosystem. Baseline studies recorded 36 mammal species in the local area including Moose, Grey Wolf and Black Bear, and 153 bird species, including both migratory and game birds. Amphibian, reptile and insect species were also observed.

Several Species at Risk species or habitat were confirmed on the Property, including five Species at Risk bats (Little Brown Myotis, Northern Myotis, Hoary Bat, Silver-haired Bat and Eastern Red Bat), Wolverine, Rusty Blackbird, Short-eared Owl, Snapping Turtle and Yellow-banded Bumble Bee. No Boreal Caribou were observed on the Property, however the entirety of the Project Area (PA) is considered to be low-quality habitat. There are no Species at Risk fish present locally.

2.4 Human Environment

The region has a low population density with nearly half identifying as Indigenous. In the broader Kenora District, the healthcare and social assistance sector makes up the largest workforce; however within municipalities and communities local to the Project, the workforce includes larger numbers involved in the mining and quarrying. Employment rates and sector participation vary across communities, with gender differences noted in workforce participation and unemployment.

Cultural heritage assessments identified potential heritage landscapes on the Property. A Wild Rice (manoomin) stand at Unnamed Waterbody 1 within the PA has been identified as a cultural heritage resource.

Stage 1 through Stage 4 terrestrial archaeology assessments were completed within the Property. The only identified site within the PA located near Unnamed Waterbody 1, yielded lithic and ceramic artifacts indicative of short-term resource gathering occupations. Great Bear Resources plans to avoid disturbance of this site with protective buffers. No marine archaeological materials were found in the surveyed waterbodies within the PA.

3 Participation and Engagement

Great Bear Resources frames engagement as the central thread of its Impact Assessment process, with a consistent emphasis on early dialogue, capacity support, transparent information sharing, and the systematic incorporation of Indigenous knowledge and community input into project design, environmental baseline programs, alternatives, effects and mitigation and follow-up monitoring. This assessment consolidates multi-year records from the planning phase through the phased submission of the Impact Statement, highlighting how feedback from Indigenous communities, governments, stakeholders and the public has shaped the Project.

3.1 Identification of Interested Parties

The Project lies within the traditional lands of Treaty 3 Anishinaabe Nations and the Northwestern Ontario Métis Community (NWOMC). The IAAC identified communities as rights holders with potential for Project interactions with Section 35 of the *Constitution Act*:

- Asubpeeschoseewagong Netum Anishinabek (ANA)
- Lac Seul First Nation (LSFN)
- Wabauskang First Nation (WFN)
- NWOMC
- Indigenous Peoples living in the Red Lake, Ontario and Ear Falls, Ontario area.

Great Bear Resources' approach recognizes that Indigenous communities are rights holders, not stakeholders, and engagement has been both community-specific and adaptive to each community's preferences, protocols, timelines, and technical review needs.

Beyond Indigenous rights holders, Great Bear Resources has engaged federal departments (e.g., IAAC, Environment and Climate Change Canada, Fisheries and Oceans Canada and Transport Canada), provincial (Ontario) ministries (e.g., Ministry of Energy and Mines, Ministry of the Environment, Conservation and Parks, Ministry of Natural Resources and Ministry of Transportation), and local municipal governments.

A broad set of local organizations, service providers, businesses, educators, health and social agencies, trapline holders, and recreation groups have also been informed and involved through meetings, open houses, site visits and targeted updates.

The range of participants and their varied mandates supports a layered engagement program. For instance, technical agencies have focused on: water quality, sulphate and methylmercury dynamics, fish and fish habitat and offsetting, air quality, navigation and cumulative effects. Municipal and service organizations have emphasized: workforce, training, housing, health system capacity, public safety and infrastructure. Community groups have prioritized transparency, access to information and long-term environmental monitoring.

Great Bear Resources' record of consultation is managed in a computer software program Borealis that can generate documents that summarize distinct consultation events so that each question or concern is traceable to a response. Appendix C of the Impact Statement provides a compilation of these records.

The Tailored Impact Statement Guidelines issued by IAAC require that Great Bear Resources keep a complete record of consultation methods and results, including both successful and unsuccessful efforts to reach participants, as well as the demonstration of how public and Indigenous input affected the analysis and conclusions of the Impact Statement. The key impact assessment milestones where Great Bear Resources provide Project information and consultation opportunities are summarized in the table that follows.

Assessment Milestone	Documents Available	Consultation Activities on Key Assessment Milestone
Consultation Approach	Indigenous Communities: • Capacity and Community Benefit Agreements (Confidential). • Métis Nation of Ontario standard Consultation Protocol.	• Environmental Management Committee (EMC) meetings discussing consultation approach • Community meetings with Indigenous communities • Through community engagement it was determined that monthly engagements in both LSFN and WFN were important to ensure meaningful consultation and that these meetings should be administered with the support of EMC representatives which informed the engagement schedule for 2025 and onward • A Workplan set out the engagement activities with NWOMC in alignment with the Protocol received, to include quarterly meetings with the Regional Consultation Committee, a communication plan, and two community information sessions with Métis Nation of Ontario citizens living in Region 1

Assessment Milestone	Documents Available	Consultation Activities on Key Assessment Milestone
Baseline Studies	Presented at Public Information Sessions / Discussed with Stakeholders: • Baseline studies • Project Overview • Water Management and Quality • Fish Habitat Government Meetings, Discussions, Presentations and Indigenous Community Meetings: • Fisheries Baseline Report • Hydrology Baseline Report • Water Quality Baseline Report • Aquatic Resources Baseline Report • Socio-economic Baseline Report • Species at Risk Baseline Work and Overall Benefit Permit • Aquatic Monitoring Program • Technical supporting documents In-community Indigenous Workshops: • Species at Risk / Interest Workshops • Fish Compensation • Cumulative effects • Alternatives assessment Archaeological Assessments: • Decisions and findings brought to Indigenous communities Indigenous Review Teams and Anishinaabe Led Impact Assessment (ALIA): • Provided materials for review and to assist with the baseline information needed for the ALIA	• Project Notices • Public Information Sessions • Stakeholder Meetings • Government Meetings Document Sharing • Presentations • Archaeological Assessments • Indigenous Review Team Meetings • Indigenous Community Meetings • Environmental Management Committee Meetings
Initial Project Description and Detailed Project Description	Initial Project Description and Detailed Project Description: • Circulated to Indigenous communities and Government Agencies for review and comment	• Government Meetings Document Sharing • Presentations • Indigenous Review Team Meetings • Indigenous Community Meetings • EMC Meetings

Assessment Milestone	Documents Available	Consultation Activities on Key Assessment Milestone
Effects Assessment / Phased Submission	Updates with Government Agencies: • Methylmercury Study and Planning • Draft Fish Habitat Offsetting and Compensation Plan • Alternatives Assessment • Cumulative Effects Methodology • Valued Components • Alternatives Assessment • Technical supporting documents Indigenous Review of Documents: • Methylmercury Study and Planning • Draft Fish Habitat Offsetting and Compensation Plan • Navigability Designation • Cumulative Effects Methodology • Valued Components • Alternatives Assessment • Technical Supporting Documents • Indigenous Peoples Effects Assessment Sections • Health Effects Workshop Indigenous Knowledge: • Support given for Indigenous knowledge reports Phased Submission: • Preliminary information, drafts and Submission 1 and Submission 2 of the Impact Statement have been provided to Indigenous communities, government agencies and stakeholders	• Project Notices • Newsletter • Project Facebook Page • Government Meetings • Document Sharing • Presentations • Indigenous Review Team Meetings • Indigenous Community Meetings • EMC Meetings

The Tailored Impact Statement Guidelines also directs explicit attention to inclusive participation to support Gender-based Analysis Plus (also known as GBA Plus), and to provide clear documentation of how Indigenous knowledge informed biophysical, social, cultural, economic and health assessments. For that reason the Great Bear Resource' engagement record spans notices, briefings, technical workshops, data sharing (including shapefiles and model inputs), and iterative document exchanges across environmental baseline, alternatives, effects and mitigation, and follow-up monitoring.

Great Bear Resources have funded an independent ALIA that is a joint undertaking between LSFN and WFN. The ALIA is an independent decision making process and is guided by Anishinaabe law, ensuring that the assessment reflects community priorities, lived experience, and Indigenous governance. The ALIA timing and scope has been established so that the ALIA evaluation of impacts, potential mitigation, and structured decision-making can inform and be recognized alongside the federal impact assessment process. An additional key undertaking is the Shared Spirits water monitoring program, a partnership between WFN and LSFN. This initiative brings together science and Anishinaabe knowledge to monitor long-term changes in water quality, aquatic ecosystems and toxicity risks across the traditional territory.

3.2 Approach to Indigenous Consultation

Great Bear Resources' engagement is anchored in international mining good practice (including the Responsible Gold Mining Principles), Great Bear Resources Social Performance Management System, and internal governance that assigns accountability for social performance to Project leadership. Great Bear Resources maintains a formal grievance process accessible by email and via an online portal.

Great Bear Resources produces engagement materials in accessible formats and shares sections and technical documents for review prior to filing where feasible, to maximize the time that Indigenous communities have for technical analysis and to facilitate validation of how Indigenous knowledge, traditional knowledge land and resource use study and socio-economic information is interpreted in the Impact Statement. The mix of tools, briefings, technical workshops, data-sharing links, in-community sessions, open houses, and social channels, reflects the emphasis of the Tailored Impact Statement Guidelines on inclusive and adaptive engagement.

3.3 Consultation Activities

Great Bear Resources is committed to contributing to community-level initiatives designed to mitigate direct and indirect effects while maximize benefits including: participation in municipal health recruitment efforts, education partnerships, science, technology, engineering and mathematics programming, and support for social services and emergency response capacity. Regional economic development organizations and post-secondary partners have been engaged to align skills training and supplier development with the Project's construction and operations timeline, including opportunities for Indigenous businesses. These actions are reflected in the impact assessment sections and in commitments to report outcomes and adapt strategies as community conditions evolve.

Great Bear Resources used a wide range of consultation tools to support engagement on the Project. These tools helped share Project information and gather input at key stages in the development of the final Impact Statement. The consultation methods and activities are summarized in the table that follows.

Consultation Type	Activities
Project Notification and Availability of Information	• Project Notices: related to consultation opportunities and key process milestones • Newsletters: to provide timely and relevant information to the community • Project Facebook Page: a widely accessible venue for interest parties to obtain and Project information and seek information regarding participation • Community Relations Email: an additional forum for interested parties to connect with Great Bear Resources representatives regarding the Project • Local Project Office: to establish a local presence and focus consultation efforts in the community
Public Consultation Opportunities	• Public Information Sessions: held throughout the Impact Statement process to present Project information and provide opportunities for input; some series of Public Information Centres also included Indigenous community open houses that were not open to the public • Stakeholder Meetings: to supplement information provided by email, telephone, and at Public Information Centre events, and allow Great Bear Resources to focus attention on the specific comments and questions of a particular stakeholder or group
Government Consultation Opportunities	• Government Meetings: to discuss and resolve specific technical comments, supplement input provided through Government Review Team meetings, and continue discussions on outstanding questions and comments identified through previous meetings or correspondence • Document Sharing: Great Bear Resources circulated copies of applicable documents to various government departments as needed to gather feedback on aspects of the Project and obtain guidance • Presentations: Great Bear Resources presented on the progress of the Project and the Impact Statement progress in person or virtually to various government agencies and ministries
Indigenous Consultation Opportunities	• Capacity and Community Benefit Agreements: signed with communities to provide capacity and assistance during the IS process and the duration of the Project • Support for the Completion of Traditional Knowledge and Land Use Studies: to develop a strong understanding of the historic and current uses of the land and resources that may be affected by the Project • Support for Indigenous Technical Review Teams: to provide third-party review capacity and a forum for technical discussions focused on community topics of interest • Indigenous Community Meetings: to provide information in a timely manner to, and to collect information on and understand the comments and feedback from local Indigenous communities • ALIA: to share information and support to the ALIA team and the ALIA process • EMC: to participate in monthly meetings with members in order to facilitate information sharing and extend opportunities for participation and transparency when applicable to the Project

3.4 Input and Feedback from Consultation

Great Bear Resources approach to Indigenous knowledge is rooted in respect for community protocols, confidentiality and data sovereignty. Where traditional knowledge and land use study reports have been shared (by LSFN, WFN and NWOMC), the Impact Statement considered that information in baseline descriptions and effects pathways. Where studies are in progress or where community direction limits data sharing with Great Bear Resources (ANA), the Impact Statement uses secondary sources and transparent, conservative assumptions. Continuous validation outreach such as providing reports for review, allows communities to see how their traditional knowledge has been considered in the Impact Statement.

Asubpeeschoseewagong Netum Anishinabek (ANA)

Engagement with ANA commenced in 2022, through correspondence, meetings and document exchange, discussing water quality and fish, methylmercury pathways, archaeology and consultation protocols. ANA has consistently underscored the community's lived experience with mercury contamination downstream and expressed expectations that Project activities should not contribute additional risk. In response, Great Bear Resources prepared and shared a comprehensive Mercury Study Plan, expanded baseline sampling (including fish tissue and far-field stations), and integrated desulphurization of tailings as well as reverse osmosis treatment to reduce sulphate concentrations in final effluent. This approach has been designed to address the biogeochemical conditions that can promote mercury methylation in sediments and biota. Great Bear Resources also funded a capacity agreement for ANA and provided Project documents for review.

Parallel to mercury-related discussions, ANA requested timely sharing of archaeology reports and asked that communications proceed through the ANA Land Protection Team. Great Bear Resources consolidated archaeological work with baseline packages, re-issued files upon request, and confirmed archaeology is assessed both in cultural heritage and Indigenous Peoples sections of the Impact Statement. Preservation commitments are carried forward into the Project design and monitoring. The ANA Land Use and Occupancy Study has not been shared with Great Bear Resources, and the Impact Statement therefore utilizes secondary sources where appropriate, and documents outreach with clear acknowledgement of community direction.

Environmental baseline documents and other technical supporting documents included as appendices to the Impact Statement were shared with ANA throughout 2025, prior to the formal submittal to IAAC. Submission 1 and Submission 2 of the Impact Statement were also shared. Great Bear Resources provided a copy of the Analysis of Changes to Indigenous Peoples - ANA, and Analysis of Changes to Indigenous Peoples in Red Lake and Ear Falls sections of the Impact Statement with ANA, as well as a presentation for review on potential health effects to Indigenous people in February 2026. This approach aimed to maximize the time for ANA review.

Lac Seul First Nation (LSFN)

Engagement with LSFN began in 2017, and is closely coordinated with Wabauskang First Nation through joint agreements and shared structures such as the EMC and the ALIA independent decision-making process. LSFN has emphasized the importance of water protection, fisheries, cultural heritage, wild rice revitalization, Species at Risk, wildlife (including moose), and closure plans in relation to LSFN land use plans.

Responding to LSFN input, Great Bear Resources funded the Chukuni Watershed Aquatic Monitoring Program to enhance Nation capacity in community-based monitoring and eDNA studies, expanded surface water and mercury baseline studies, and invested in a Wild Rice Enhancement Project. The Wild Rice Enhancement Project, led by Lakehead University and partners, is intended to support knowledge building, and broader wild rice revitalization projects in the local area, advancing understanding, and recovery of this culturally and ecologically important plant.

Great Bear Resources held workshops on fish habitat offsetting and compensation, Species at Risk, mine closure scenarios and effects assessment, and shared Impact Statement Submission 1, Impact Statement Submission 2 and targeted technical supporting documents to enable rigorous third-party review commissioned by the Nation.

Findings from the LSFN traditional knowledge and land use study report has been incorporated across the Impact Statement valued components, with attention to place-based priorities and a conservative analytic approach where specific locations remain confidential. Workshops and open houses in Frenchman's Head, Kejick Bay and Whitefish Bay, created multiple entry points for community members, while monthly in-community sessions provided continuity and responsiveness. These sustained interactions influenced the Project's water treatment selections, fish offsetting design, monitoring scope and closure planning refinements. They also informed how Great Bear Resources linked effects assessment to post-approval follow-up with Indigenous participation.

The validation step undertaken by Great Bear Resources included providing the LSFN and WFN communities with the Analysis of Changes to Indigenous Peoples sections - LSFN, Analysis of Changes to Indigenous Peoples - WFN, and Analysis of Changes to Indigenous Peoples in Red Lake and Ear Falls sections to verify that the traditional use and Indigenous knowledge shared with Great Bear Resources has been considered and interpreted appropriately. It is important to acknowledge that the validation step is not a sign-off from communities on the conclusions in the sections; although information included within the sections may be considered to inform the independent ALIA decision making process. A letter was received on January 20 2026 from Chief Bull (LSFN) to confirm that the validation process had been completed. A workshop was also held on February 19, 2026 to discuss and present health effects.

Wabauskang First Nation (WFN)

As LSFN's joint partner in ALIA and in the EMC, WFN has pursued a parallel yet community-specific path with Great Bear Resources, focusing on fisheries, water quality, Species at Risk, archaeology and mine closure. The WFN traditional knowledge and land use study report highlights land-based activities, harvesting and spiritually significant places, reinforcing the need for careful design of fish habitat offsetting and watershed monitoring throughout all phases of the Project.

Great Bear Resources held workshops on fish habitat offsetting and compensation, Species at Risk, mine closure scenarios and effects assessment. The Impact Statement Submission 1 and Submission 2 and targeted technical supporting documents were shared to enable rigorous third-party review commissioned by the Nation. The archaeology protection commitments for the Project reflect guidance from WFN, and are integrated within closure land-use planning.

The validation step undertaken by Great Bear Resources included providing the WFN (and the LSFN) communities with the Analysis of Changes to Indigenous Peoples sections - WFN,

Analysis of Changes to Indigenous Peoples - LSFN, and Analysis of Changes to Indigenous Peoples in Red Lake and Ear Falls sections to verify that the traditional use and Indigenous knowledge shared with Great Bear Resources has been considered and interpreted appropriately. This validation step is not a sign-off from communities on the conclusions in the sections. The information included within the Impact Statement sections may be considered to inform the independent ALIA decision making process. A letter was received on January 20, 2026 from Chief Petiquan (WFN) to confirm that the validation process had been completed. A workshop was also held on February 19, 2026 to discuss and present health effects.

Northwestern Ontario Métis Community (NWOMC)

NWOMC and Great Bear Resources established a Relationship Building and Capacity Agreement in November 2024, with a focus on effective participation in the regulatory process, quarterly Regional Consultation Committee meetings, and a negotiated path toward a Community Benefit Agreement.

The NWOMC traditional knowledge and land use study progressed from preliminary to final in 2025. The study results are reflected in the land use, culture and socio-economic analyses in the Impact Statement. NWOMC was engaged on mercury study design, and potential economic inclusion via employment and supplier development. Great Bear Resources has documented how NWOMC comments informed effect pathways and monitoring design and how Métis cultural values appear in the selection and assessment of valued components in the Impact Statement.

Environmental baseline reports and other technical supporting documents included in the Impact Statement were shared throughout 2025 with NWOMC, prior to the formal submittal to IAAC. The Impact Statement Submission 1 and Submission 2 were also shared. Great Bear Resources provided the Analysis of Changes to Indigenous Peoples - NWOMC and Analysis of Changes to Indigenous Peoples in Red Lake and Ear Falls sections to verify that the traditional use and Indigenous knowledge shared with Great Bear Resources has been considered and interpreted appropriately. A presentation for review on health effects was also shared with the NWOMC in February 2026. This approach aimed to maximize the time for NWOMC review.

Government Agencies

Engagement with government agencies has been ongoing and iterative, often organized around biweekly coordination with IAAC and technical topics with a larger government review team through key issue briefings. The government review team included: IAAC, Environment and Climate Change Canada, Fisheries and Oceans Canada, Indigenous Services Canada, Natural Resources Canada, Transport Canada, Ministry of Energy and Mines, Ministry of the Environment, Conservation and Parks and Ministry of Natural Resources, with participation varied depending on the topic. Great Bear Resources focused on migratory birds, water management, aquatic effects and fish and fish habitat offset measures, and also included methylmercury bioaccumulation modelling in fish and consumption of fish by Indigenous people. The documented exchanges and agency feedback resulted in refinements to modelling inputs, monitoring designs, mitigations and fish offset packages.

Stakeholders and the Public

Municipal briefings with Red Lake and Ear Falls representatives, health service providers, education institutions, economic development bodies and community organizations focused on practical, place-based priorities: workforce accommodation and planning, training pipelines for local and Indigenous job seekers, healthcare capacity and recruitment, public safety and infrastructure readiness. Regular meetings with Municipal leaders as invited, were held to encourage strong collaboration and positive relationships.

Great Bear Resources responses include the development of accommodation strategies, targeted training and recruitment initiatives, support for community health and social services (including direct funding contributions), and an open approach to information sharing through: newsletters, a Project Facebook page, open houses and site tours. Public Open Houses were held in Red Lake and Ear Falls biannually to provide Project updates. Effects Assessment workshops were also held for interested stakeholders.

3.5 Influence of Consultation on Impact Assessment

Opportunities to provide input on the Impact Statement have been regularly provided during its preparation. These efforts have been summarized in the table that follows, with correspondence logs and records provided in the Record of Engagement included as Appendix C to the Impact Statement.

Impact Statement Topic	Influence of Consultation
Environmental Baseline Studies	• Environmental Baseline Studies: Opportunities have been provided to review baseline studies and for involvement with key baseline data collection. Comments were considered in ongoing baseline work. Baseline information has been used to inform the effects assessments in the Impact Statement. Any comments related to specific environmental components are captured in the analysis of effects to pVC and fVC in the Impact Statement. • Environmental Baseline Scopes: Great Bear Resources supplemented several planned environmental baseline programs as a result of comments received from LSFN and WFN. This included enhanced eDNA studies for fish, as well as expanded surface water sampling program, and extended program related to existing mercury and methylmercury levels in the environment. • Indigenous Knowledge: Great Bear Resources has provided funds to support the documentation of Indigenous knowledge for local communities and to help inform the Impact Statement preparation. Confidential studies have been prepared by LSFN, NWOMC and WFN that were fully consideration during Impact Statement preparation. Funding has also been provided to ANA, although information has not been shared with Great Bear Resources to date. • Mercury and Methylmercury Study Plan: Great Bear Resources has acknowledged the concerns from ANA, which have been echoed by LSFN and WFN, associated with the potential for Project impacts on existing mercury and methylmercury content in the environment. Great Bear Resources circulated a Study Plan for review from Indigenous communities which includes collected of baseline information, and revised the initial investigations and study plan.

Impact Statement Topic	Influence of Consultation
Alternatives Assessment Methodology and Results	• Opportunities have been provided to review and comment on the alternative assessment for the Project. Comments were considered in Section 4 of the Impact Statement. Indigenous knowledge and traditional knowledge and land use study information provided by communities has been incorporated into the assessment of each alternative to identify the potential for effects on Indigenous communities in selecting preferred Project components. Where location-specific information was not provided, the alternatives assessment took a conservative approach that assumed that communities would potentially use areas anticipated to be disturbed by the Project for traditional purposes.
Environmental Effects Assessment	• Valued Components: A list of anticipated valued components was circulated for review and comment. The list was updated because of key comments received from WFN and LSFN (with specific assessments provided for Wild Rice and Moose). The NWOMC also held a workshop focusing on key values to inform their traditional knowledge and land use study. • Key comments that influenced the effects assessment are discussed in each of the pVC and fVC section of the Impact Statement, and detailed in the record of consultation in Appendix C to the Impact Statement. In addition, methylmercury in fish predictive modelling and specific human health risk assessment for this pathway was added based on comments received. • Indigenous knowledge and traditional knowledge and land use study information provided by communities has been incorporated throughout the Impact Statement.
Project Design	The following Project optimizations were made based on consultation input on water quality, mercury and fish: • Addition of new circuit to the process plant for segregation of tailings streams • Enhanced site management of contact water • Enhanced water treatment (membrane filtration) of select contact water streams to reduce sulphate concentrations in treated effluent • Re-use of the Viggo pit during the operations phase for temporary storage of membrane filtration reject solution (west Viggo management facility), permanent storage of concentrate tailings and contact water management during operation and active closure (east Viggo management facility) • Establishment of proposed onsite facilities to compensate and offset loss of fish habitat In addition to the above Great Bear Resources has committed to: • Independent Tailings Review Panel: Great Bear Resources has established an independent board of experts to review and advise on the design, construction, operation, performance and closure of the planned tailings management facility. The Panel was established early, well in advance of construction to provide review and advice from detailed design through to closure.

Impact Statement Topic	Influence of Consultation
	• Tailing Management Facility: Great Bear Resources are committed to managing out tailings according to the Mining Association of Canada guidance and the Canadian Dam Association guidelines, as well as the implementation of the Global Industry Standard on Tailings Management, and the Mining Association of Canada Towards Sustainable Mining. • Cyanide Management: Kinross, the parent company of Great Bear Resources, is a signatory of the International Cyanide Management Code which is a voluntary, performance driven certification program of best practices for the management of cyanide. Kinross is committed to Cyanide Code certification at all their active mine sites.
Community Benefits	• Regional Watershed Studies: At the request of LSFN and WFN, Great Bear Resources has funded a regional community-based Chukuni Watershed Aquatic Monitoring Program. This will focus on the transfer of knowledge from Elder advisors to youth throughout all phases of the Project. The program will also serve to increase capacity of the Nations to complete future monitoring programs to protect the waters throughout the Treaty 3 territory. • Wild Rice Enhancement Project: Great Bear Resources has funded a study by Lakehead University, Northern Bioscience and Harris Ecological Consulting, upon the request of LSFN and WFN. The purpose of this study is to address the loss of historic Wild Rice (manoomin) production on Wabaskang Lake. Potential effects on Wild Rice are anticipated because of an overprint at WB01 by Project infrastructure. The enhancement study is anticipated to off-set potential effects on Wild Rice because of the Project. The Wild Rice enhancement location, on the WFN reserve, has been recommended by the community. The study will develop potential enhancement options for implementation in 2026. In addition to habitat restoration, the project will incorporate education and knowledge-sharing on sustainable harvesting practices, supporting long-term stewardship by community members. This collaborative initiative could support broader Wild Rice revitalization projects and be shared with other Indigenous communities in the local area if there is interest, advancing the understanding, and recovery of this culturally and ecologically significant plant. Together, these efforts will support a more holistic understanding of Wild Rice habitats, cultural values and their continued importance to the region. • Freshwater Conservation Canada: Great Bear Resources is funding the assessment and strategy development phase of the Red Lake. Trout Recovery Project. This includes analysing existing research, evaluating habitat conditions in Pipestone Bay, engaging with Indigenous communities and regulators, and identifying feasible restoration actions. Great Bear Resources support of these efforts is a result of dialogue across Indigenous and public stakeholders' interest to restore a self-sustaining Lake Trout population in Red Lake. • Sponsorship and Donation: Great Bear Resources has provided ongoing support to local, regional, and Indigenous events, programs, and organizations. Donations have included New Starts for Women, Red Lake Anishinaabe Pow Wow Circle, Lac Seul Career Fair, Lac Seul Treaty Days, Red Lake Hospital Foundation, Community Support Services, Red Lake Fire Rescue and National Indigenous Peoples Day.

Impact Statement Topic	Influence of Consultation
	• Education: Great Bear Resources has committed to the establishment of the Industrial Research Chair in Mineral Exploration with Lakehead University. Great Bear Resources recognizes the importance of this research and its potential to drive advancements in mineral exploration, which directly supports our business and the broader mining sector in northwestern Ontario and the community in which we operate. In addition, Great Bear Resources has broadly supported ongoing science, technology, engineering and mathematics and educational based programming with youth consistent with Company standards. GBR is also progressing an education and training strategy to focus on apprenticeship opportunities, on the job training, work readiness, and scholarships and bursaries. • Healthcare: Great Bear Resources has funded healthcare and social services initiatives and organizations within the local and regional area. Great Bear Resources also participates in the Red Lake Health Care Committee that allows for consideration of Project related pressure in partnership with healthcare providers, municipal and industry representatives. Great Bear Resources has recognized health care initiatives as a key priority for local communities. A $200,000 contribution was made to support local health care, including necessary equipment, upgrades, and recruitment initiatives. • Ceremonies: Great Bear Resources is committed to incorporate appropriate ceremonial practices into the Project. Ceremonies will be held under the direction of local Indigenous Nations. • Access: Great Bear Resources are committed to working with the forestry management company, in collaboration with Indigenous Nations, to maintain access to the south of the site. • Long Term Monitoring: Great Bear Resources will continue to work with the environmental management committee(s) and engage Indigenous environmental monitors from local communities in the implementation of mitigation and monitoring. • Training and Procurement: Great Bear Resources is committed to working with local suppliers, including Indigenous owned businesses, to develop their capacity to effectively compete and win business while meeting the Company's standards for ethical conduct, due diligence, quality of goods and services, health and environmental safety.

3.6 Ongoing Engagement Following Submission of the Impact Statement

Following the submission of the Impact Statement, Great Bear Resources will continue to engage with Indigenous communities (First Nations and Métis), government agencies and ministries, and stakeholder groups to keep all interested parties informed on the Project. A number of regulatory consultation requirements will need to be fulfilled as part of obtaining outstanding permits and approvals for the Project.

Future engagement after the submission of the Impact Statement will include continued dialogue with the Indigenous communities, Government agencies, and stakeholders to provide transparency about Great Bear Resources' environmental management and monitoring performance. Information regarding the Project will continue to be shared by social media, Project newsletter and Project website as appropriate, to continue to provide opportunities to discuss interests and comments and resolve issues related to the Project.

Great Bear Resources will adjust its engagement efforts based on feedback from stakeholders to be responsive to the interests and comments expressed.

4 Project Alternatives

4.1 Purpose of the Project

The purpose of the Project is to extract ore by underground and open pit mining for processing on site to produce bars of gold and silver (doré bars). The doré bars will be transported off site and sold to provide a reasonable rate of return on investment while providing employment and supporting the Canadian economy.

Mining is an important industry and a major job creator in Canada. Mining and related industries made up 7.8% of the Canadian gross domestic product in 2022 (MAC 2024). Mining products from Canada are produced with fewer greenhouse gas emissions than anywhere else in the world. Ontario produces approximately 40% of the Canadian gold production. Mineral production in Ontario supports 31,000 direct jobs and 47,000 indirect jobs (MINES 2024).

4.2 Alternatives Assessment

The Impact Statement assesses a reasonable range of technically and economically feasible alternatives to the Project, and means of completing the Project. The assessment of alternatives provides sufficient information to support an understanding of the rationale for the Project design.

Mines are unique from other types of Projects for which a number of Project alternatives might be available, because the ore body to be mined has a fixed location, and the only way to proceed is to mine the ore body in place. The only Project alternative that meets the intended Project purpose is to proceed with the Project in the near term, as planned.

An assessment was completed of alternative means of completing the Project in a structured manner, screening to determine if there are viable alternatives for the following Project components or activities:

- Mining
- Mined materials management (mine rock, low grade ore and overburden)
- Ore processing
- Tailings management
- Buildings, facilities and general infrastructure
- Water and wastewater management
- Aggregate supply
- Water crossings
- Power supply
- Corridors
- Domestic waste management
- Workforce

For Project components or activities where more than one potentially viable alternative has been identified, an alternatives assessment was completed that considered natural environment, human environment, and technical and economic criteria. The table below summarizes the alternative methods assessed in detail in the Impact Statement:

Alternative Means Assessed in Detail:		
Potential Alternative Methods	**Range of Potentially Viable Alternatives Considered**	**Selected Alternative**
Tailings management	• 15 locations • 6 technologies	• Desulphurized tailings stored in a surface tailings management facility located west of the main Project site • Concentrate tailings stored in re-purposed depleted east lobe of Viggo pit (east Viggo management facility) • High-density thickened tailings
Mine rock management	• 6 locations	• Re-used in construction and for site maintenance • Stockpile located north of LP Central pit
Low grade ore temporary storage	• 4 locations	• Temporary facility located south of the mine rick stockpile
Overburden storage	• 6 locations	• Two primary stockpiles located west and east of the mine rock stockpile • Small stockpiles at tailings management facility • Re-used in site construction and reclamation
Processing	• 3 locations	• Facility located west of the mine access road • Gold recovery by cyanidation in a process plant • Destruction of residual cyanide using the SO_2 / Air process
Contact water management	• 8 locations	• Integrated water management system • East Viggo management facility during primary operation period • Mine water pond located downgradient of the tailings management facility if needed
Membrane treatment reject solution management	• 10 locations	• West Viggo management facility (re-purposed depleted west lobe of Viggo pit)

Alternative Means Assessed in Detail:		
Potential Alternative Methods	**Range of Potentially Viable Alternatives Considered**	**Selected Alternative**
Power supply	• 7 technologies (sources)	• Combined grid power and natural gas power generation • Transitioning to only grid power later in mine life if available
Domestic solid waste	• 2 location types	• Transport to existing local municipal landfill subject to commercial agreements
Accommodations	• 2 location types • 2 locations	• Facility on Property north of the regional transmission line at Tuzyk's Road
Mine closure, LP Central pit filling	• 6 technologies	• Active filling with water from the Chukuni River
Mine closure, Viggo management facility filling	• 6 technologies	• Active filling with water from the Chukuni River after reject solution pumped to underground mine at depth
Mine closure, demolition waste	• 2 location types	• Transport to existing local municipal landfill subject to commercial agreements

5 Project Description

5.1 Exploration History and Existing Facilities

The Property is accessible via Tuzyk's Road, an all-weather forestry and exploration road. Exploration has occurred since the 1940s, with multiple companies conducting drilling, surveys, trenching, and airborne geophysics.

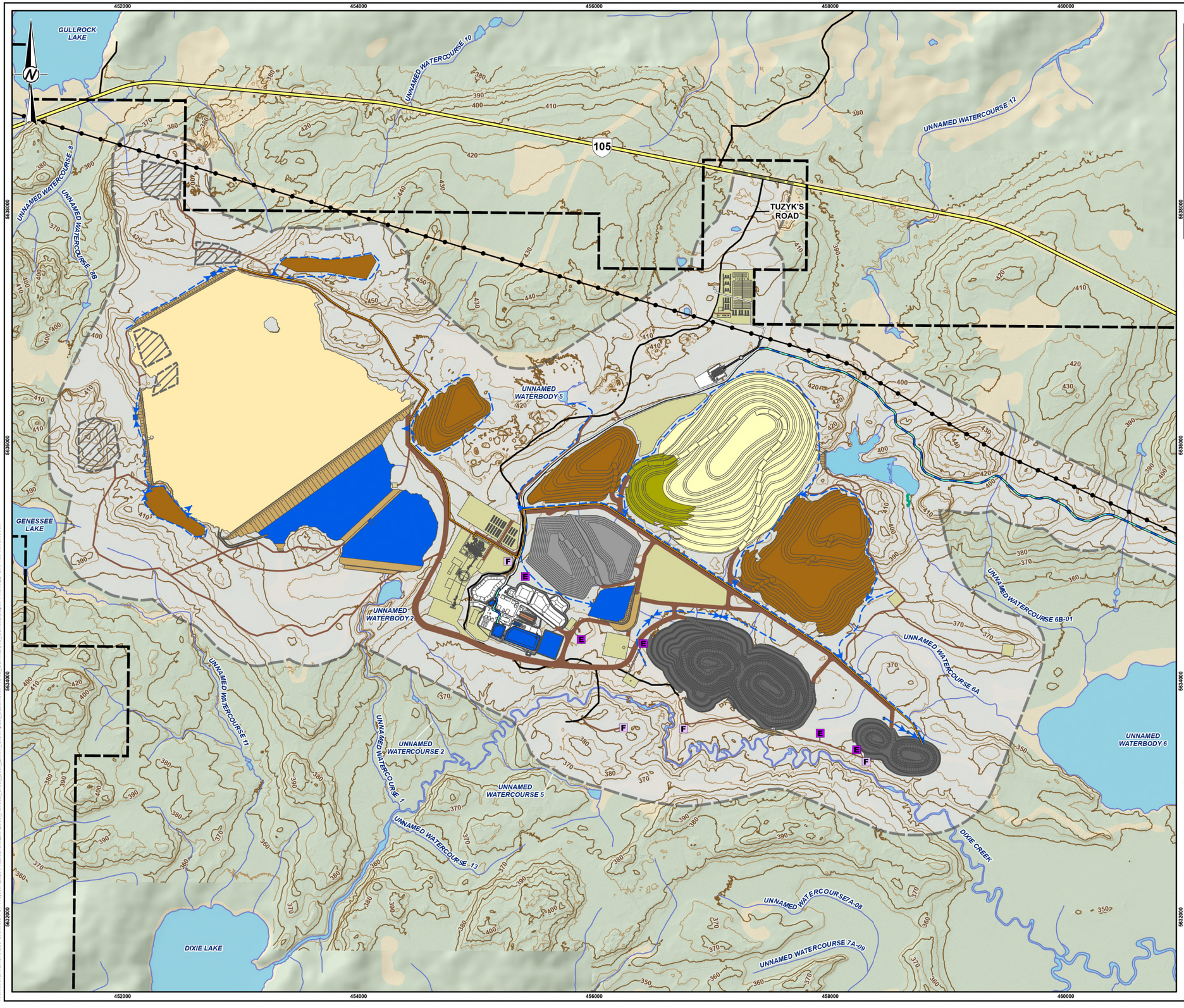
In 2024, Great Bear Resources initiated an Advanced Exploration Program, including underground workings to support excavation of bulk ore sample. Advanced Exploration Program facilities and infrastructure will include two portals to access the limited underground workings, and surface buildings and supporting infrastructure including: stockpiles, crusher, water management and treatment infrastructure, explosives magazine and power infrastructure.

5.2 Main Project Components

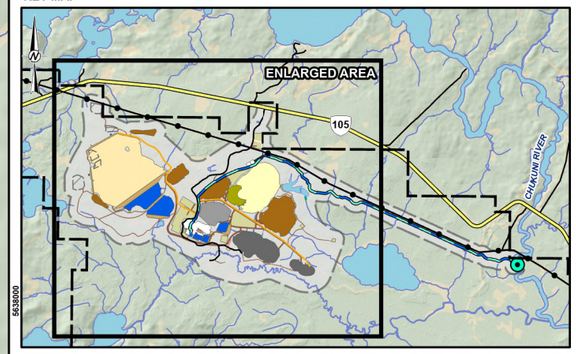
Extensive engineering and environmental studies have been completed to design the Project. The site layouts provided in Figure 2 and Figure 3 with topography and satellite imagery backgrounds, places the required mine-related facilities on Great Bear Resources-held mining leases, near the open pits and openings to the underground to minimize the overall Project footprint. As engineering studies progress and engagement with government agencies, Indigenous Nations and the public continues, some of the details of the Project described in the Impact Statement may be refined.

The proposed Project development includes:

- Underground mine reaching approximately 1,500 metres depth, with underground ore accessed by only ramp early in the mine life, and later also by shaft
- Two open pits:
  - Viggo pit: two lobe pit, with a surface area of approximately 22.8 hectares and maximum depth of about 120 metres
  - LP Central pit: surface area of approximately 87 ha and a depth of 255 metres
- Surface stockpiles:
  - Overburden: approximately 26 million tonnes of overburden will be removed, which will be either used in construction or stockpiled to become a source of material for reclamation
  - Mine rock: area of approximately 170 hectares and will have a maximum height of approximately 120 metres to store potentially acid generating, non-potentially acid generating - metal leaching and non-potentially acid generating mine rock
  - Low grade ore: two temporary stockpiles to store ore for blending with higher grade ore later in mine life of about 8.1 million cubic metres and area of 30.2 hectares, and 2.6 million cubic metres and area of 17.2 hectares
  - Run of mine ore: an area of up to 3 hectares to receive ore trucked from the mine prior to the crushing



KEY MAP



SCALE: 1:32,000

LEGEND

- PROPERTY BOUNDARY
- PROJECT AREA (PA)
- HIGHWAY (INCLUDING ENBRIDGE PIPELINE)
- LOCAL ROAD
- EXISTING TRANSMISSION LINE
- WATERCOURSE
- WATERBODY
- MAJOR CONTOURS (10 M INTERVAL)
- MINOR CONTOURS (5 M INTERVAL)

PROPOSED MINE FEATURE

- OPEN PIT
- MINE ROCK STOCKPILE (NPAG)
- MINE ROCK STOCKPILE (PAG)
- LOW GRADE ORE STOCKPILE (LGO)
- OVERBURDEN STOCKPILE (OVB)
- TAILINGS MANAGEMENT FACILITY (TMF)
- DAM
- POND
- COLLECTION DITCH
- MINE FACILITIES / INFRASTRUCTURE
- ROAD
- PORTAL
- ADVANCED EXPLORATION SITE (AEX)
- ROCK QUARRY (Q) / SAND AND GRAVEL PIT (B)
- DIVERSION CHANNEL
- E EXHAUST VENT RAISE
- F FRESH AIR VENT RAISE
- TRANSMISSION LINE
- TAILINGS PIPELINE
- PASTE PLANT PIPELINE
- EFFLUENT / FRESH WATER PIPELINE CORRIDOR
- EFFLUENT DISCHARGE LOCATION

0 0.5 1 2

1:32,000 KILOMETRES

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. CONTAINS INFORMATION LICENSED UNDER THE OPEN GOVERNMENT LICENCE - ONTARIO
2. CONTOURS ACQUIRED FROM 2022 LIDAR SURVEY.
3. PROPERTY BOUNDARY PROVIDED BY GREAT BEAR RESOURCES, AUGUST 2024.
4. ROADS INFORMATION PROVIDED BY GREAT BEAR RESOURCES, AUGUST 2022.
5. SITE PLAN BASED ON INFORMATION PROVIDED BY GREAT BEAR RESOURCES, DECEMBER 2024 / JUNE 2025.
6. COORDINATE SYSTEM: NAD 1983 UTM ZONE 15N

CLIENT
GREAT BEAR RESOURCES

PROJECT
GREAT BEAR PROJECT

TITLE
SITE PLAN (TOPOGRAPHY)

CONSULTANT

wsp

YYYY-MM-DD	2026-03-31
DESIGNED	----
PREPARED	MD
REVIEWED	----
APPROVED	SD

PROJECT NO.	CONTROL	REV.	FIGURE
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452000 454000 456000 458000 460000

5538000 5536000 5534000 5532000

GULLROCK LAKE

UNNAMED WATERCOURSE 10

UNNAMED WATERCOURSE 12

105

UNNAMED WATERCOURSE 8

UNNAMED WATERCOURSE 8B

TUZYK'S ROAD

UNNAMED WATERBODY 5

GENESSEE LAKE

UNNAMED WATERBODY 2

UNNAMED WATERCOURSE 6B-01

UNNAMED WATERCOURSE 6A

UNNAMED WATERBODY 6

UNNAMED WATERCOURSE 1

UNNAMED WATERCOURSE 2

UNNAMED WATERCOURSE 5

UNNAMED WATERCOURSE 1

UNNAMED WATERCOURSE 1A

DIXIE CREEK

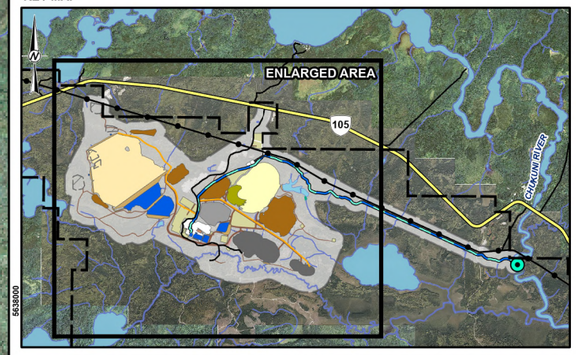
UNNAMED WATERCOURSE 7A-08

UNNAMED WATERCOURSE 7A-09

DIXIE LAKE

F E

KEY MAP



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LEGEND

- PROPERTY BOUNDARY
- PROJECT AREA (PA)
- HIGHWAY (INCLUDING ENBRIDGE PIPELINE)
- LOCAL ROAD
- EXISTING TRANSMISSION LINE
- WATERCOURSE
- WATERBODY

PROPOSED MINE FEATURE

- OPEN PIT
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- MINE ROCK STOCKPILE (PAG)
- LOW GRADE ORE STOCKPILE (LGO)
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- TAILINGS MANAGEMENT FACILITY (TMF)
- DAM
- POND
- COLLECTION DITCH
- MINE FACILITIES / INFRASTRUCTURE
- ROAD
- PORTAL
- ADVANCED EXPLORATION SITE (AEX)
- ROCK QUARRY (Q) / SAND AND GRAVEL PIT (B)
- DIVERSION CHANNEL
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- F FRESH AIR VENT RAISE
- TRANSMISSION LINE
- TAILINGS PIPELINE
- PASTE PLANT PIPELINE
- EFFLUENT / FRESH WATER PIPELINE CORRIDOR
- EFFLUENT DISCHARGE LOCATION

0 0.5 1 2

1:32,000 KILOMETRES

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. CONTAINS INFORMATION LICENSED UNDER THE OPEN GOVERNMENT LICENCE - ONTARIO
2. AERIAL IMAGERY PROVIDED BY GREAT BEAR RESOURCES (SCENE DATE: SEPTEMBER 2022).
3. PROPERTY BOUNDARY PROVIDED BY GREAT BEAR RESOURCES, AUGUST 2024.
4. ROADS INFORMATION PROVIDED BY GREAT BEAR RESOURCES, AUGUST 2022.
5. SITE PLAN BASED ON INFORMATION PROVIDED BY GREAT BEAR RESOURCES, DECEMBER 2024 / JUNE 2025.
6. COORDINATE SYSTEM: NAD 1983 UTM ZONE 15N

CLIENT
GREAT BEAR RESOURCES

PROJECT
GREAT BEAR PROJECT

TITLE
SITE PLAN (IMAGERY)

CONSULTANT
wsp

YYYY-MM-DD	2026-03-31
DESIGNED	----
PREPARED	MD
REVIEWED	----
APPROVED	SD

PROJECT NO.	CONTROL	REV.	FIGURE
CA0031271	0001	A	3

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- Ore process plant: onsite process plant that will process ore at a throughput capacity of 10,000 tonnes per day in a conventional grind and gravity / carbon-in-pulp plant
- Tailings produced from the plant after the gold has been recovered, will be used as backfill in the underground mine or stored in:
    - Tailings management facility: a 345 hectare surface storage area designed for permanent storage of desulphurized tailings, contained by natural high ground and three perimeter containment dams
    - Viggo management facility: the east lobe of the Viggo pit depleted during the construction phase, will be re-purposed for storage of concentrate tailings under permanent water cover
- Water management system: an integrated water management treatment system is proposed for storage, treatment and discharge of water within the PA that includes the following key facilities:
    - Non-contact diversions
    - Ditches and ponds to collect and manage contact waters, including a main collection channel, collection water pond, tailings management facility pond, east lobe of the Viggo pit (east Viggo management facility) and mine water pond
    - Water treatment system which includes a cyanide destruction circuit for tailings within the process plant, enhanced treatment (membrane filtration) of excess water from the tailings management facility, and a water treatment plant for treatment of effluent to meet regulatory requirements prior to discharge to the Chukuni River via a surface pipeline
- Other buildings and infrastructure: including administrative and maintenance buildings, headframe, camp complex, internal roads, pipelines, potable water and domestic sewage treatment plants, aggregate sources and power supply infrastructure.

A PA has been defined that includes the area between proposed facilities and provides a buffer around the proposed site footprint to accommodate potential Project optimizations.

5.3 Project Phases and Schedule

A Project schedule has been established based on current knowledge. The planned Project phases are as follows:

- Construction phase:
    - Years -3 to -1 represents the primary period of Project construction
- Operations phase:
    - Years 1 to 26 when mining and processing of ore is occurring
- Closure phase completed in accordance with a certified Closure Plan that meets the requirements of the provincial *Mining Act*:
    - Years 27 to 29 represent the active closure period when the majority of the Project decommissioning and reclamation is completed

- Year 30 is a passive closure period of about one year, while the filling of the mine workings with water is being completed and excess water is treated and discharged to the Chukuni River
- Year 31 is the final reclamation period when water treatment infrastructure is removed and site waters are acceptable for passive release to the environment.

Key activities by Project phase are as follows.

Construction Phase:

- Establishment of the construction camp (1,000 person temporary camp)
- Clearing, earthworks, construction of haul roads, diversions and dams
- Initial mining of Viggo pit for construction rock
- Expansion of underground workings from Advanced Exploration Program ramps
- Stockpile construction
- Water management and treatment initiation
- Establishment of permanent buildings and utilities
- Indigenous engagement and environmental monitoring.

Operations Phase:

- Underground mining for about 26 years
- Mining of LP Central pit for approximately nine years
- Ore processing to doré bars (approximately two shipments per month)
- Tailings deposition in tailings management facility and Viggo management facility
- Year-round water treatment and discharge

Closure Phase:

- Will follow the requirements of the provincial *Mining Act*, and will be completed in accordance with a certified Closure Plan
- Decommissioning of facilities and removal of salvageable assets
- Filling of the underground mine, LP Central pit and Viggo management facility with collected site waters and water pumped from Chukuni River
- Revegetation of disturbed areas
- Treatment of site waters including potential overflow from LP Central pit, until water quality meets regulatory requirements and is acceptable for passive discharge
- Removal of residual facilities and infrastructure after water treatment is no longer needed.

5.4 Expected Site Conditions Post-Closure

The existing topography of the PA will be permanently altered by the Project. The primary changes to the topography after closure activities are completed are:

- Flattened, revegetated terrain associated with the main facility and development and aggregate extraction areas
- Revegetated raised areas (rehabilitated tailings management facility, mine rock stockpile, overburden stockpiles and residual flood protection berm)
- Additional large waterbodies (LP Central pit lake and Viggo management facility pit lake) and an expanded fish-bearing waterbody in the upper reaches of Unnamed Watercourse 6
- Remnants of other infrastructure at the site, including roads, building and laydown areas, which will be scarified and revegetated at closure, but will remain raised slightly (in the order of a metre or so) above the surrounding terrain.

5.5 Project Optimizations since Impact Assessment Planning Phase

The Project has been planned and designed to avoid or minimize adverse environmental effects through the careful configuration of Project components, and use of economically and technically feasible control technologies. Extensive study, analysis and consultation have informed the following optimizations that have occurred since the Impact Assessment Planning Phase.

The locations of Project components have been optimized with the additional information gained during site investigations and ongoing engineering activities, with an overall goal of maintaining a compact footprint to minimize disturbance to the natural environment. Refinements also include strategic placement of facilities, such as stockpiles upgradient of open pit for efficient seepage collection and avoid waterbodies and watercourses as reasonable. Primary site plan optimizations since the Detailed Project Description was issued:

- Reduction in the area of the LP Central pit
- Discovery Pit will no longer be developed
- Reduction in the stockpiles and the tailings management facility footprints and minimization of infrastructure south of Dixie Creek
- Viggo pit will be mined during the construction period to provide construction rock for building and to allow for repurposing for reject solution storage during the operations phase (west Viggo management facility) and water management during the operations phase and permanent storage of concentrate tailings (east Viggo management facility)
- Addition of new water management treatment and infrastructure
- Incorporation or a fish compensation area including a pond and channel improvement area, and new pond complex within the Dixie Creek floodplain

Additional Project optimizations may occur as a result of ongoing consultation and engagement, progression of detailed design, and regulatory feedback during the environmental approvals processes.

6 Pathways to Changes to Valued Components under Federal Jurisdiction

The assessments of potential effects to each pVC are supported by descriptions of existing conditions, identification and description of potential effects and a description of applicable mitigation measures.

6.1 Analysis of Changes to Air Quality

Air quality was selected as a pVC since air quality indicators like dust and fuel combustion emissions can have an effect on the environment and humans in certain amounts. There are no identified pathway linkages to air quality. Air quality may have linkages to the fVCs migratory birds and Indigenous Peoples. The assessment of air quality was guided by both federal and provincial legislation. The table below summarizes the potential changes to air quality resulting from the Project, as well as key mitigation measures proposed for managing these changes:

Air Quality:				
Pathways to Potential Effect / Criteria	**Phase**			**Key Proposed Mitigation Measure**
	Con	**Op**	**Cl**	
Change in dustfall and trace metal concentrations	●	●	-	Dust management plan
	●	●	●	Road watering and dust suppression
	●	●	●	Maintenance of roads to minimize silt loading
	●	●	●	Vehicle speed limits
	-	●	-	Enclosure of process plant emissions sources and use of dust control best practices and equipment
	-	●	●	Revegetation and progressive reclamation of dust sources
Changes in fuel combustion emissions	●	●	●	Preventative maintenance programs for all pollution control equipment, diesel engines and processes with potential air quality effects
	●	●	●	Use of equipment that complies with off-road engine emission criteria
	-	●	-	Testing one emergency generator at a time to reduce short-term emissions
	-	●	-	Strategic scheduling to minimize travel distance for vehicles and use of low-sulphur diesel fuel
Change to other air quality measurements related to ore mining and processing	-	●	-	Use of a treatment process to eliminate hydrogen cyanide emissions and reduce cyanide in the tailings management facility and recirculation of reduce excess sulphur dioxide
	-	●	-	Control of lime silo and lime slaker vents by a dust collector
	-	●	-	Maintenance of dust control equipment

Con.: Construction Phase; Ops.: Operations Phase; Cl: Closure Phase
● : applicable mitigation to phase; - : not applicable to phase

With the use of the proposed mitigation measures, it is predicted that air quality indicators for all Project phases will be below the applicable guideline levels during all Project phases.

6.2 Analysis of Changes to Sound

Sound was selected as a pVC because it is of Provincial regulatory interest and excessive sound (noise) can have effects on the environment and humans. It has also been identified as of interest during consultation and engagement activities. There are no identified pathways linkages to sound. Sound may have linkages to the fVCs migratory birds and Indigenous Peoples. The analysis of sound was guided by federal and provincial legislation.

The table below summarizes the potential changes to sound resulting from the Project, as well as key mitigation measures proposed for managing these changes:

Sound:				
Pathways to Potential Effect / Criteria	**Phase**			**Key Proposed Mitigation Measure**
	Con	**Op**	**Cl**	
Changes in sound levels (in A-weighted dB)	●	●	-	Prepare a noise management plan to minimize sound impact to the surrounding area
	●	●	●	Site equipment will be procured and operated to meet NPC-300 noise limits at points of reception, as applicable, with motorized equipment selected or designed as appropriate with mufflers and silencers to reduce noise emissions
	●	●	●	Regular inspections will take place to confirm that equipment and machinery used on site is operated in good working condition through regular maintenance
	●	●	●	A mechanism will be established for receiving and responding to noise complaints in a timely manner during construction, operations and closure phases

Con.: Construction Phase; Ops.: Operations Phase; Cl: Closure Phase
● : applicable mitigation to phase; - : not applicable to phase

Sound levels at all of the identified points of reception are predicted to be below the federal and provincial criteria after application of mitigation measures. The confidence level of this assessment is considered to be high.

6.3 Analysis of Changes to Vibration

Vibration was selected as a pVC given that blasting activities will occur during the construction and operations phases. These activities cause changes in ground vibration, air overpressure and water overpressure that can have an effect on wildlife and humans if the present in levels are above a certain limit. There are no identified pathways linkages to vibration. Vibration may have linkages to the fVCs fish and fish habitat and migratory birds. The analysis of vibration was guided by federal and provincial legislation. The table below summarizes the potential changes

to vibration resulting from the Project, as well as key mitigation measures proposed for managing these changes:

Vibration:				
Pathways to Potential Effect / Criteria	**Phase**			**Key Proposed Mitigation Measure**
	Con	**Op**	**Cl**	
Changes in ground vibration and air overpressure (mm/s and dB)	●	●	-	Prepare a Blast Management Plan prior to the start of the Project
	●	●	-	Avoid blasting at LP Central pit, Viggo pit and / or underground mine simultaneously
Changes in water overpressure (kPa).	●	●	-	Prepare a Blast Management Plan prior to the start of the Project
	●	●	-	Before any blasting activity starts near Dixie Creek and Unnamed Watercourse 3, perform onsite low-charge blasts to determine the site-specific parameters
	●	●	-	Avoid blasting at LP Central pit, Viggo pit and / or underground mine simultaneously
	●	●	-	Mitigate impact to fish habitats by satisfying the industry-standard procedures and recommendations

Con.: Construction Phase; Ops.: Operations Phase; Cl: Closure Phase
● : applicable mitigation to phase; - : not applicable to phase

Vibration levels are predicted to be well below all federal and provincial limits at all identified points of reception. The confidence level of this assessment is considered to be high.

6.4 Analysis of Changes to Groundwater Quantity

Groundwater quantity was selected as a pVC because it is a natural component which can be important to other ecosystem elements, is of regulatory interest and was identified during engagement activities. Surface water flows and levels has a linkage to groundwater quantity. Groundwater quantity may have linkages to the fVCs fish and fish habitat and Indigenous Peoples. The assessment of groundwater quantity was guided by federal and provincial legislation.

The table that follows summarizes the potential change to groundwater quantity resulting from the Project, as well as key mitigation measures proposed for managing the change:

Groundwater:				
Pathways to Potential Effect / Criteria	**Phase**			**Key Proposed Mitigation Measures**
	Con	**Op**	**Cl**	
Change in groundwater quantity	●	●	●	Development of a compact mine site
	●	●	-	Re-using collected contact water
	●	●	-	Grouting will be used to seal off open exploration holes and large open fractures to reduce inflows into the underground
	-	-	●	Active filling in a controlled manner of the LP Central pit, Viggo management facility, and underground mine workings

Con.: Construction Phase; Ops.: Operations Phase; Cl: Closure Phase
● : applicable mitigation to phase; - : not applicable to phase

After implementation of the proposed mitigation measures, there is a reduction of groundwater flows and levels during the construction and operations phases that is mitigated during closure, returning to near baseline conditions. The level of confidence in the prediction is considered to be high.

6.5 Analysis of Changes to Surface Water Flows and Levels

Surface water flows and levels was selected as a pVC because it is a key ecosystem element, is of provincial regulatory interest and was identified during engagement. Groundwater quantity has a pathway linkage to surface water flows and levels. Surface water flows and levels may have linkages to the fVCs fish and fish habitat, migratory birds and Indigenous Peoples. The assessment of surface water flows and levels was guided by federal and provincial legislation.

The table that follows summarizes the potential change to surface water flows and levels resulting from the Project, as well as key mitigation measures proposed for managing the change:

Surface Water Flows and Levels:				
Pathways to Potential Effect	**Phase**			**Key Proposed Mitigation Measures**
	Con	**Op**	**Cl**	
Change in Surface Water Flows and Levels	●	●	●	Diversion of non-contact water from entering the site
	●	●	●	Development of a compact mine site
	-	●	-	Recycle contact water in the process plant
	●	●	●	Surface water intake rate and schedule will meet all federal and provincial regulatory requirements
	●	●	●	Effluent discharge rate and schedule to the environment will meet all federal and provincial regulatory requirements
	-	●	●	Restoration of the site to a naturalized state through progressive reclamation and at closure, to restore runoff conditions closer to those present pre-development

Con.: Construction Phase; Ops.: Operations Phase; Cl: Closure Phase
● : applicable mitigation to phase; - : not applicable to phase

Reduction in flow is estimated during the construction, operations, and closure phases in Dixie Creek due to loss in contributing watershed area and groundwater contributions. The temporary reduction in flow is expected to cause a small change in water level, which will vary along Dixie Creek depending on channel hydraulics and geometry. This change is considered temporary and reversible, as flows and water levels are restored at post-closure. Estimated changes to flow and water level in the Chukuni River are not observable. The level of confidence in the estimate provided is considered to be high.

6.6 Analysis of Changes to Water Quality

Water quality was selected as a pVC because changes to water quality parameters resulting from the development of the Project have the potential to affect environmental and human health and has been identified as important to local Indigenous Nations. Great Bear Resources recognizes and respects the importance of Nibi (water) and acknowledges our collected responsibility to protect Nibi today and for future generations. Groundwater quantity and surface water flows and levels have pathway linkages to water quality. Water quality may have linkages to the fVCs fish and fish habitat, migratory birds and Indigenous Peoples. The assessment of water quality was guided by federal and provincial legislation.

The table that follows summarizes the potential change to surface water flows and levels resulting from the Project, as well as key mitigation measures proposed for managing the change:

Water Quality:				
Pathways to Potential Effect / Criteria	**Phase**			**Key Proposed Mitigation Measures**
	Con	**Op**	**Cl**	
Change in Water Quality	●	●	●	Development of a compact mine site
	●	●	●	Diversion of non-contact water from entering the site
	●	●	●	Employ a dust management strategy to minimize fugitive dust deposition on the surface water receiving environment
	●	●	●	Implement a site-specific erosion and sediment control plan
	-	●	-	Recycle contact water in the process plant
	-	●	●	Reduce sulphur in tailings stored in the tailings management facility by the use of the desulphurization flotation circuit
	-	●	-	Tailings will undergo cyanide distribution
	-	●	-	A portion of the contact water treatment stream will be subject to enhanced water treatment (membrane filtration)
	●	●	●	The water treatment plant will be designed to produce water that is suitable for re-use or discharge to the environment
	●	●	●	Effluent discharge rate and schedule to the environment will meet all federal and provincial regulatory requirements. The surface water intake rate and schedule will meet all federal and provincial regulatory requirements.
	-	●	●	Restoration of the site to a naturalized state through progressive reclamation and at closure, to restore runoff conditions closer to those present pre-development.

Con.: Construction Phase; Ops.: Operations Phase; Cl: Closure Phase
● : applicable mitigation to phase; - : not applicable to phase

All predicted concentrations for all modelling nodes are well below the identified guidelines, with the exception for cobalt concentrations in Unnamed Watercourse 1 in the operations phase. During the closure phase (and post-closure), all parameters are expected to be below guidelines or equivalent to baseline conditions that were above guidelines. The level of confidence in the estimate provided is considered to be high.

6.7 Analysis of Changes to Vegetation Communities

Vegetation communities were selected as a pVC because they are a natural component that is important to other ecosystem elements and may interact with identified fVCs. Air quality, groundwater quantity and surface water flows and levels have pathway linkages to vegetation communities. Vegetation communities may have linkages to the fVCs migratory birds and Indigenous Peoples. The assessment of vegetation communities was guided by federal and provincial legislation.

The table below summarizes the potential changes to vegetation communities resulting from the Project, as well as key mitigation measures proposed for managing the changes:

Vegetation Communities:				
Pathways to Potential Effect / Criteria	**Phase**			**Key Proposed Mitigation Measures**
	Con	**Op**	**Cl**	
Standard Vegetation Mitigation Measures (applicable to all criteria)	●	-	-	Minimize Project footprint to reduce vegetation clearing
	●	●	●	Implement wetland and riparian protection measures
	●	●	●	Implement erosion and sediment control measures
	●	●	-	Progressive rehabilitation and revegetation
	●	●	-	Implementation of an invasive species management plan
	●	●	-	Implementation of air quality and dust control measures
	●	●	-	Implementation of mitigation measures for surface water and groundwater effects
	-	-	●	Rehabilitation of developed areas during closure phase
Relative Abundance and Diversity of Plant Species	●	●	●	Apply standards for supporting vegetation diversity
Quality and Connectivity	●	●	●	Mitigate contamination risk from spills, including development of a spill prevention and support plan and storage of hazardous substances greater than 30 metres from water features
Species of Importance to Indigenous People	-	-	●	Provide opportunities to local Indigenous community members to harvest plants for traditional purposes prior to construction activities

Con.: Construction Phase; Ops.: Operations Phase; Cl: Closure Phase
● : applicable mitigation to phase; - : not applicable to phase

Changes to vegetation communities after mitigation are expected to be localized to the PA. Adherence to the Project area and other mitigation measures listed will prevent limit changes to the relative abundance and diversity of vegetation communities. vegetation recovery to pre-development conditions is a long-term process. With the implementation of the mitigation measures outlined, the PA can return to its current or an equivalent stage of succession in the long-term. The level of confidence in the effects predictions is high.

6.8 Analysis of Changes to Wild Rice

Wild Rice was selected as a pVC due to feedback received through consultation and engagement activities. Wild Rice may have linkages to the fVC Indigenous Peoples. Wild Rice is also a source of food for some migratory birds. The assessment of Wild Rice was guided by federal and provincial criteria, benchmarks and standards.

The table below summarizes the potential changes to Wild Rice resulting from the Project, as well as key mitigation measures proposed for managing the changes:

Wild Rice:				
Pathways to Potential Effect / Criteria	**Phase**			**Key Proposed Mitigation Measures**
	Con	**Op**	**Cl**	
Abundance of Wild Rice Stands	●	-	-	Minimize Project footprint to reduce vegetation clearing
	●	-	-	Development of the Wild Rice Enhancement Project
Change in Quality of Wild Rice Stands	●	●	-	Implementation of mitigation measures for surface water and groundwater effects

Con.: Construction Phase; Ops.: Operations Phase; Cl: Closure Phase
● : applicable mitigation to phase; - : not applicable to phase

A direct, permanent loss of the Wild Rice at Unnamed Waterbody 1 will occur as a result of the Project development. The Wild Rice Enhancement Project is expected to offset potential effects on Wild Rice stand abundance caused by the Project. Thereby, no changes to the abundance of Wild Rice stands in the broader geographical context are predicted. The level of confidence in the effects predictions for Wild Rice is high.

6.9 Analysis of Changes to Moose

Moose was selected as a pVC as the species was identified as being of particular interest during engagement activities. Moose may have linkages to the fVC Indigenous Peoples. The assessment of Moose was guided by federal and provincial legislation.

The table that follows summarizes the potential changes to Moose resulting from the Project, as well as key mitigation measures proposed for managing the changes:

Moose:				
Pathways to Potential Effect / Criteria	**Phase**			**Key Proposed Mitigation Measures**
	Con	**Op**	**Cl**	
Standard Mitigation Measures (applicable to all criteria)	●	-	-	Minimize Project footprint to reduce vegetation clearing
	●	●	-	Progressive rehabilitation and revegetation
	●	●	-	Implementation of air quality and dust control measures
	●	●	-	Implementation of mitigation measures for surface water and groundwater effects
	-	-	●	Rehabilitation of developed areas during closure phase
Change in Quality of habitat	●	●	●	Mitigate contamination risk from spills, including development of a spill prevention and support plan and storage of hazardous substances greater than 30 metres from water features
	●	●	●	Implement noise and vibration mitigation plan and minimize lighting
Change in Risk of Mortality	●	●	●	Enforce speed limits on all site and access roads, install Moose warning signage, include Moose awareness in safety briefings, monitor Moose activities
Change in Moose Density	●	●	●	Apply best management practices for noise, light, vibration, and dust
	●	●	●	Conduct regular Moose surveys to monitor changes, use adaptive management and progressively rehabilitate linear features

Con.: Construction Phase; Ops.: Operations Phase; Cl: Closure Phase
● : applicable mitigation to phase; - : not applicable to phase

Direct losses of Moose habitat will occur within the PA during the construction phase, but no critical habitat types are eliminated at the regional scale. With the implementation of the proposed design and mitigation measures, changes to the abundance of Moose habitat are not expected after closure. Moose density may change, but it predicted that only a small number of Moose will be impacted, and populations are expected to remain above targets. The level of confidence in the effects predictions is high.

6.10 Analysis of Changes to Other Wildlife

Other wildlife was selected as a pVC to encompass the fauna not considered in the other pVCs and fVCs, including furbearers, large mammals, herptiles, raptors, and species of importance to Indigenous people. Other wildlife may have linkages to the fVC Indigenous Peoples.

The table below summarizes the potential changes to other wildlife resulting from the Project, as well as key mitigation measures proposed for managing the changes:

Other Wildlife:				
Pathways to Potential Effect / Criteria	**Phase**			**Key Proposed Mitigation Measures**
	Con	**Op**	**Cl**	
Standard Mitigation Measures (applicable to all criteria)	●	-	-	Minimize Project footprint to reduce vegetation clearing
	●	●	-	Progressive rehabilitation and revegetation
	●	●	-	Implementation of air quality and dust control measures
	●	●	-	Implementation of mitigation measures for surface water and groundwater effects
	-	-	●	Rehabilitation of developed areas during closure phase
Change in Quality of habitat	●	●	●	Mitigate contamination risk from spills, including development of a spill prevention and support plan and storage of hazardous substances greater than 30 metres from water features
Change in Quality of habitat	●	●	●	Implement noise and vibration mitigation plan and minimize lighting
Change in Risk of Mortality	●	●	●	Enforce speed limits on all site and access roads, include wildlife awareness in safety briefings, monitor wildlife activities, adhere to vegetation clearing windows

Con.: Construction Phase; Ops.: Operations Phase; Cl: Closure Phase
● : applicable mitigation to phase; - : not applicable to phase

Direct losses of other wildlife habitats will occur within the PA during construction, but no critical habitat types are eliminated at the regional scale. No changes to other wildlife populations are anticipated after mitigations. There will be a change in the risk of mortality due to wildlife - vehicle collisions. This will be limited effects after the active closure period and removed post-closure. The level of confidence in the effects predictions is high.

6.11 Analysis of Changes to Species at Risk

Species at Risk was selected as a pVC due to the requirement that the Impact Statement describe the effects of all Species at Risk listed under the federal *Species at Risk Act.* The species considered within this pVC include Caribou (Boreal Population; Boreal Caribou), five bat Species at Risk (Little Brown Myotis, Northern Myotis, Hoary Bat, Silver-haired Bat and Eastern Red Bat), Wolverine, Rusty Blackbird, Short-eared Owl, Snapping Turtle and Yellow-banded Bumble Bee. Species at Risk may have linkages to the fVC Indigenous Peoples. The assessment of Species at Risk was guided by federal and provincial legislation.

The table below summarizes the potential changes to Species at Risk resulting from the Project, as well as key mitigation measures proposed for managing the changes:

Species at Risk:				
Pathways to Potential Effect / Criteria	**Phase**			**Key Proposed Mitigation Measures**
	Con	**Op**	**Cl**	
Standard Mitigation Measures (applicable to all criteria)	●	-	-	Minimize Project footprint to reduce vegetation clearing
	●	●	-	Progressive rehabilitation and revegetation
	●	●	-	Implementation of air quality and dust control measures
	●	●	-	Implementation of mitigation measures for surface water and groundwater effects
	-	-	●	Rehabilitation of developed areas during closure phase
Change in quality of habitat	●	●	●	Mitigate contamination risk from spills, including development of a spill prevention and support plan and storage of hazardous substances greater than 30 metres from water features
Standard Mitigation Measures	●	●	●	Implement noise and vibration mitigation plan and minimize lighting
Change in risk of mortality	●	●	●	Enforce speed limits on all site and access roads, include Species at Risk awareness in safety briefings, monitor Species at Risk activities
	●	●	-	Develop waste management plan including wildlife-resistant containers
	●	●	-	Adhere to timing windows for vegetation removal
Change in Range Conditions for Boreal Caribou	●	●	●	Follow best management practices for dust, surface water, groundwater, water quality, sounds and light

Species at Risk:				
Pathways to Potential Effect / Criteria	**Phase**			**Key Proposed Mitigation Measures**
	Con	**Op**	**Cl**	
Change in Population Demography for Boreal Caribou	●	●	●	Enforce timing windows to avoid disturbance during sensitive life stages for Boreal Caribou Document Species at Risk sightings during monitoring
Change in Community via Predator – Prey Dynamics for Boreal Caribou	●	●	●	Minimize creation of linear features that facilitate predator movement Progressively rehabilitate linear features

Con.: Construction Phase; Ops.: Operations Phase; Cl: Closure Phase
● : applicable mitigation to phase; - : not applicable to phase

Direct habitat losses will occur within the PA during construction, but no critical Species at Risk habitats will be eliminated. Following mitigation, the Project results in a marginal increase in disturbance to Boreal Caribou and no nursery or overwintering habitats are directly or indirectly impacted. The Project also does not alter the long-term population trajectory of Boreal Caribou in the Sydney Range. There will be a change in the risk of mortality due to wildlife - vehicle collisions, which are possible when roads and vehicular traffic are present. This will be limited after the active closure period and removed post-closure. The level of confidence in the effects predictions is moderate to high, as some species have limited or indirect evidence of presence.

6.12 Analysis of Changes to Land and Resource Use

The pVC land and resource use encompasses activities and associated infrastructure in relation to the non-Indigenous use of land, waterways and any resources for the purposes of recreation, commercial usage, and navigation. Land and resource use is included as a pVC for this Impact Statement due to its contribution to the quality of life and livelihoods of local community members. The potential changes in land and resource are linked to the fVCs: fish and fish habitat, migratory birds and Indigenous Peoples.

The table that follows summarizes the potential changes to Land and Resource Use resulting from the Project, as well as key mitigation measures proposed for managing the changes:

Land and Resource Use:				
Pathways to Potential Effects / Criteria	**Project Phase**			**Key Proposed Mitigation Measures**
	Con	**Op**	**Cl**	
Change in recreational land and resource use	●	●	●	Access to the remainder of the local study are outside the PA will be maintained via the existing road and trail network or planned forestry roads
Change in commercially based land and resource use	-	-	-	No mitigation planned
Change in navigation	●	●	●	Authorization by Transport Canada as needed

Con.: Construction Phase; Ops.: Operations Phase; Cl: Closure Phase
● : applicable mitigation to phase; - : not applicable to phase

6.13 Analysis of Changes to Cultural Heritage

Cultural heritage was selected an a pVC in recognition of the interests of government agencies, responsible for the effective management of these resources, and potentially affected Indigenous communities. Archaeology has a pathway linkage with cultural heritage, and Wild Rice may also be related. Cultural Heritage may have a linkage to the fVC Indigenous Peoples. The assessment of Cultural Heritage was guided by federal and provincial legislation.

The table below summarizes the potential changes to cultural heritage resulting from the Project, as well as key mitigation measures proposed for managing the changes:

Cultural Heritage:				
Pathways to Potential Effects / Criteria	**Project Phase**			**Key Proposed Mitigation Measures**
	Con	**Op**	**Cl**	
Change in the presence of protected Built Heritage Resources or Cultural Heritage Landscapes	●	-	-	Potential heritage properties will be mapped to identify the heritage status of the Property
Change in the presence potential Built Heritage Resources or Cultural Heritage Landscapes that are 40 years old or older	●	-	-	Potential heritage properties will be mapped to identify the heritage status of the Property
Alteration or destruction of a protected or potential Built Heritage Resource or Cultural Heritage Landscape	●	-	-	If potential heritage properties may be directly impacted, the Property will be evaluated in a Cultural Heritage Evaluation Report

Con.: Construction Phase; Ops.: Operations Phase; Cl: Closure Phase
● : applicable mitigation to phase; - : not applicable to phase

Changes are not anticipated to the identified Built Heritage Resources and Cultural Heritage Landscapes with the proposed design and mitigation measures. The level of confidence in the effects prediction is high.

6.14 Analysis of Changes to Archaeology

Archaeology was selected as a pVC in recognition of responsible government agencies and potentially affected Indigenous communities and parties that have an interest in resources related to their history and culture. Cultural heritage has a pathway linkage to archaeology. Archaeology may have a linkage the fVC Indigenous Peoples. The assessment of Archaeology was guided by federal and provincial legislation. The table below summarizes the potential changes to archaeology resulting from the Project, as well as key mitigation measures proposed for managing the changes:

Archaeology:				
Pathways to Potential Effects / Criteria	**Project Phase**			**Key Proposed Mitigation Measures**
	Con	**Op**	**Cl**	
Changes to terrestrial archaeological sites	●	-	-	Archaeological sites and buffers will be noted on applicable Project maps
Changes to areas of marine archaeological potential	●	-	-	Areas of marine archaeological will be noted on applicable Project maps
Alteration or destruction of an archaeological site or area of marine archaeological potential	-	-	-	Use of chance find procedures to avoid unknown sites

Con.: Construction Phase; Ops.: Operations Phase; Cl: Closure Phase
● : applicable mitigation to phase; - : not applicable to phase

With the proposed design and mitigation measures, no residual changes to the terrestrial archaeological sites or areas of marine archaeological potential are expected. There is a high level of confidence in the effects prediction.

6.15 Analysis of Changes to Local and Regional Economy

Local and regional economy was selected as a pVC in recognition of the interests of government agencies, Indigenous communities and the public. Land and resource use has a pathway linkage to local and regional economy. Local and regional economy may have a linkage to the fVC Indigenous Peoples. There are no permitting or other regulatory requirements specifically related to this local and regional economy.

The Project is predicted to only have positive changes to the local and regional economy and mitigation measures were not required. The Project will have a net positive effect on the local and regional economy through employment and labour income, opportunities and income for local and regional businesses, and increased revenues to local and regional municipalities.

7 Changes to Valued Components under Federal Jurisdiction

The assessments of potential effects to each fVC are supported by linkages to pathway effects from pVCs, descriptions of existing conditions, identification and description of potential effects and proposed mitigation measures. Where residual effects were identified after mitigation, significance was characterized using the following attributes: magnitude, geographic extent, duration, frequency, reversibility and timing.

7.1 Fish and Fish Habitat

Fish and fish habitat was selected as an fVC due to the identification of fish as a resource to Indigenous and non-Indigenous land users and the established federal regulatory jurisdiction over fish and fish habitat under the *Fisheries Act.* This fVC includes fish, the habitat that supports these fish, and the health of these fish populations.

Pathway linkages to fish and fish habitat include vibration, groundwater, surface water flows and levels, water quality and land and resource use. Fish and fish habitat may have linkages to migratory birds and Indigenous Peoples. The assessment of fish and fish habitat was guided by applicable provincial and federal legislation and regulatory requirements.

Methods for undertaking the assessment included geographic information system mapping, field surveys, modelling of flow reductions, fish sampling, establishment of a habitat evaluation procedure, fish tissue analysis, sediment and water quality analysis and calculation of vibration from blasting. A conservative approach was used to support the assessment of potential effects on fish and fish habitat.

The criteria and key indicators for fish and fish habitat are listed below:

- Changes to fish habitat: change in area of water frequented by fish, change in flow from baseline condition or water level change from baseline condition.
- Changes to fish communities: change in relative abundance of fish species, change in fish community structure measured as number of species and percent species composition.
- Changes to fish health: change in water quality, change in fish tissue contaminants and change in fish growth.

The table that follows summarizes the identified changes to fish and fish habitat, key proposed mitigation measures and a determination of residual effects predicted following proposed mitigation measures. As residual effects to fish and fish habitat are not predicted for any Project phases, a determination of significance is not required. The level of confidence in this prediction is considered to be high.

Fish and Fish Habitat:					
Pathways To Potential Effect / Criteria	**Phase**			**Key Proposed Mitigation Measures**	**Residual Effects Following Proposed Mitigation Measures**
	Con	**Op**	**Cl**		
Change to fish habitat	●	-	-	Minimize site footprint and overprinting of waterbodies	None expected
	●	●	●	Implement a site-specific Erosion and Sediment Control Plan	
	●	●	●	Undertake inwater construction activities outside of the fish spawning and egg incubation periods	
	●	-	-	Design culverts to provide fish passage and naturalized substrates	
	●	●	●	Install isolation measures for inwater works associated with construction	
	-	●	-	Complete required maintenance of inwater structures	
	●	-	-	Implement the measures in the Fish Habitat Offsetting and Compensation Plan including: • Development of the east pond and channel • Construction of the Dixie Creek pond complex • Support the development of a Fisheries Management Plan for Wabaskang Lake	

Fish and Fish Habitat:					
Pathways To Potential Effect / Criteria	**Phase**			**Key Proposed Mitigation Measures**	**Residual Effects Following Proposed Mitigation Measures**
	Con	**Op**	**Cl**		
Change in fish communities	●	●	●	Undertake inwater construction activities outside of the fish spawning and egg incubation periods	None expected
	●	●	●	Install isolation measures for inwater works associated with construction	
	●	●	●	Relocate fish from the work area prior to undertaking inwater works	
Change in fish communities (cont'd)	●	-	-	Prior to dewatering Unnamed Waterbody 1, a comprehensive fish removal program will be conducted	
	●	●	●	Install screens or use other measures at water intakes	
	●	●	-	Prior to construction, develop a detailed blasting management plan	
	-	●	-	Complete required maintenance of inwater structures	
Change in fish health	●	●	●	Implement a site-specific erosion and sediment control plan	None expected
	●	●	●	Install isolation measures for inwater works associated with construction	
	●	●	●	Prior to construction, a spill and emergency response plan will be developed	
	●	●	●	Implement the measures to mitigate effects on surface water including the treatment of mine effluent prior to discharging to the Chukuni River, and the collection and management of runoff and seepage water from the PA	

Con.: Construction Phase; Ops.: Operations Phase; Cl: Closure Phase
● : applicable mitigation to phase; - : not applicable to phase

7.2 Migratory Birds

Migratory birds was selected as an fVC as they were raised as an important consideration based on comments received by the Impact Assessment Agency of Canada during the Planning Phase of the impact assessment. are protected federally under the *Migratory Birds Convention Act.* This fVC considers species listed under Article I of the *Migratory Birds Convention Act* and Schedule 1 of the *Species at Risk Act*.

Pathway linkages to migratory birds include air quality, sound, vibration, groundwater, surface water flows and levels, water quality, and fish and fish habitat. Migratory birds may have linkages to Indigenous Peoples. The assessment of migratory birds was guided by applicable provincial and federal legislation and regulatory requirements.

Methods for undertaking the assessment included the identification of direct and indirect effects using habitat and density maps, use of habitat suitability models and field surveys. A conservative approach was used to support the assessment of potential effects on migratory birds.

The criteria and key indicators for migratory birds are listed below:

- Changes to abundance of habitat: percent change in the abundance of habitat, change in form and function of Confirmed Significant Wildlife Habitat.
- Changes to connectivity and quality of habitat: change in fragmentation before and after development.
- Changes to density and populations: percentage of population impacted under the worst case impact scenario, potential increase in density in the study areas.
- Changes to risk of mortality: qualitative risk of mortality assessment, vegetation removal timing windows in relation to sensitive time periods.
- Changes to migratory bird Species at Risk: the same criteria and indicators were assessed for Species at Risk on Schedule 1 of the *Species at Risk Act* and also on Article 1 of the *Migratory Birds Convention Act*. Based on field detections the following migratory SAR birds are identified in the Regional Study Area: Barn Swallow, Bank Swallow, Canada Warbler, Common Nighthawk, Eastern Whip-poor-will, Eastern Wood-pewee, Evening Grosbeak, Olive-Sided Flycatcher and Yellow Rail.

The table that follows summarizes the identified changes to migratory birds, key proposed mitigation measures, determination of residual effects predicted following proposed mitigation measures and a determination of significance. The residual effects predicted for all criteria were determined to be not significant. The level of confidence in this prediction is considered to be moderate to high.

Migratory Birds:					
Pathways To Potential Effect / Criteria	**Phase**			**Key Proposed Mitigation Measures**	**Residual Effects Following Proposed Mitigation Measures and Significance**
	Con	**Op**	**Cl**		
Change in Habitat Abundance	•	-	-	Develop a compact mine footprint	Residual effects anticipated due to impacts on wildlife and waterfowl habitat during the construction phase. Significance: not significant
	•	-	-	Implement mitigation measures for potential effects on vegetation communities and wetlands	
	-	•	•	Implement progressive and final rehabilitation measures	
	-	•	•	Revegetate disturbed areas during closure, preferentially using commercially available native species, incorporating plant species of Indigenous interest and that support wildlife habitat where reasonable	
Change in Connectivity and Quality of Habitat	•	•	•	All mitigation measures related to Change in Abundance of Habitat	Residual effects anticipated due to noise levels during the operations phase. Significance: not significant
	•	•	-	Mitigation measures for potential effects on air quality relevant to birds	
	•	•	-	Mitigation measures for potential effects on noise relevant to birds	
	•	•	-	Mitigation measures for lighting to minimize sensory disturbance	
	•	-	-	Mitigation measures for potential effects on surface wate relevant to birds	
	-	•	•	Mitigation measures for potential effects on vegetation communities and wetlands relevant to birds	
	•	•	-	Mitigation measures for potential effects on wildlife and wildlife habitat relevant to birds	
	-	-	•	Progressive and final rehabilitation measures for mine development	

Migratory Birds:					
Pathways To Potential Effect / Criteria	**Phase**			**Key Proposed Mitigation Measures**	**Residual Effects Following Proposed Mitigation Measures and Significance**
	Con	**Op**	**Cl**		
Change in Density and Population	•	•	•	All mitigation measures related to Change in Abundance of Habitat, Change in Connectivity and Quality of Habitat, and Change in Risk of Mortality	None expected Significance: not significant
Change in Risk of Mortality	•	-	-	Follow appropriate timing windows for vegetation removals	Residual effects possible for some species as a result of unavoidable activities during the construction and operations phases. Significance: not significant
	-	•	•	Monitoring and potential use of rotating deterrents to discourage nesting	
	-	•	•	Implement mitigation measures for lighting to minimize sensory disturbance	
	•	•	-	Mitigation measures for potential effects on vegetation communities and wetlands	
	•	•	-	Mitigation measures for potential effects on wildlife and wildlife habitat relevant to birds	
	•	•	•	Mitigation to reduce wildlife - vehicle collisions	
	•	•	-	Mitigation measures to minimize the risk of birds colliding with windows	

Migratory Birds:					
Pathways To Potential Effect / Criteria	**Phase**			**Key Proposed Mitigation Measures**	**Residual Effects Following Proposed Mitigation Measures and Significance**
	Con	**Op**	**Cl**		
Change to Migratory Bird Species at Risk	•	•	•	All mitigation measures related to Change in Abundance of Habitat, Change in Connectivity and Quality Habitat, and Change in Risk of Mortality	Residual effects resulting from changes in risk to mortality of migratory Species at Risk birds is possible due to their low population densities Significance: not significant
	•	•	-	Mitigation relevant to recovery plans for migratory Species at Risk birds, including: • Avoid the removal of protected habitat unless authorized • Use habitat clearing windows and / or obtain permits or regulatory approval, to avoid the removal of nests • Cover and / or re-slope potential Bank Swallow nesting habitat before the breeding season • Comply with the relevant requirements, if migratory Species at Risk birds are encountered	

Con.: Construction Phase; Ops.: Operations Phase; Cl: Closure Phase
● : applicable mitigation to phase; - : not applicable to phase

7.3 Indigenous Peoples

The *Impact Assessment Act* requires consideration of the impact that a designated project may have on an interested Indigenous group, or the rights of the Indigenous peoples of Canada. This consideration is also affirmed by the Tailored Impact Statement Guidelines for the Project. Indigenous Peoples has been identified as a fVCs for the Project, and potential effects are described for the Indigenous communities of: ANA, LSFN, WFN, NWOMC and Indigenous Peoples living in the Red Lake and Ear Falls area.

Pathway linkages to Indigenous Peoples include: air quality, sound, vibration, surface water flows and levels, water quality, vegetation communities, Wild Rice, Moose, other wildlife, Species at Risk, land and resource use, cultural heritage, archaeology, fish and fish habitat, and migratory birds. The assessment of Indigenous Peoples was guided by applicable provincial and federal legislation and regulatory requirements.

Methods for undertaking the assessment included the identification of direct and indirect effects using demographic and socio-economic data, interview with service providers where available, and traditional knowledge and land use study reports. A conservative approach was used to support the assessment of potential effects on Indigenous Peoples.

The assessment of the Project and its potential effects on Indigenous Peoples and their interests are considered based on the following criteria and key indicators:

- Community Services and Infrastructure:
  - Changes to housing (availability and costs), service delivery capacity (education and healthcare) and transportation infrastructure
- Current Use of Lands and Resources for Traditional Purposes:
  - Changes to availability and access to hunting, trapping, fishing, plant harvesting, and areas / sites of habitation, cultural and spiritual importance sites / areas and associated quality of experience during these activities
- Indigenous Physical and Cultural Heritage, and Structures, Sites, or Things of Significance:
  - Alteration or destruction of archaeological, historical, or architectural sites, changes to the access or quality of experience at these sites / areas as well as changes to associated ceremonial, spiritual and cultural values
- Community Well-being:
  - Changes to cost of living, crime rates, education and employment
- Health:
  - Biophysical determinants of health (linked to changes in air quality, multi-media environmental quality, access and availability of water, access and availability of traditional foods, and sensory disturbances)
  - Social determinants of health (linked to changes in economics, housing, access to health and social services, food security, mental wellness and community cohesion, actual and perceived public safety, and safety of Indigenous women and girls).

The tables that follow summarize the identified changes to Indigenous Peoples, key proposed mitigation measures, determination of residual effects predicted following proposed mitigation measures and a determination of significance. The residual effects predicted for all criteria were determined to be not significant. The level of confidence in this prediction is considered to be moderate to high.

Indigenous Peoples - ANA, LSFN and WFN:						
Pathways To Potential Effect / Criteria	**Potential Effect**	**Phase**			**Key Proposed Mitigation Measures**	**Residual Effects Following Proposed Mitigation Measures and Significance**
		Con	**Op**	**Cl**		
Community Services and Infrastructure	Change in housing and accommodations	-	-	-	• No on-reserve mitigation measures required, as no potential effects are identified	No residual effects are anticipated within the communities because of the Project activities and existing conditions remain unchanged. Significance: determination not required
	Change in municipal, provincial and non-profit service delivery capacity	-	-	-		
	Change in Transportation	-	-	-		
Current Use of Lands and Resources for Traditional Purposes	Change in availability, access to, and quality of experience related to traditional terrestrial wildlife harvesting (hunting and trapping)	•	•	•	• No access to the PA; access maintained to LSA • Environment management committee(s) and environmental monitors • Trapline engagement and coordination with Ministry of Natural Resources • Sensory controls (visual, dust and sound) • Prohibition of hunting and fishing in the PA • Progressive rehabilitation	Residual effects remain for availability, access, and quality of experience within the LSA. Effects are low magnitude, localized and reversible Significance: not significant

Indigenous Peoples - ANA, LSFN and WFN:						
Pathways To Potential Effect / Criteria	**Potential Effect**	**Phase**			**Key Proposed Mitigation Measures**	**Residual Effects Following Proposed Mitigation Measures and Significance**
		Con	**Op**	**Cl**		
Current Use of Lands and Resources for Traditional Purposes (cont'd)	Change in availability, access to, and quality of experience related to traditional terrestrial wildlife harvesting (hunting and trapping)	•	•	•	• No access to the PA; access maintained to LSA • Environment management committee(s) and environmental monitors • Trapline engagement and coordination with Ministry of Natural Resources • Sensory controls (visual, dust and sound) • Prohibition of hunting and fishing in the PA • Progressive rehabilitation	Residual effects remain for availability, access, and quality of experience within the LSA. Effects are low magnitude, localized and reversible Significance: not significant
	Change in availability, access to, and quality of experience related to traditional aquatic harvesting (fishing)	•	•	•	• Environment management committee(s) and environmental monitors • Fish Habitat Offsetting and Compensation Plan • Prohibition of fishing and hunting in PA	No residual effects remain for availability, access, or quality of experience. Significance: determination not required
	Change in availability, access to, and quality of experience related to traditional plant (food and medicinal) harvesting	•	•	•	• No access to the PA; access maintained to LSA • Pre-construction plant harvesting opportunities (where interested) • Environment management committee(s) and environmental monitors • Sensory (visual, dust and sound) • Wild Rice Enhancement Project • Progressive rehabilitation	Residual effects remain for availability, access, and quality of experience within the LSA. Effects are low magnitude, localized and reversible. Significance: not significant

Indigenous Peoples - ANA, LSFN and WFN:						
Pathways To Potential Effect / Criteria	**Potential Effect**	**Phase**			**Key Proposed Mitigation Measures**	**Residual Effects Following Proposed Mitigation Measures and Significance**
		Con	**Op**	**Cl**		
Current Use of Lands and Resources for Traditional Purposes	Change in availability, access to and quality of experience related to traditional habitation, cultural, spiritual sites and areas	•	•	•	• No access to the PA; access maintained to LSA • Environment management committee(s) and environmental monitors • Sensory controls (visual, dust and sound) • Progressive rehabilitation	Residual effects remain for quality of experience only within the LSA. Availability and access are not affected. Significance: not significant
Indigenous Physical and Cultural Heritage, and Structures, Sites or Things of Significance	Alteration or destruction of sites or areas of Indigenous heritage importance, including archaeological, historical, or architectural sites	•	•	•	• Avoidance of archaeological sites • Cultural Heritage Protection Plan • Chance Find Procedure • Wild Rice Enhancement Project • Environmental monitors and environmental management committee(s) • Progressive reclamation	Residual effects remain related to loss of access within the PA (e.g., trapline RL068, plant gathering areas and manoomin stand). Significance: not significant
	Change in access to or quality of experience with sites or areas of Indigenous heritage importance, including archaeological, historical, or architectural sites	•	•	•	• No access to the PA, with maintained LSA access • Environmental management committee(s) and environmental monitors • Sensory controls (visual, sound, dust) • Progressive rehabilitation • Indigenous-led ceremonies • Cultural Heritage Protection Plan and Chance Find Procedure implementation	Residual effects remain for access loss within PA and quality of experience near PA. Significance: not significant

Indigenous Peoples - ANA, LSFN and WFN:						
Pathways To Potential Effect / Criteria	**Potential Effect**	**Phase**			**Key Proposed Mitigation Measures**	**Residual Effects Following Proposed Mitigation Measures and Significance**
		Con	**Op**	**Cl**		
Indigenous Physical and Cultural Heritage, and Structures, Sites or Things of Significance (cont'd)	Change in sacred, ceremonial, spiritual and cultural values (including language, stories and traditions) associated with sites or areas of Indigenous heritage importance, including archaeological, historical, or architectural sites	•	•	•	• Cultural Heritage Protection Plan • Indigenous-led ceremonies • Environmental monitors • Sensory controls (visual, sound and dust) • Progressive reclamation • Wild Rice Enhancement Project.	Residual effects remain related to restricted PA access affecting cultural practices and knowledge transmission. Significance: not significant

Indigenous Peoples - ANA, LSFN and WFN:						
Pathways To Potential Effect / Criteria	**Potential Effect**	**Phase**			**Key Proposed Mitigation Measures**	**Residual Effects Following Proposed Mitigation Measures and Significance**
		Con	**Op**	**Cl**		
Community Well-being	Change in Community Well-being	•	•	•	• Workforce camp (camp complex, dry camp policy, onsite medical services, controlled access and security) • Cultural awareness and gender-based violence prevention training • Partnerships with Indigenous organizations and safety advocates • Community Liaison Committee(s) • Inclusive and local hiring strategy • Indigenous procurement and training programs • Education scholarships and bursaries • Regional coordination to support health and social services • Social closure planning including retraining and transition supports.	No direct residual effects on on-reserve community well-being are anticipated. Indirect residual effects may remain related to cost of living and traditional economy, regional access to services (regional), access to lands and resources, and economic opportunity and inequality. Significance: not significant

Indigenous Peoples - ANA, LSFN and WFN:						
Pathways To Potential Effect / Criteria	**Potential Effect**	**Phase**			**Key Proposed Mitigation Measures**	**Residual Effects Following Proposed Mitigation Measures and Significance**
		Con	**Op**	**Cl**		
Health	Change in Health (biophysical and / or social determinants)	•	•	•	• Environmental monitoring • Environmental data sharing agreements • Support for Indigenous-led education and training for land-based activities • Employee benefits and retirement programs • Community support (housing and accommodations / access to services) • Camp medical facilities and emergency response on-site • Workplace harassment training and monitoring • Collaborate with local law enforcement on community safety • See also Community Well-Being mitigation measures	Residual effects are identified for health due to Project related changes to biophysical and social determinants of health; however, these effects are not expected to result in a change to population-level health of Indigenous peoples. Significance: not significant

Con.: Construction Phase; Op.: Operations Phase; Cl: Closure Phase
● : applicable mitigation to phase; - : not applicable to phase

Indigenous Peoples - NWOMC and Indigenous Peoples living in the Red Lake Ear Falls Area:						
Pathways To Potential Effect / Criteria	**Potential Effect**	**Phase**			**Key Proposed Mitigation Measures**	**Residual Effects Following Proposed Mitigation Measures and Significance**
		Con	**Op**	**Cl**		
Community Services and Infrastructure	Change in housing and accommodations	•	•	•	• Onsite camp (for about 1,000 people during construction; and about 300 during operations) • Social Performance Plan including coordinating with municipalities to support housing development • Support for culturally appropriate housing initiatives • Education and workforce development to reduce in-migration pressures	No residual adverse effects predicted after mitigation. Significance: determination not required
	Change in municipal, provincial and non-profit service delivery capacity	•	•	•	• Onsite medical services and emergency response • Telus telehealth (or equivalent) access for employees and immediate families • Community liaison committee(s) • Collaboration with provincial / municipal / Indigenous service providers • Funding support for social and health programs • Regional Social Performance Plan • Education and training supports • Closure Plan	Residual adverse effect remains of low magnitude and reversible. Significance: not significant

Indigenous Peoples - NWOMC and Indigenous Peoples living in the Red Lake Ear Falls Area:						
Pathways To Potential Effect / Criteria	**Potential Effect**	**Phase**			**Key Proposed Mitigation Measures**	**Residual Effects Following Proposed Mitigation Measures and Significance**
		Con	**Op**	**Cl**		
Community Services and Infrastructure (cont'd)	Change in Transportation	•	•	•	• Workforce bussing and carpooling • Consolidation of travel from regional hubs • Coordination with regional transportation systems • Traffic management practices	No residual adverse effects predicted after mitigation. Significance: determination not required
Current Use of Lands and Resources for Traditional Purposes	Change in availability, access to, and quality of experience related to traditional terrestrial wildlife harvesting (hunting and trapping)	•	•	•	• No access to the PA; access maintained to LSA • Environment management committee(s) and environmental monitors • Sensory controls (visual, dust and sound) • Prohibition of hunting and fishing in the PA • Progressive rehabilitation • Trapline holder engagement where applicable	Residual adverse effects remain for availability, access (PA restriction), and quality of experience in LSA proximal to PA. Significance: not significant
	Change in availability, access to, and quality of experience related to traditional aquatic harvesting (fishing / aquatic resources)	•	•	•	• Fish Habitat Offsetting and Compensation Plan • Environment management committee(s) and environmental monitors • Prohibition of fishing and hunting in PA • Progressive rehabilitation	No residual effects remain for availability, access, or quality of experience. Significance: determination not required

Indigenous Peoples - NWOMC and Indigenous Peoples living in the Red Lake Ear Falls Area:						
Pathways To Potential Effect / Criteria	**Potential Effect**	**Phase**			**Key Proposed Mitigation Measures**	**Residual Effects Following Proposed Mitigation Measures and Significance**
		Con	**Op**	**Cl**		
Current Use of Lands and Resources for Traditional Purposes (cont'd)	Change in availability, access to, and quality of experience related to traditional plant (food and medicinal) harvesting	•	•	•	• Restricted PA access; pre-construction harvesting opportunities • Wild Rice Enhancement Project • Environment management committee(s) and environmental monitors • Sensory controls (visual, sound and dust) • Progressive rehabilitation	Residual adverse effect remains for quality of experience in LSA proximal to PA. Significance: not significant
	Change in availability, access to and quality of experience related to traditional habitation or cultural, spiritual sites and areas	•	•	•	• Restricted PA access; maintained LSA access • Sensory controls (visual, sound, and dust) • Environmental monitor(s) • Progressive rehabilitation	Residual adverse effect remains for quality of experience in LSA proximal to PA. Significance: not significant
Indigenous Physical and Cultural Heritage, and Structures, Sites or Things of Significance	Alteration or destruction of sites or areas of Indigenous heritage importance, including archaeological, historical, or architectural sites	•	•	•	• Cultural Heritage Protection Plan • Chance Find Procedure • Environmental monitor(s) • Progressive reclamation	Residual adverse effects predicted for alteration / destruction after mitigation. Significance: not significant

Indigenous Peoples - NWOMC and Indigenous Peoples living in the Red Lake Ear Falls Area:						
Pathways To Potential Effect / Criteria	**Potential Effect**	**Phase**			**Key Proposed Mitigation Measures**	**Residual Effects Following Proposed Mitigation Measures and Significance**
		Con	**Op**	**Cl**		
Indigenous Physical and Cultural Heritage, and Structures, Sites or Things of Significance (cont'd)	Change in access to or quality of experience with sites or areas of Indigenous heritage importance, including archaeological, historical, or architectural sites	•	•	•	• Restricted PA access; LSA access maintained • Sensory controls (visual, sound and dust) • Cultural Heritage Protection Plan • Chance Find Procedure • Environmental monitor(s) • Progressive rehabilitation	Residual adverse effect remains related to restricted access to PA. Significance: not significant
	Change in sacred, ceremonial, spiritual and cultural values (including language, stories and traditions) associated with sites or areas of Indigenous heritage importance, including archaeological, historical, or architectural sites	•	•	•	• Cultural Heritage Protection Plan • Chance Find Procedure • Indigenous-led ceremonies where appropriate • Sensory controls (visual, sound and dust) • Environmental monitor(s) • Progressive reclamation	Residual adverse effect remains related to restricted PA access affecting cultural practice / knowledge transfer tied to place. Significance: not significant

Indigenous Peoples - NWOMC and Indigenous Peoples living in the Red Lake Ear Falls Area:						
Pathways To Potential Effect / Criteria	**Potential Effect**	**Phase**			**Key Proposed Mitigation Measures**	**Residual Effects Following Proposed Mitigation Measures and Significance**
		Con	**Op**	**Cl**		
Community Well-being	Change in Community Well-being	•	•	•	• Dry camp policy, onsite medical services and Telus telehealth (or equivalent) • Cultural awareness, and gender-based violence and human trafficking prevention training • Site security measures • Inclusive and local hiring strategy • Indigenous procurement • Training scholarships and bursaries, on the job training and mentorship • Partnerships with Friendship Centre and service providers • Community Liaison Committee(s) • Transportation management • Social Performance Plan • Closure Plan	Residual adverse effects remain for cost of living and traditional economy, access to services, economic opportunity and inequality (regional study area), and access to lands and resources. Significance: not significant

Indigenous Peoples - NWOMC and Indigenous Peoples living in the Red Lake Ear Falls Area:						
Pathways To Potential Effect / Criteria	**Potential Effect**	**Phase**			**Key Proposed Mitigation Measures**	**Residual Effects Following Proposed Mitigation Measures and Significance**
		Con	**Op**	**Cl**		
Health	Change in Health (biophysical and / or social determinants)	•	•	•	• Environmental monitoring • Environmental data sharing agreements • Support for Indigenous-led education and training for land-based activities • Employee benefits and retirement programs • Community support (housing and accommodations / access to services) • Camp medical facilities and emergency response on-site • Workplace harassment training and monitoring • Collaborate with local law enforcement on community safety • See also Community Well-Being mitigation measures	Residual effects are identified for health due to Project related changes to biophysical and social determinants of health; however, these effects are not expected to result in a change to population-level health of Indigenous peoples. Significance: not significant

Con.: Construction Phase; Op.: Operations Phase; Cl: Closure Phase
● : applicable mitigation to phase; - : not applicable to phase

8 Potential for Cumulative Effects

The Impact Statement includes an assessment of potential cumulative effects of the Project of valued components with change after mitigation. The assessment follows federal guidance and incorporates consultation with Indigenous communities and stakeholders, and considers other past, present, and foreseeable future projects and activities in the region.

The potential for cumulative effects arises when the effects of a proposed project after mitigation, overlap spatially and temporally and may interact with the same valued components that are affected by the residual effects of other past, present and known future projects or physical activities. Technical guidance from IAAC does not prescribe the area over where cumulative effects assessments should be considered. Identifiable projects and activities within 140 kilometres from the centre of the Project were used to identify potential interactions.

Present-day conditions reflect the cumulative effects from past and most present activities. Existing conditions described in the environmental baseline reports appended to the Impact Statement therefore fully represent the cumulative effects associated with physical disturbances of developments, such as mining, forestry, communities and infrastructure already present in the region. Present-day conditions also reflect ongoing harvesting activities in the region (fishing, hunting and trapping). A variety of public sources of information were used to identify future projects and physical activities that could interact with the Project. Only a limited number of future Projects or physical activities were identified in the cumulative effects study area.

A screening was completed of the potential cumulative effects for all pVCs with changes after mitigation. This screening summarized below, determined that detailed cumulative effects assessments were not appropriate for any of the pVCs as there were no overlapping project or activities:

Screening of pVCs for Cumulative Effects Assessment:		
pVC	**Is the Adverse Change after Mitigation a Pathway to a fVC?**	**Does the Change Overlap Both Spatially and Temporally with an Identified Project or Activity**
Air Quality	Yes	No
Sound	Yes	No
Vibration	Yes	No
Groundwater	Yes	No
Surface Water Flows and Levels	Yes	No
Water Quality	Yes	No
Vegetation Communities	Yes	No
Wild Rice	Yes	No

Screening of pVCs for Cumulative Effects Assessment:		
pVC	**Is the Adverse Change after Mitigation a Pathway to a fVC?**	**Does the Change Overlap Both Spatially and Temporally with an Identified Project or Activity**
Moose	Yes	No
Other Wildlife	Yes	No
Species at Risk	Yes	No
Land and Resource Use	No	Not applicable
Cultural Heritage	No	Not applicable
Archaeology	No	Not applicable
Local and Regional Economy	No	Not applicable

A screening assessment was also completed for the fVCs. The table the follows summarizes residual and cumulative effects identified for fVCs:

- As there are no residual adverse effects after mitigation predicted to fish and fish habitat, there can be no cumulative effects
- Residual effects are predicted for migratory birds but are not expected to result in significant cumulative effects
- Residual effects are predicted for Indigenous Peoples but are not expected to result in significant cumulative effects.

Summary of Results of Cumulative Effects Assessment for fVCs:					
fVCs	**Criteria**	**Residual Adverse Effects? (Note 1)**	**Analysis of Cumulative Effects**		
			Spatial and Temporal Overlap? (Note 2)	**Cumulative Effects?**	**Significant Cumulative Effects?**
Fish and Fish Habitat	Changes to fish habitat	No	Not applicable		
	Changes to fish communities	No	Not applicable		
	Changes to fish health	No	Not applicable		
Migratory Birds	Changes to abundance of habitat	Yes, not significant	Yes	Not predicted to overlap spatially and temporally in a manner that would result in material cumulative effect	No
	Changes to connectivity and quality of habitat	Yes, not significant	Yes		No
	Changes to density and population	Yes, not significant	Yes		No
	Changes to risk of mortality	Yes, not significant	Yes		No
	Changes to migratory bird Species at Risk	Yes, not significant	Yes		No

Summary of Results of Cumulative Effects Assessment for fVCs:					
fVCs	**Criteria**	**Residual Adverse Effects? (Note 1)**	**Analysis of Cumulative Effects**		
			Spatial and Temporal Overlap? (Note 2)	**Cumulative Effects?**	**Significant Cumulative Effects?**
Indigenous Peoples - ANA	Change in community services and infrastructure	No	Not applicable		
	Change in current use of lands and resources for traditional purposes	Yes, not significant	Yes	Physical disturbance and sensory effects of forestry may result in changes to wildlife movement or ANA use of the area.	No
	Change in Indigenous physical or cultural heritage, and structures, sites, or things of significance	Yes, not significant	Yes		No
	Change in community well-being	Yes, not significant	Yes	Future activities have the potential to effect community cohesion, and access to land and resources which may overlap temporally with the Project.	No
	Change in health	Yes, not significant	Yes	Yes, not material	No

Summary of Results of Cumulative Effects Assessment for fVCs:					
fVCs	**Criteria**	**Residual Adverse Effects? (Note 1)**	**Analysis of Cumulative Effects**		
			Spatial and Temporal Overlap? (Note 2)	**Cumulative Effects?**	**Significant Cumulative Effects?**
Indigenous Peoples - LSFN	Change in community services and infrastructure	No	Not applicable		
	Change in current use of lands and resources for traditional purposes	Yes, not significant	Yes	Physical disturbance and sensory effects of forestry may result in changes to wildlife movement or LSFN use of the area.	No
	Change in Indigenous physical or cultural heritage, and structures, sites, or things of significance	Yes, not significant	Yes		No
	Change in community well-being	Yes, not significant	Yes	Yes, not material	No
	Change in health	Yes, not significant	Yes	Yes, not material	No

Summary of Results of Cumulative Effects Assessment for fVCs:					
fVCs	**Criteria**	**Residual Adverse Effects? (Note 1)**	**Analysis of Cumulative Effects**		
			Spatial and Temporal Overlap? (Note 2)	**Cumulative Effects?**	**Significant Cumulative Effects?**
Indigenous Peoples - WFN	Change in community services and infrastructure	No	Not applicable		
	Change in current use of lands and resources for traditional purposes	Yes, not significant	Yes	Physical disturbance and sensory effects of forestry may result in changes to wildlife movement or WFN use of the area.	No
	Change in Indigenous physical or cultural heritage, and structures, sites, or things of significance	Yes, not significant	Yes		No
	Change in community well-being	Yes, not significant	Yes	Yes, not material	No
	Change in health	Yes, not significant	Yes	Yes, not material	No

Summary of Results of Cumulative Effects Assessment for fVCs:					
fVCs	**Criteria**	**Residual Adverse Effects? (Note 1)**	**Analysis of Cumulative Effects**		
			Spatial and Temporal Overlap? (Note 2)	**Cumulative Effects?**	**Significant Cumulative Effects?**
Indigenous Peoples - NWOMC	Change in community services and infrastructure	Yes, not significant	Yes	Yes, not material	No
	Change in current use of lands and resources for traditional purposes	Yes, not significant	Yes	Physical disturbance and sensory effects of forestry may result in changes to wildlife movement or NWOMC use of the area.	No
	Change in Indigenous physical or cultural heritage, and structures, sites, or things of significance	Yes, not significant	Yes		No
	Change in community well-being	Yes, not significant	Yes	Yes, not material	No
	Change in health	Yes, not significant	Yes	Yes, not material	No

Summary of Results of Cumulative Effects Assessment for fVCs:					
fVCs	**Criteria**	**Residual Adverse Effects? (Note 1)**	**Analysis of Cumulative Effects**		
			Spatial and Temporal Overlap? (Note 2)	**Cumulative Effects?**	**Significant Cumulative Effects?**
Indigenous Peoples - Red Lake and Ear Falls	Change in community services and infrastructure	Yes, not significant	Yes	Yes, not material	No
	Change in current use of lands and resources for traditional purposes	Yes, not significant	Yes	Physical disturbance and sensory effects of forestry may result in changes to wildlife movement or Indigenous Peoples use of the area.	No
	Change in Indigenous physical or cultural heritage, and structures, sites, or things of significance	Yes, not significant	Yes		No
	Change in community well-being	Yes, not significant	Yes	Yes, not material	No
	Change in health	Yes, not significant	Yes	Yes, not material	No

Note 1: Overall results listed; results for individual indicators provided in the Impact Statement.
Note 2: Spatial and temporal overlap of residual effects with an identified project or activity.

9 Effects of Potential Accidents and Malfunctions

Although the Project is designed to meet or exceed regulatory standards with significant engineered safeguards, structural and operational failures and / or human error have the potential to result in accidents and malfunctions and associated environmental and human health effects. An assessment of these potential accidents and malfunctions is necessary in order to develop measures to prevent or mitigate these potential effects.

The analysis considers reasonable worst-case scenarios and excludes extremely improbable events. Most potential effects are expected to remain within the PA, with limited potential for broader social or environmental consequences.

A structured, step-wise approach was used, including identifying accident / malfunction scenarios, describing design safeguards and contingency measures, assessing potential environmental and human effects and determining residual risk while considering likelihood and consequences. An emergency response plan will be developed for the Project to support response to potential accidents and malfunctions.

All residual risks were assessed during all Project phases, as very low or low, after consideration of proposed safeguards and contingency measures.

10 Effects of the Environment on the Project

The Project has been designed in full consideration of its natural surroundings and potential environmental stresses, including a safety margin. The Tailored Impact Statement Guidelines require that the Impact Statement consider how environmental conditions and credible hazards may impact the Project, and how the Project's design and operations are robust and resilient to these risks.

10.1 Potential Effects from Credible Hazards and Extreme Events

- Wildfires: The PA is vulnerable due to local forest fuel and climate change. Mitigation includes fire-resistant infrastructure, fire breaks, coordination with the Ministry of Natural Resources, and evacuation plans. While wildfires may halt operations, major environmental effects are not anticipated due to robust safety measures.
- Major Precipitation Events and Floods: Increased precipitation and flooding risks are projected due to climate change. Surface water management for the Project has been designed for extreme events, with contingency plans for excess contact water. Infrastructure is built to withstand 1:100-year flood events. Potential erosion will be managed through progressive revegetation. Infrastructure will be designed to withstand snow accumulation and snow removal will be used to clear roads.
- Severe Wind Storms**:** High winds and unlikely tornadoes could affect Project infrastructure. Design standards and progressive revegetation of exposed materials mitigate erosion and physical damage. Backup power and safety protocols are in place for wind-related disruptions.
- Extreme Temperatures: Temperature extremes are expected to increase in the future due to climate change. Infrastructure is designed for local temperature extremes and projected increases. Freeze-thaw cycles and temperature fluctuations are managed through design and maintenance, minimizing risks to structures and operations.
- Low Intensity Seismic Events: The Project is in a low seismic risk zone. All facilities are designed to withstand the maximum credible earthquake, following national and provincial guidelines. Seismicity is not expected to cause substantive damage.

10.2 Climate Resilience

An assessment was made of the resilience of the Project to climate change, by identifying climate hazards and potential interactions with Project components, completed risk analysis and identifying appropriate mitigation measures. The assessment identified climate interactions that potential physical climate risks ranging from low risk to high risk. High risks are mainly associated with wildfires and flooding, especially in the 2050s. Medium risks relate to extreme precipitation, winds and freeze-thaw cycles.

Ongoing monitoring and adaptive management if needed, will ensure resilience to evolving climate conditions throughout the Project life.

11 Summary of Benefits

11.1 Economic Benefits

Mining remains a major driver of Canada's economy, contributing significant gross domestic product, employment, and government revenues. The Project is anticipated to generate major long-term economic benefits at both the regional and provincial scales.

During construction, operations, and closure, the Project will create extensive cumulative benefits, including 113,130 person-years of employment, $9.2 billion in labour compensation, $18.9 billion added to gross domestic product and $6.3 billion in government revenue. Local area impacts make up a large portion of this activity, including 85,720 person-years of local employment, $7.4 billion in local labour compensation and $15.1 billion local gross domestic product contribution.

Great Bear Resources emphasizes local hiring and will prioritize hiring of Indigenous peoples and local residents, supported by targeted training, apprenticeships and capacity-building initiatives. These practices aim to encourage the return of skilled tradespeople to the region and the retention of local youth, while providing workers with transferrable skills that will strengthen the labour market beyond the life of the mine. The Project is expected to stimulate local business and encourage diversification.

11.2 Social Benefits

Great Bear Resources plans to take a life of mine approach to meet local community expectations, while aiming to create benefits that continue beyond closure and align with the development goals of local communities and Indigenous Nations.

The following key social benefits are predicted as a result of the Project: Worker housing, increased income, purchases of goods and services, fair compensation for workers, increased labour force and business capacity and support for local initiatives. To date, Great Bear resources has contributed $200,000 toward regional healthcare.

Great Bear Resources is committed to inclusive employment practices, education, training and supporting well-being in order to support the ability of Indigenous peoples to gain employment benefits from the Project. Some of these initiatives include equity-based hiring protocols, Indigenous recruitment policies, supporting work schedule flexibility, partnering with Indigenous training organizations, providing job-readiness scholarships, delivering cultural awareness training to staff, providing financial literacy workshops, providing various health and wellness resources to staff and incorporating appropriate ceremonial practices into the Project. Great Bear Resources utilizes a Social Performance Management System to provide effective management of potential social impacts and risks as well as proactive development opportunities.

11.3 Contributions to Knowledge

In keeping with the goal of creating positive benefits for local communities and Indigenous peoples that extend beyond the life of mine, Great Bear Resources have contributed to numerous programs that will increase knowledge in the region, including environmental baselines studies undertaken to support both the Project design and effects assessment, with enhanced programs in response to feedback from LSFN and WFN, including eDNA surveys, mercury assessment, and expanded surface water monitoring.

Great Bear Resources has provided funding for:

- A regional community-based Chukuni Watershed Aquatic Monitoring Program at the request of LSFN and WFN, which will facilitate Indigenous Nations in the collection and analyzing of data. and increase the capacity for future Indigenous-led monitoring programs
- A Wild Rice enhancement project based on the request of LSFN and WFN to help address the loss of historic Wild Rice (manoomin) production on Wabauskang Lake
- The assessment and strategy development phase of the Red Lake Trout Recovery Project, which is intended to provide the foundation for future efforts to restore a self-sustaining Lake Trout population in Red Lake
- Completion of comprehensive Indigenous knowledge and land and resource use data collection by ANA, LSFN, NWOMC and WFN.
- An independent Anishnaabe-led Impact Assessment of the Project

Great Bear Resources has also committed to the establishment of the Industrial Research Chair in Mineral Exploration with Lakehead University.

11.4 Precautionary Principle

The use of the precautionary principle is mandated by the *Impact Assessment Act.* The Impact Statement incorporates the precautionary principle through multi-year baseline investigations and conservative assessment assumptions, evaluation of alternatives focused on environmental protection and net-zero alignment, use of best-available economically achievable technologies, progressive reclamation planning from project outset, strong community engagement, transparent communications and established grievance mechanisms.

12 Environmental Management and Follow-up

12.1 Management Plans

Environmental management plans are a tool used by mining companies to document and effectively implement the mitigation measures identified for a project. The management plans or procedures currently proposed are listed in the table that follows. These plans may be renamed or combined as appropriate.

Management Plans:	
Plan Content / Name	**Description**
Air quality and dust management plan	Provides best practices and controls to control dust emissions
Aquatic management plan	Sets requirements to monitor, assess and mitigate potential impacts on fish and fish habitat
Archaeological chance / inadvertent find procedure	Outlines measures for management of identified archaeological resources that may be affected by the Project
Blast and vibration management plan	Provides procedures required to minimize blast effects on personnel and the environment
Cyanide management plan	Includes details on the receipt, handling, storage, use, treatment and disposal of cyanide
Environmental emergency plan	Meets the requirements of the Environmental Emergency Regulations of the *Canadian Environmental Protection Act*
Erosion and sediment control plan	Outlines measures to protect the fish and other environmental components from sediment releases
Wildlife and vegetation management plan	Outlines mitigations to reduce effects on fish and wildlife in their habitat, identifies disturbance timing windows
Fuel handling and storage management plan	Outlines the safe delivery, handling, storage and dispensing of fuel for the Project
Hazardous material handling and waste management plan	Provides the protocol for safe handling, storage, and monitoring of hazardous materials
Metal leaching / acid rock drainage management plan	Outline the measures intended for management of mineral waste related to metal leaching / acid rock drainage
Net-zero plan	Outlines technologies, energy source options, operating practices and environmental practices to be implemented for the reduction of greenhouse gas emissions
Noise management plan	A tool to help manage the sound being produced by the Project
Social performance plan	Framework to manage, track and improve their social impacts, benefits and relationships with communities and stakeholders
Spill and environmental emergency response plan	Outlines measures for the provision of emergency response planning, training, responsibilities, cleanup equipment and materials

Management Plans:	
Plan Content / Name	**Description**
Tailings management plan	Detail the actions to be implemented for the safe construction, operation and maintenance of tailings dams
Traffic management plan	Describe the approach to traffic management
Waste management plan	Outline required approach to manage and temporarily store domestic and industrial waste on site and transport off site

C: Construction, O: Operations, Cl: Closure

12.2 Follow Up Programs

A follow up program is required to verify the accuracy of the prediction of environmental and social effects of the Project in the Impact Statement and evaluate the effectiveness of the proposed mitigation measures. A preliminary follow up is provided for each fVC which includes:

- Proposed program with a preliminary description of planned studies
- Expected outcome(s) and targets
- Summary of anticipated related regulatory monitoring
- Duration and frequency
- Triggers and Intervention mechanisms
- Opportunities for the involvement of Indigenous peoples in the program design and implementation.

The Project must also comply with federal and provincial environmental approvals and will be monitored during all Project phases, with a goal of meeting or improving on regulatory requirements for environmental performance at the Project. A screening process was undertaken to determine whether a dedicated follow up program was needed for pVCs that may interact with fVCs that result material changes to the environment after proposed mitigation measures. Dedicated follow up programs were determined to not be needed as surrogate monitoring information is available from other regulatory programs.

The result of the follow up programs and surrogate monitoring information will be prepared annually.

Great Bear Resources intends to take an adaptive management approach over the life of the mine related to environmental performance, adjusting management practices and approaches, and learning from the outcomes of ongoing environmental monitoring and management. The follow up program will be reviewed and updated as new information becomes available.

12.3 Issue Tracking and Grievance Procedure

The Community Grievance Procedure aims to appropriately address, record, and resolve all stakeholder concerns, complaints and grievances. A review will be completed of grievance forms received, as well as patterns and trends in the feedback, as part of the internal adaptive management process and to support the continuous improvement of management plans and procedures. Resolutions will aimed to be reached within 30 days.

13 Conclusions

This final Impact Statement has been prepared to meet the regulatory requirements under the *Impact Assessment Act*. The Impact Statement reflects the results of consultation and engagement efforts by Great Bear Resources, particularly over the last 32 months of the Impact Assessment process. Consultation input from local Indigenous Nations has been considered throughout the Impact Statement including the extensive baseline data collection, alternatives assessment, Project design advancements, assessment of potential Project effects and proposed mitigation measures to eliminate or reduce adverse effects.

Key features of the Project include:

- Economic benefits and employment: The Project is expected to generate $18.9 billion in gross domestic product, 113,130 person-years of employment, $9.2 billion in labor compensation, and $6.3 billion in government revenues, with a workforce peaking at over 1,300 during construction and targeting local and Indigenous hiring.
- Sustainable community development: The Project promotes transferable skills and business experience to support the regional economy post-closure, aiming for benefits extending beyond the mine's life.
- Valued components selection: The Impact Statement identifies valued components under federal jurisdiction and pathway components, integrating environmental and social factors based on Indigenous knowledge and stakeholder input.
- Mitigation and environmental management: Project design incorporates climate change considerations and mitigation measures to avoid significant adverse effects on fish, migratory birds, and Indigenous Peoples, supported by conservative assumptions and follow-up programs.
- Impact on Indigenous Peoples: While some access restrictions and changes to traditional land use are expected, adverse effects on Indigenous communities are considered manageable with mitigation, with no significant residual effects anticipated.
- Compliance with environmental obligations: The Project aligns with Canadian biodiversity commitments and legislation, including assessing impacts on species at risk and migratory birds, and incorporates Indigenous knowledge in mitigation planning.
- Greenhouse gas emissions and climate action: The Project will increase greenhouse gas emissions mainly from natural gas use in the absence of available grid power, but mitigation opportunities and a net-zero plan aiming for net-zero emissions by 2050 support federal climate commitments.
- Climate resilience: A climate change risk assessment and roadmap have been integrated into Project design to support resilience to future climate conditions throughout its lifespan.

Great Bear Resources is dedicated to establishing productive local partnerships that contribute to achieving goals identified in collaboration with the communities to derive benefits from the Project. Ongoing, consultation and engagement is essential to success, and is proposed to continue to occur throughout all phases of the Project. Great Bear Resources is looking forward to working with its local partnerships to develop a world-class gold mine in the Red Lake area on completion of the environmental approvals process.

14 References

Mining Association of Canada (MAC) 2024. Facts & Figures 2024. Accessed from: https://mining.ca/resources/reports/facts-figures-2023/.

Ministry of Mines (MINES). 2024. Ontario's Minerals Sector. Accessed from: https://www.ontario.ca/page/ontarios-minerals-sector#section-0.