Impact Statement and Closure Plan for the Great Bear Gold Project

Technical Review

June 2, 2026

Submitted by:
Lac Seul First Nation
Wabauskang First Nation

Executive Summary

The proposed Great Bear Gold Project (Great Bear; the Project) owned by Kinross Gold Corp (Kinross; the Proponent) is in the heart of the shared Traditional Territories of Lac Seul First Nation (LSFN) and Wabauskang First Nation (WFN; collectively; Nations). LSFN & WFN have undertaken a technical review of the Impact Statement (IS) and the preliminary Closure Plan (CP) for the Great Bear Project with a focus on identifying potential adverse impacts to our Treaty and Aboriginal rights and interests from the proposed Project and proposing means by which the Proponent and/or the Crown may avoid, mitigate or accommodate those potential impacts.

While our Nations are acutely aware of the potential adverse impacts to our Treaty and Aboriginal rights and interests from the Project, we are committed to engaging in good faith with both the Proponent and the Crown. This review is one component of our extensive ongoing engagement on the Project.

The findings of this technical review and the subsequent responses from the Proponent will be incorporated into our ongoing Anishinaabe-Led Impact Assessment (ALIA) for the Great Bear Gold Project. Our ALIA is a Nation-led process wherein our Nations are engaging internally with our members, and externally with other nations, individuals, and corporations, to consider and assess how this Project may impact Anishinaabe Aki. The ALIA process is grounded in, and driven by, Anishinaabe Inaakonigewin (law).

The following list summarizes the key findings from LSFN & WFN's technical review of the IS for the Project:

- **Regional context and cumulative impacts**
    - LSFN & WFN territories have been deeply impacted by almost a century of mining activities, which has left a painful legacy of contamination across the region, especially in the Chukuni River Watershed.
    - This legacy is ongoing, far-reaching, and has caused profound changes in our Nations' ability to exercise our Treaty and Aboriginal rights. Any additional contaminant loadings to the environment will further exacerbate this difficult situation and increase the impacts to the health and well-being of our members.
- **Water resources and geochemistry**
    - The risks of contaminant transport and loadings to the surrounding environment have been underestimated significantly or modeled highly optimistically. Much of the rock that will be mined has both significant

metal(loid) leaching (ML) and acid rock drainage (ARD) risks, jeopardizing the quality of ground and surface waters as well as soils. Major, permanent mine structures expose very large quantities of Project rocks and thus present very serious risks of permanent contaminant leaching to the environment.

- Given the nature of the Project rocks, the contaminants of greatest concern include arsenic and sulphate. Copper, zinc, iron, and lead, among others, also raise concerns, even in non-potentially acid generating rocks.
- Some predictive geochemical models present optimistic and likely unrealistic water quality predictions. These predictions form the basis for much of the Proponent's strategy to contain and manage contaminants. Closer scrutiny of these models highlights very serious concerns about their quality and the validity of their results. Additionally, some hydrogeological models lack the necessary information to assess contaminant loadings to specific surrounding water bodies.
- Specific long-term contaminant pathways of concern include leachates and overflows from the pits to Dixie Creek. They also include leachates from various stockpiles, as well as the tailings dams, to the surrounding groundwaters, further impacting the linked surface water bodies.
- Stricter contaminant containment strategies and adaptive management protocols can help address these underestimated risks. Additionally, stricter protocols for the selection and validation of Project rocks for the purposes of construction are necessary to limit risks.

- **Aquatic ecology**
  - Dixie Creek has cultural significance to LSFN and WFN. Because of this, the communities are particularly concerned that the proposed location of the LP Central Pit and sections of the haul road are only a few 100 meters away from the creek. This proximity creates a high risk of detrimental impacts to aquatic life within the creek through contamination via dustfall and groundwater pathways, vibration disturbances as the pit is excavated, and water quantity changes from changes to runoff and shallow groundwater pathways.
  - The Proponent states that no residual effects are expected to fish and fish habitat, despite many watercourses and waterbodies being directly overprinted by the mine footprint. The loss of functional aquatic habitat and replacement with artificial habitat cannot reasonably be considered negligible, particularly given the temporal delay before constructed habitats become fully ecologically functional. LSFN and WFN are

concerned about the high degree of uncertainty regarding the whether the proposed offsetting will adequately replace the ecological function, habitat complexity, and connectivity of the habitat proposed to be destroyed.

- The Proponent's primary offsetting measure is the creation of the East Pond immediately next to the Potentially Acid Generating (PAG) stockpiles. This is deeply inadequate due to the high risk that the pond will become contaminated from the stockpiles through surface runoff or groundwater pathways. The pond is at high risk of being exposed to the same types of hydrological or environmental pressures that the plan is trying to compensate for. Furthermore, the proposed location of the East Pond is undesirable to LSFN and WFN community members wishing to exercise their rights to fish and travel waterways, and raises well-founded concerns regarding the safety of consuming fish that may be exposed to mine contamination.
- Although not as close as the East Pond, the Dixie Creek Pond Complex is also downstream and downgradient from the mine site, raising similar concerns of contamination, making it an ineffective compensatory measure.
- The offset and compensation plan relies mainly on creating lentic habitat (i.e., East Pond and the Dixie Creek Pond Complex), whereas a large portion of the impacts are to lotic habitats. LSFN and WFN are concerned that the plan may not fully replace the types and functions of habitats that would be lost.
- Only a few offsetting measures are being implemented, which reduces the likelihood of adequate offsetting if the preferred measures underperform.
- The Fish Habitat Offset and Compensation Plan lacks temperature and dissolved oxygen monitoring, raising concerns about long term habitat suitability.
- Aluminum exceedances in Dixie Creek pose a serious long term risk to aquatic life, as concentrations already exceed CCME guidelines and are expected to worsen due to ARD, declining buffering capacity, and episodic pH depression, impairing fish health, egg development, and hatch success.
- LSFN and WFN are concerned that the flow reductions that have been modelled may impact walleye and white sucker spawning habitat, and that even modest reductions during spawning could affect reproductive success and have population-level impacts.

- Additional studies are recommended to assess walleye abundance and spawning success, including baseline egg development monitoring within the EEM program.

- **Mercury**
  - The environmental monitoring programs, as currently designed, need to be strengthened in order to generate the statistical power required to meaningfully apportion the project's short and long term contribution to the extant methylmercury problem in the Chukuni watershed. Changes to the design, scope and protocols can help address this uncertainty.

- **Terrestrial ecology**
  - LSFN and WFN have substantial concerns about the reliability of the FRI mapping dataset used for analyses for changes to migratory birds and pVC's, particularly as some of the datasets are nearing 20 years of age.
  - The "worst case scenarios" used in the change analyses presented by the Proponent assume that mitigations and rehabilitation will occur. In the eyes of LSFN and WFN, worst case scenarios would occur if the Proponent failed to implement any mitigation or rehabilitation on the mine site.
  - It is extremely unlikely that the rehabilitation plan of the Proponent will restore the PA to the exact plant communities existing in the baseline conditions. Therefore, statements suggesting that there will be no significant changes to migratory birds and pVC's are completely unsubstantiated.
  - The Proponent assumes that forestry impacts and recent wildfires have caused areas within the PA, LSA and RSA's to be fragmented, and therefore uses these "fragmented areas" as the baseline reference for rehabilitation/revegetation efforts. LSFN and WFN note that burned areas should never be considered fragmented as wildfire is a natural function of forest ecology and succession. Furthermore, potential fragmentation caused by forestry impacts shall not be considered equivalent with fragmentation from mining.
  - There is no basis for assuming that all migratory bird species present in the baseline PA, will return to the area following reclamation.
  - The Proponent has not indicated whether or not the Project will have an effect on Arsenic levels within plant and animal species discussed in Sections 7 and 9.
  - In some instances, the Proponent has used generalist proxy species for impact analyses on wildlife species. To use a conservative proxy species

approach, the Proponent must use proxy species that are the most sensitive to anthropogenic impacts as proxy species when determining the impacts of the Project.

- The Proponent must commit to habitat compensation for wildlife species and pVC's of importance to LSFN and WFN. Particular commitments must include the establishment/reestablishment of over 232 hectares of wild rice, the establishment of a successful bald eagle nest, the establishment of two new sharp-tailed grouse leks, and two new sites that possess potential for bat hibernacula.

- **Air and dust**
  - There is no basis for concluding that baseline air quality conditions represent exposures at Indigenous harvesting areas, as monitoring stations are located near the mine site and do not capture downwind locations (e.g., Lac Seul or the Chukuni River) where emissions may travel.
  - The conclusion that air quality standards will be met is highly dependent on an assumed 90% dust control efficiency, without a clear mechanism to detect or respond to realistic reductions in control (e.g., equipment failure or seasonal constraints).
  - The assessment of human receptors does not include traditional land use sites (e.g., harvesting camps, fishing areas), meaning air quality impacts at these potentially closer or more sensitive locations may be underestimated.
  - The air quality assessment does not evaluate process upset scenarios for hydrogen cyanide emissions (e.g., pH dropping below design levels), despite the strong influence of pH on HCN volatilization and potential risk.
  - Key modelling inputs, including haul road silt content and dust control efficiency, rely on assumptions that are not supported by site-specific data and may underestimate predicted dust levels relative to Ontario guidance values.

- **Climate change**
  - Greenhouse gas (GHG) emissions could be alleviated, and net-zero objectives achieved sooner, through early integration of the Project into Ontario's low-carbon grid and by leveraging carbon credits and offsets. A proactive effort to help catalyze grid power supply growth, along with including a broader range of carbon credit and offset options, are gaps in the current net-zero strategy.

- Stricter accountability measures throughout the implementation process of the net-zero plan will help ensure objectives are met.

- **Socio-economic Concerns**

  - Broadly, the risk levels assigned to the Determinants of Health are insufficient to address the most likely impacts of the Project.

  - Specifically, the Minor or Negligible impacts assigned to Housing, Access to Health and Social Services, Mental Wellness and Personal Behaviours, Actual and Perceived Public Safety, and Safety of Indigenous Women and Girls are contradicted by various statements made by the Proponent in Appendices N-2 and O-1.

  - Statements should be made that clarify the impacts of the Project on houselessness, criminalization of Indigenous people, drug toxicity, safety of Indigenous women, girls and 2SLGBTQQIA people, with the added context that the incoming mine workforce will increase the demand for housing supply, legal and illegal drugs, and sex work.

  - Statements should be made that clarify the impacts of the Project on worker injuries, stress, mental health, and other factors predictive of substance use that may aggravate the likelihood of drug toxicity in the region.

  - Efforts should be made to find solutions to problems involving substance use, sex work, and houselessness that do not lead to further criminalization of Indigenous people or further entrenchment of trauma based in past and ongoing colonial practices.

  - Consideration should be given to comparable projects in Ontario (e.g. Geraldton) concerning impacts on specified Determinants of Health.

  - Mitigating strategies for all impacts on Determinants of Health should be proposed that align with local Indigenous knowledge and community values.

- **Archaeology**

  - Given the irreversible impacts of this project on archaeological and heritage resources and the descendent communities themselves, and the fact that some developments occur through relatively undisturbed areas, the overall conclusions of low potential should be reviewed more critically and conservatively. The property is situated on sandy glaciofluvial soils,

which are often associated with archaeological potential in northern Ontario, including proximity to an esker.

- LSFN & WFN would like the Proponent to pursue more extensive consultation with our communities than is strictly required under the standard Ontario parameters. This includes pursuing deeper research into Indigenous knowledge or local descendent community practices that could point toward archaeological potential and resources; greater documentation for local Indigenous histories; and formal Indigenous Knowledge engagement protocols with meaningful participation from both LSFN and WFN, including addressing consent and ownership of provided knowledge.

The following list summarizes the key findings from LSFN & WFN's technical review of the preliminary CP for the Project:

- The rehabilitation measures and monitoring programs for closure are insufficient to fully protect all pathways of contaminant release to the environment, with special emphasis on seepage risks from the pit lakes to Dixie Creek.
- Broadening the scope of the monitoring program and pumpback measures can alleviate risks of seepage and contamination pathways being overlooked.
- Incorporate submergent aquatic vegetation into the pit lake rehabilitation strategy to improve water quality and ecosystem function.
- Include the monitoring of foraging foods and medicines within the LSA for risks of contaminant bioaccumulation and risks of contaminant transfer through Members' traditional activities.
- Improve revegetation measures to protect the genetic lineage of the region.

These points are only a short summary of LSFN and WFN's concerns. Report sections 7 and 8 discuss all concerns in greater detail. LSFN & WFN expect these issues to be meaningfully addressed by the Proponent, the Crown and through our Anishinaabe-Led Impact Assessment (ALIA). These issues must also be acknowledged as satisfactorily addressed through the execution of a Project Agreement / Impact Benefits Agreement between our Nations and the Proponent.

Note on the role of this technical review in relation to our Nations' consent decision on the Project: LSFN and WFN have established a means by which we will be providing or withholding our consent for the Project through our Anishinaabe-Led Impact Assessment (ALIA). The ALIA analysis will be directly informed by the content of the Impact Statement and the findings of this technical review, amongst other lines of evidence. The consent

decision made by our Nations on the Project will ultimately be made by our Chief and Councils' decision based on the ALIA advisory committee's final recommendation. As such, the comments and recommendations in this report should be understood as a technical analysis to guide our ALIA process and therefore do not imply anything about our Nations' consent decision on the Project.

Contents

1. Introduction

LSFN and WFN have prepared this technical review of the IS and CP as an important part of our engagement with the Proponent on their proposed Great Bear Gold Project located near Red Lake, Ontario in the shared territory of LSFN and WFN.

In this technical review, we have prepared a series of comments and recommendations with a focus on the implications and potential impacts on our Aboriginal rights and interests. These technical findings form the basis of the analysis of the Project we are undertaking in our Anishinaabe-Led Impact Assessment (ALIA) of the Great Bear Gold Project. This review does not represent or imply a decision by either Nation to provide, withhold, or condition consent for the Project.

2. Lac Seul First Nation

Gold mining has been ongoing in the Red Lake region for over 100 years. Our people, however, have lived in relationship with these lands and waters for much longer. For thousands of years the Anishinaabe lived a good and healthy life, throughout Lac Seul Traditional Territory which includes the Red Lake area. Our Elders say that "we are the land and the land is us". And this is true. All life comes from the land, and we all return to it. Our people are buried all over this land. The lands and waters provided everything we needed. Animals to eat, plants for medicine, and copper for tools.

Our way of life has always revolved around the water (Nibi in Anishinaabemowin) . In our culture, water is life. We travelled by water; our homes were near the water; we cultivated wild rice (*manoomin* in Anishinaabemowin, which means the "good berry") in the water; our hay lands and gardens were in the low-lying areas next to the water; we fished and hunted from the water; and we interred our dead near the water.

On October 13, 1873, Treaty 3 was signed by the Dominion of Canada and Chiefs of the Anishinaabe. LSFN adhered to Treaty 3 in 1874, representatives from Trout Lake signed the adhesion. When our Elders speak of the Treaty, they do so carefully. Our oral history is critical to our Nation – our history and Treaty are never referred to flippantly. When our Elders speak about the Treaty, they speak about a "relationship" between the Anishinaabe and the Crown. That is how we understand the Treaty – as a *relationship*. Our Elders always insisted that by entering into Treaty we agreed to share the land; we did not agree to surrender it. In our culture, the land is our mother. It would be as repugnant to talk of surrendering ownership of the land as it would be to talk of surrendering ownership of our mother. By entering into Treaty, the Crown promised that our way of life would be protected and supplemented. We were promised that we would be as free as in the past to practice our traditional activities, including, hunting, trapping, and fishing.

For many years Canada forgot and broke its sacred promise. In 1929 Canada and Ontario built a dam at Ear Falls to power the gold mines here in Red Lake. The dam raised water levels by 10 feet on Lac Seul. The flooding, which continues to this day, destroyed everything. Our homes, our traplines, our wild rice gardens.

Our ancestors were forced out of their homes at Forestry Point - *Neyaawankank* - and Howey Bay to make room for gold miners. So much was lost. So much wealth was taken out of our lands and not shared with us.

Today, LSFN is comprised of five communities: Frenchman's Head, Kejick Bay, Whitefish Bay, Canoe River and Trout Lake. Frenchman's Head, Kejick Bay, Whitefish Bay and Canoe River are located on Lac Seul Reserve near the municipality of Sioux Lookout. Our reserve land is located on Lac Seul. Our Trout Lake community has never had it's own reserve parcel despite being an integral community of our Nation. We have approximately 3,500 members. Of these, about 1,000 live on reserve. We have approximately 150 members living in the Municipality of Red Lake.

2.1 Red Lake - WanamaniSaa'ikan

Red Lake is a part of our homeland. Our people call Red Lake – *WanamaniSaa'ikan*. Before the arrival of settlers, *WanamaniSaa'ikan* referred to the lake. Now "Red Lake" means the municipality.

Our people have inhabited *WanamaniSaa'ikan* for centuries, using the many lakes and rivers for fishing and trapping routes. For example, a recent archeological assessment led by the Ministry of Natural Resources and Infrastructure Ontario (MNRF) uncovered thousands of artifacts and several burial sites at a location in Red Lake known to us as *Neyaawankaank* and known to non-indigenous people as Forestry Point. *Neyaawankaank* is sacred land. We used it for ceremony, camping and fishing. In the 1920s the MNRF displaced us and destroyed our graves, by building a firebase on *Neyaawankaank*, which still remains.

Our Trout Lake people used *WanamaniSaa'ikan* and in particular an area now known as "Howey Bay" today, as a gathering place before the spring travels to Lac Seul. It was also a favourite place to meet for the fall ceremonies prior to the *manoomin* (wild rice), whitefish and trout harvest and before dispersing to our winter hunting and trapping grounds.

However, all this started to change when gold was discovered in *WanamaniSaa'ikan*. Soon after my mother, Sarah Olsen, was born (1922), the *NamekosipiiwAnishinaape* (people of Trout Lake) heard that gold had been discovered (1928). The discovery of gold led to a tremendous influx of settlers into our traditional homelands particularly

around Red Lake.

As described in *Following Nimishoomis,* the *NamekosipiiwAnishinaape* felt threatened. They had never contemplated such an influx of people. We were concerned for our kin – the animals, the land, the water, the plants and the trees – how they would be affected by such an intrusion. My mother recalls watching the endless stream of boats travelling along the rivers and lakes, bringing with them prospectors in search of gold. This led to a quick and dramatic decline of large animals such as moose.

The influx of prospectors forced our people from their traditional gathering grounds at Howey Bay. Our people moved further down the shoreline. By the 1930s commercial timber harvesting was in full flow, and the settlers wanted to build a sawmill where we now lived. Once again, we were forced from our homes and relocated further down the shoreline. In the 1940s the settlers decided to build a tourist resort known as Howey Bay Resort. Yet again, we were forced to move. Finally, in or around 1960, the community of Red Lake decided it had to deal with the problem of "Indian squatters" who were taking up valuable land. Once again, our homes along Howey Bay were torn down and burned. This time we relocated to the other side of the bay, to an area known as North Star Hill, where we lived in 18 small homes. In the 1980s the town condemned these houses.

3. Wabauskang First Nation

3.1 Who we are

WFN is an Anishinaabe community in Treaty #3 territory in northwestern Ontario. The Nation descends from the Mattawan and English River Band, signatories to Treaty #3 on October 3, 1873, under Chief Sakatcheway. WFN's traditional territory is extensive, spanning a broad area of northwestern Ontario that has been continuously occupied and used by WFN ancestors and members for well over two centuries. There is documented WFN presence and land use including hunting, fishing, trapping, rice harvesting, and seasonal movement across Cedar Lake (Lake Wabauskang), Mattawan, Escabitchewan, Pakwash Lake, Red Lake, Trout Lake, and the Wabigoon-English River system with records from as early as the 1820s of WFN-affiliated individuals including Passequicabow, Quiusance, and Sagajiway (later Chief Sakatcheway) operating across this full territory, including in areas that today encompass the Great Bear Project area near Red Lake. This deep, unbroken connection to the land and water defines WFN's identity, governance, and responsibilities today. WFN's living Indigenous Knowledge database now contains over 5,400 spatially documented land use records, confirming the continuity of traditional practices to the present day.

3.2 Values and Guiding Principles

WFN's scrutiny of industrial development is rooted in direct and cumulative experience of harm. The community's traditional territory has been shaped and in many ways diminished by successive waves of industrial activity over the past century: forestry operations and herbicide spraying that have disrupted plant harvesting areas and displaced wildlife; unmonitored early-stage mineral exploration that has damaged berry patches, medicine sites, and cultural values; historic mining development in the Red Lake region; and, most severely, decades of industrial water pollution. From the 1940s onward, the Dryden Paper Mill discharged toxic effluent including lethal concentrations of resin acids, sulphates, and ultimately mercury into the Wabigoon River, where WFN members lived, fished, and drew drinking water. Despite provincial knowledge by 1952 that the river was toxic, WFN was never warned. Each of these experiences has compounded the last, steadily eroding the availability, safety, and accessibility of the lands and waters WFN depends on.

It is from this lived reality that WFN's engagement with the Great Bear Project and with any proposed development on its traditional territory proceeds. WFN's positions are grounded in Anishinaabe law, the OCAP® principles (Ownership, Control, Access, and Possession), and WFN's Consultation and Accommodation Protocol. These procedures reflect the community's living relationship with the land, its responsibilities to future generations, and hard lessons learned from a long history of being told that industrial development would not cause harm and then watching it do exactly that.

3.2.1 Stewardship of Land and Water

Anishinaabe teachings place WFN in a relationship of responsibility with the natural world. Water, fish, wild rice, and wildlife are relatives, not resources. WFN's obligation is to protect these for future generations, guided by Manito Aki Inaakonigewin (Sacred Earth Law), which asserts Anishinaabe jurisdiction over all relationships with the land and water in Treaty #3 Territory.

3.2.2 Treaty Rights and Indigenous Sovereignty

WFN is a signatory to Treaty #3 and holds constitutionally protected rights to fish, hunt, trap, and harvest across its traditional territory. These rights cannot be extinguished or infringed without meaningful consultation, accommodation, and, where required, consent. WFN's Consultation and Accommodation Protocol affirms the Nation's own jurisdiction over how that engagement must occur. Specifically, it must be direct, early, and properly resourced, not delegated through third parties or satisfied through information-sharing sessions. WFN also asserts its rights under the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) and Canada's Impact

Assessment Act. Consultation is not a box to check; it is an ongoing, nation-to-nation process that must continue through every phase of the project lifecycle.

3.2.3 Ownership and Control of Indigenous Knowledge

WFN's traditional knowledge is a living expression of Anishinaabe law, culture, and identity accumulated over generations and inseparable from the community's governance, spirituality, and well-being. The OCAP® principles govern how this knowledge is used: WFN owns it, controls who may access it, determines how it is interpreted, and retains possession of it. No external party including proponents, regulators, or consultants may use, disclose, or draw conclusions from WFN's traditional knowledge without WFN's explicit direction and consent. Where documentation is permitted, it must be stored securely under community-approved data agreements. Cultural integrity further requires that engagement respect oral traditions, use Anishinaabemowin where appropriate, and involve knowledge holders directly in interpreting and validating findings.

3.2.4 Precautionary Approach

WFN applies a precautionary standard to all proposed industrial development. Given the community's direct experience of severe environmental harm and given the documented cumulative pressures already affecting its traditional territory from forestry and mining the burden of proof rests with the proponent to demonstrate safety, not with WFN to demonstrate harm. Incomplete baseline data, uncharacterized contamination pathways, and untested mitigation measures are not acceptable foundations for decision-making about the project and its approval. Where scientific uncertainty exists regarding impacts to water quality, fish populations, wild rice, waterfowl, semi-aquatic mammals, or human health, WFN expects that uncertainty to be managed before decisions are made and not after the fact.

3.2.5 Integration of Indigenous Knowledge

WFN's TKLU database contains over 5,400 spatially documented land use records representing generations of observation and practice across its traditional territory. This knowledge must be treated as an equal and scientifically credible input into environmental assessment and monitoring and not appended as a consultation summary or used selectively to validate conclusions already reached through scientific methods alone. Community members have directly observed changes in fish health, declining wildlife populations, the effects of herbicide spraying on plant harvesting areas, and the cumulative footprint of industrial activity across the territory. These observations carry evidentiary weight and must be reflected in project design, impact prediction, and monitoring frameworks.

3.2.6 Accountability, Enforcement, and Long-Term Protection

WFN requires binding commitments, not voluntary undertakings or letters of intent. Any project approval must be accompanied by enforceable environmental protection standards; independent, third-party monitoring with meaningful WFN participation; transparent and regular public reporting; meaningful consequences and real penalties for non-compliance; and financial assurance for reclamation and remediation that is fully secured and independently verified before any ground disturbance begins. Monitoring must continue through closure and post-closure, not end when production stops.

3.2.7 Cumulative Effects

No project exists in isolation. WFN's traditional territory has already been significantly affected by decades of forestry operations, mines, herbicide spraying, unmonitored early-stage mineral exploration, road building, and historical industrial contamination. These pressures have reduced the availability and safety of traditional harvesting sites, displaced wildlife, degraded aquatic habitat, and disrupted the seasonal routines and land-based knowledge systems that define WFN's way of life. The Great Bear Project must be assessed within this cumulative context — not evaluated as though it is arriving on undisturbed land. WFN expects cumulative effects assessment to be rigorous, honest about existing baselines, and informed by community knowledge of how the land has already changed.

3.2.8 Economic Participation

If the project proceeds, WFN expects genuine and sustained economic benefit for its members including employment, training, contracting, and revenue sharing. These are all part of meaningful accommodation of Treaty rights. Economic participation and environmental protection are complementary obligations, not competing trade-offs. A project that employs community members while degrading the waters and lands they depend on is not a benefit.

3.3 WFN's Position on the Great Bear Project

WFN acknowledges Kinross's collaborative engagement through the ALIA process, technical reviews, and fisheries and species-at-risk offset planning. WFN's position is rigorous, rights-based scrutiny. Minimum expectations include: full protection of water quality; protection of documented fishing, harvesting, and cultural sites; incorporation of WFN's TKLU into project design and monitoring; elimination of tailings spill risk to downstream water systems; secured financial assurance for reclamation before ground disturbance; and negotiation of an IBA prior to approval. WFN's position will continue to

evolve through the ALIA process, expected to conclude in early 2027.

4. Great Bear Project

The Great Bear Project, proposed by Kinross Gold Corp, is a planned open-pit and underground gold mine and processing facility located approximately 25 kilometers southeast of Red Lake, Ontario, along Highway 105. This project aims to extract gold and silver over approximately 26 years of operations and a total mine life of 34 years, with construction expected to start in mid-2027.

The mine is expected to operate continuously throughout its lifetime, processing ore onsite at an average rate of 10,000 tonnes per day (tpd) and a total capacity of 15,000 tpd. In total about 81.2 million tonnes of ore are expected to be processed. The gold is primarily refractory, contained in sulphides and hosted in quartz veins. The ore will be processed via crushing and grinding, gravity concentration, cyanide leaching with carbon-in-pulp recovery, followed by refining and producing doré bars.

The main geochemical characteristics of the Project rocks revolve around acid generation potential (PAG) and elevated arsenic contents. Therefore, the main direct environmental risks relating to these rocks relate to ARD and metal(loid) leaching, with emphasis on arsenic, iron, lead, zinc, copper and sulphate, among other compounds. Throughout its lifetime, the Project will bring about 155 million tonnes of rock up to the surface. About 25 million tonnes are not expected to be acid-generating as well as contain low arsenic, and will therefore be used for constructing major structures such as dams at the TMF. The remainder will be considered acid-generating and will be stored in the mine rock storage (MRS) site. About 55 million tonnes of tailings are expected to be managed in tailings facilities on surface, of which 3.3 million tonnes will be sulphide-rich concentrates, stored sub-aqueously in the Viggo management facility, and the de-sulphurized remainder stored at the surface in the tailings management facility (TMF). Additionally, about 26 million tonnes of tailings are expected to be stabilized with cement and used and stored as underground backfill.

The property of the Project encompasses 11,780 hectares. The MRS will cover about 170 hectares and reach a height of up to 120 meters. The TMF will encompass an area of 345 hectares. The Viggo pit will cover an area of 23 hectares and be up to 120 meters deep, and the LP central pit will cover an area of 87 hectares and be 255 meters deep. The deepest parts of the underground operations are expected to reach down to 1,500 meters. Other stockpiles cover about 220 hectares and the processing site about 32 hectares. The mine camp is designed to accommodate up to 1,000 people during construction and 300 during operations.

The Project footprint overlies northern Ontario boreal ecosystem, which includes forests,

wetlands and aquatic habitats. The Project will disturb these lands and include some watercourse realignments during operations. Surface water management will address hydrology and water quality in the footprint area. Kinross has proposed plans to progressively reclaim affected areas throughout the project's operational life, including the TMF, stockpiles, and other infrastructure no longer in use.

The Project is expected to require up to 430,000 cubic meters of water per year during operations. This water will be sourced from underground pumping (to keep operations dry and functional), as well as from the Chukuni River. After treatment, the water will be released back into the Chukuni River. Water management systems will also be constructed to ensure non-contact water is diverted and contact water is treated before discharge. The Viggo management facility (VMF) will act as a steady-state storage site for mine-contact waters and water treatment reject waters.

The mine site will have a total power requirement of 50 MW. The existing Ontario power grid has insufficient capacity to provide the entirety of this power requirement, so a natural gas power plant will be built on site, along with diesel generators. Natural gas will be supplied to the site via connection to a nearby pipeline. In this configuration, the Project is expected to emit about 5 million tonnes of CO_2e. 85% of these GHG emissions are expected to originate from fossil fuel consumption, for the purposes of power and heat generation as well as to power the mobile fleet.

Kinross anticipates that the Project will 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.

5. Community Engagement

Our Nations have been engaging extensively and intensively with the Proponent and the Crown on the Project. Kinross has hosted a number of community open house sessions over the past year, and our ALIA Advisory Committee meets biweekly to assess the impacts of the Project from an Anishinaabe perspective and consider what mitigations would be required for our Nations to be willing to consent to the Project. Later in 2026 the Advisory Committee will present their findings to LSFN and WFN membership and leadership as part of our process to determine whether our Nations will consent to the Project or not.

6. Anishinaabe-led Impact Assessment

LSFN and WFN are jointly undertaking an Anishinaabe-Led Impact Assessment of the

Project (ALIA). The ALIA is guided by the 4 Anishinaabe principles of care, takes a seven generations perspective, and is rooted in Anishinaabe Law (Manito Aki Inaakonigewin). The ALIA is made up of an advisory committee that is composed of members of each of the Nations. The advisory committee meets 1 – 2 times per month to assess specific aspects of the Project through the decision making process that has been designed for the ALIA. Similar to the Federal Impact Assessment process, the ALIA will conclude with an ALIA report that has a decision on whether the Nations will consent to the Project, the conditions for which the Nations require the Proponents' commitment to uphold, and the rationale by which the Nations arrived at these conclusions through the ALIA processes findings and recommendations.

The findings of this technical review, the responses from the Proponent and the Information requests developed by IAAC on all the submissions on the IS will all be incorporated into the internal ALIA decision-making process. As such, the comments and recommendations in this report should be understood as a technical analysis to guide our ALIA process and therefore do not imply anything about our Nations' consent decision on the Project.

7. LSFN & WFN Comments and Recommendations on the Impact Statement for the Great Bear Gold Project

#	Topic	Comments	Recommendations
General Comments			
1.	**Primacy of ALIA**	LSFN & WFN would like to emphasize that our Nations are considering the Project under our own laws, mandate, concerns, interests and decision-making process. Accordingly, ALIA is the body that will provide the final decision from our Nations to this Project. All the information contained in this document must be understood as a review of technical information only, and does not have direct implications on the ALIA's final decision.	N/A
2.	**Appendix V: Navigable Waters Assessment Information**	Section 1.2 of Appendix V states that "*to date Great Bear Resources has not received knowledge that imparts the historic or existing use of the watercourses and waterbodies listed in this document, apart the Chukuni River from Indigenous communities to date.*" LSFN and WFN have documented contemporary travel along Dixie Creek in particular, with some members talking about water travel along Dixie Creek being a frequent (at least annual) activity.	A. LSFN and WFN Require that the Proponent update Appendix V to acknowledge the fact that LSFN and WFN members use Dixie Creek as a waterway for navigation. B. LSFN and WFN require that Transport Canada review the information in Appendix V accordingly.
3.	**General comment: regional context and cumulative impacts**	One of the dominant guiding principles for LSFN & WFN when assessing this Project relate to the heightened sensitivity to risks of contaminants entering the Chukuni watershed. Recent surveys have highlighted pervasive and lasting problems with arsenic across too much of this valued watershed. Furthermore, the arsenic problem builds upon other regional issues with high mercury contents in fish. These problems are very closely tied to a very painful legacy of mining activities in the region. The Red Lake area in particular (a mere 25 km away from the Project location) is responsible for extremely heavy impacts due to the history of mining operations, and is the source of very significant arsenic contamination across the entire region.	LSFN & WFN require the Proponent to: A. Recognize the regional context of legacy impacts that the Project will operate within, and the heightened sensitivity to any additional contaminants to the Chukuni watershed. B. Maintain this awareness as a guiding principle and operational framework for all aspects of decision making, planning and execution of mine site activities. C. Contribute, within the limits of its abilities, to efforts to rehabilitate the Chukuni watershed and the region, to pre-mining impact conditions. Note that we intend to develop an

#	Topic	Comments	Recommendations
		Dixie Creek is a small water body that will experience a decrease in flow during operations, and is therefore sensitive to even small contaminant loadings. It also flows directly to the Chukuni River, which is already heavily impacted from the region's mining activities, imparting serious risks to ecosystems and human health at the regional level. Any additional contaminant loadings will exacerbate this already difficult situation.	ALIA condition related to this and intend to commence discussions on this with the Proponent as soon as possible.
Water Resources and Geochemistry			
4.	**IS section 5: Viggo pit lake overflow design**	Fig. 5.14-6 suggests that the overburden stockpiles and the Viggo pit lake will direct mine contact waters flow into the unnamed watercourse 6a during post-closure. The text in the same section (5.19.3) describes a different plan, with the Viggo pit lake's overflow will discharge into the LP pit lake.	LSFN & WFN require the Proponent to clarify the fate of overburden runoff waters and Viggo pit lake overflow waters during post-closure.
5.	**Appendix H-2: hydrogeological models and reporting to water bodies**	The IS states that groundwaters are expected to return to conditions very similar to the pre-mining baseline during post-closure. Appendix H-2 indicates that the Viggo Management Facility (VMF) will report 173 m^3/d of seepage mainly to Dixie Creek. A similar quantified model is missing for waters of the LP central pit, and its water reporting to Dixie Creek during post-closure. This is very surprising considering the LP pit is the receiving body for many runoff and overflow waters across the property during post-closure, and would therefore be the point source of any potential contaminants emerging from many parts of the property. Similarly for other mine site structures (such as MRS, LGO), appendix H-2 only provides cursory information about their contribution to groundwater flow and their respective reporting to surface water bodies.	LSFN & WFN require the Proponent to: A. Perform a quantified model for groundwater reporting from the LP pit to the surrounding water bodies (with special attention to Dixie Creek) during post-closure. B. Provide a better visualized and quantified summary of the groundwater reporting of all mine site structures (e.g., MRS, LGOs, etc.), and their various receiver surface waters, across all phases of the mine life.
6.	**Appendix K-2: LP pit lake geochemistry model in post-closure**	Appendix K-2 states that during post-closure, waters from the LP pit lake will not impact the water quality of the receiving water bodies, on the basis that the pit lake waters are expected to meet all regulatory requirements in their natural state.	LSFN & WFN require the Proponent to perform new pit lake water chemistry models for the LP pit, that can provide results that are credible and meaningful in estimating risks to the receiving environment. These new and updated models need to address all the concerns discussed in the comments column, with particular emphasis on (i) the effects of season-driven vertical

#	Topic	Comments	Recommendations
		LSFN & WFN express very serious concerns with this conclusion, as it offers an extremely unrealistic and optimistic view of pit lake water quality in spite of the majority of the project rocks having acid rock drainage (ARD) and metal leaching (ML) potential. The LP pit lake water quality results presented in appendix K-2 have some very serious and problems: 1. Kinetic tests of the project rocks in appendix J show leachates exceeding provincial regulations with arsenic, cadmium, zinc and lead, among others, including in lithologies FV 1 & 2, which constitute the majority of the project rock. This casts serious doubts on the premise that the pit lake will meet water quality regulations as described in the IS during post-closure. 2. These ML risks identified in kinetic tests exist long before the expected onset of ARD. The timing of post-closure lines up with the expected onset of ARD. Which will compound the ML risks already manifest in the (pre-ARD onset) kinetic test results. Risks to pit lake water quality will therefore compound rapidly during post-closure as ARD starts to take effect. 3. Arsenic is of particular concern, regardless of ARD risks, since it is mobile in neutral pH and very redox-sensitive, and is more mobile in reducing environments. Therefore, even neutral pH and anaerobic pit lake conditions won't inhibit significant arsenic loadings. 4. Appendix K-2 states that the pit lake will have significant buffering capacity and be able to neutralize acid generation. This comment is merely presented as fact, without any supporting evidence to back it up. Appendix J clearly demonstrates that the bulk of project rocks are potentially acid generating (PAG) with very limited inherent buffering capacity. No discussion in the IS or its appendices offered any sense of where this added buffering capacity could be coming from to offset ARD effect. 5. The walls of the pit lake, which are characterized mainly as PAG, will be exposed to oxygen for the duration of construction and operations. This will create a significant degree of oxygen ingress through the local groundwater and bedrock, and will likely lead to accelerated sulphide oxidation, creating conditions for significant ARD and ML risks in the pit lake when the pit fills up. Additionally, the pit walls situated higher than the water level will continuously experience this oxidative weathering, creating an addition of contaminant loading through water runoff (from rain, snowmelt,	mixing and stratification cycles, (ii) incorporate the impacts of ML, with emphasis on As cycling, and (iii) incorporating the effects of the onset of ARD expected to occur early in post-closure. Software like PitMod have a proven track record for providing high spatial and temporal resolution to that effect. If the Proponent chooses to keep GoldSim as a modeling software, a complete overhaul and review of boundary conditions needs to be performed, using peer-reviewed empirical data and real-life case studies for model validation. Whichever modeling software is used, some sanity checks must be applied to model results as a means to ensure model outputs are consistent with scientific knowledge, empirical data, and the actual closure strategy (further discussions on this in topics 7 and 9 below). Importantly, these new and updated pit lake water quality models need to provide the necessary information on contaminant seepage and loadings to the surrounding groundwaters, and for sporadic overflow events, in order to further model loadings to the receiving environment (further discussed in topic 8).

#	Topic	Comments	Recommendations
		groundwater flow, etc.) along the pit walls, which is a well-documented process (Savage et al., 2009). 6. Appendix K-2 only discusses wind shear as a mechanism for vertical mixing of the water column, and omits very important seasonal effects on lake stratification such as spring turnover and summer stratification. These dynamic processes render stratification a very dynamic feature, which has important implications for oxygen as well as metal leaching and cycling in the water column, and overall lake quality. 7. Appendix K-2 models both stratified and fully mixed lake scenarios, but presents results that are virtually undifferentiated for both scenarios. This is inconsistent with geochemistry principles. If ARD (and most ML) risks require oxygen to take effect significantly, then a well-stratified lake with an anoxic bottom layer may propose a mechanism to stabilize most of the ARD-generating rocks of the pit walls. On the other hand, a well-mixed lake would incur well-oxygenated bottom waters, thus promoting sulphide oxidation and ARD with added ML across the entirety of pit walls. Yet the water quality results presented offer no meaningful differences between the scenarios. This casts very serious doubts on the overall quality of the pit lake models presented. 8. Appendix K-2 claims that the naturally occurring adsorption of metals onto iron oxide particles (i.e., polishing) will be the main mechanism of metal contaminant removal during post-closure. As a passive process, this is very unlikely to succeed at producing waters that meet water quality requirements, since it would require a mechanism for the continuous generation of sufficient amounts of iron oxide particles, and their subsequent settling to the bottom of the pit lake, at adequate rates. Such conditions never happen in nature in the way that would effectively treat waters to regulations, and can't realistically happen in a static pit lake devoid of suspended particle inputs. While iron oxides are indeed commonly used as a mechanism to remove many metal contaminants, there are reasons why this process is always performed within the bounds of engineered systems, not passively in stagnant water bodies. 9. Recent surveys of the mine-impacted Chukuni River show that arsenic remains a persistent contaminant for over 70 km along the watershed, which includes oxygen-rich large lakes with suspended solids (Shared Spirits, 2025).	

#	Topic	Comments	Recommendations
		This clearly demonstrates that passive polishing is not a reliable mechanism to remove metal(loid) contaminants effectively. 10. If the LP pit lake develops an anoxic bottom layer, the metal-laden iron oxide particles that settle at the bottom of the lake will undergo reductive dissolution, thus releasing their metals again in the lake waters, creating a cycling of metals in the lake waters. This process would make it nearly impossible for lake waters to ever meet regulatory requirements. 11. This cycling problem will certainly be very strong with arsenic, as it is highly mobile in reducing conditions, and even oxidized phases remaining a pervasive risk. Arsenic is particularly problematic as it presents a ML risk regardless of ARD conditions, and is very well documented as being a contaminant that routinely cycles through the water column. This cycling is absolutely a possibility in pit lakes, as these contains sediments in the form of (metal-enriched) sand and gravel, as well as natural debris. Ammonia (from blasting) and organic carbon (from groundwater seepage and organic debris deposition) will also be present in the lake and act as excellent reducing agents to enable the reductive dissolution process. The metal-enriched nature of the rocks and sediments in pit lakes offer excellent microbially-catalyzed redox reactions. 12. These ARD and ML risks, especially those with arsenic, are well-documented across the Canadian shield and the world. Problems with water quality and persistent arsenic contamination are very common, especially in reclaimed gold mines, including Ontario. Even natural lakes, whether shallow or deep, can experience persistent arsenic contents without being exposed to large ARD or ML-generating walls (Tempel et al., 2000; Savage et al., 2009; Hershey, 2010; Verbuyst, 2020; Herrell et al., 2022). These considerations cast very serious doubts on the claim that the LP pit lake will meet water quality regulations in post-closure in its natural state. To conclude, the water quality model for LP pit presented in appendix K-2 contradicts (i) scientific principles of water quality and geochemistry, (ii) the empirical results from the Proponent's own kinetic tests, and (iii) the weight of the scientific literature on long-term pit lake water quality, including in settings similar to Great Bear.	

#	Topic	Comments	Recommendations
		The very premise that a pit lake occurring in a PAG, ML and arsenic-enriched environment would reach water quality regulations in its natural state is highly problematic. LSFN and WFN therefore do not recognize the validity of the results presented in the water quality model for the LP pit lake proposed in appendix K-2.	
7.	**Appendix K-2: Viggo pit lake geochemistry model in post-closure**	Appendix K-2 also states that waters from the Viggo management facility (VMF) pit lake will not impact the water quality of the receiving water bodies, on the basis that the pit lake waters will be kept at a low elevation and be pumped to the water treatment plant (WTP) during operations, and are expected to meet regulatory requirements in their natural state during post-closure. LSFN & WFN further express very serious concerns with this conclusion, as it also offers an unrealistically optimistic view of pit lake water quality. The majority of the project rocks have ARD and ML potential, which is on top of the fact that VMF will host a range of waste products during operations through to post-closure. The pit lake water quality results for VMF have all the same very serious and problematic limitations as discussed in topic 6 above, but also have these: 13. Unlike the LP pit, models of the VMF do not include a range of vertical mixing regimes. Producing a precise model, or range of alternative models, of lake stratification and mixing is especially important in the case of the east lobe of the VMF since, during post-closure, it is expected to be ~ 50 m deep, which is in the range of partial or seasonal meromixis. These depths are in the same range as many common mixing effects such as spring overturn, thus opening the possibility of a fully mixed lake, right where the concentrate tailings are to be permanently stored. 14. During post-closure, a fully mixed water column would bring oxygen to all the exposed pit walls, further promoting ARD and ML (as discussed in topic 6). But in the case of the VMF, this would also create upwelling of bottom water exposed to the non-potentially acid generating (NPAG) capping materials. As discussed in appendix J, these capping materials, even if they have no ARD and contain low arsenic contents, still present ML risks, in the form of selenium, zinc, copper, lead among others. Even arsenic could present a risk of ML under continuous weathering conditions.	LSFN & WFN require the Proponent to: A. Perform replicated kinetic experiments of submerged concentrate tailings in order to generate a more statistically valuable data set on ARD and ML risks from these tailings. These experiments would need to be more representative of geochemical conditions during operations (e.g., in a brine-rich environment), as well as during post-closure (e.g., lower temperatures and higher starting pH). The experiments should also include measurements of porewater contaminants in order to address risks of lateral contaminant transfer to surrounding groundwaters. B. Perform thorough characterization experiments of permeability and diffusion coefficients on the proposed capping materials overlying the concentrate tailings. C. Perform replicated laboratory-scale and pilot-scale experiments of post-closure conditions of the VMF, testing the viability of the capping material as a diffusive barrier. Also perform further experiments to determine the contribution of the capping materials itself to contaminant loadings to the pit lake waters. D. As per topic 6, perform new pit lake water chemistry models for the VMF, that can provide results that are credible and meaningful in estimating risks to the receiving environment. These new and updated models need to address all the concerns discussed in the comments column. A thorough review of boundary conditions needs to be performed, using

#	Topic	Comments	Recommendations
		15. Additionally, the physical characteristics of this capping material are lacking, mainly information relating to its permeability or qualities as a diffusive barrier. The geochemical models proposed in appendix K-2 assumed no diffusion would occur through this capping material, but this is a very non-conservative assumption and has absolutely no empirical data to support it. Virtually no sediment materials in nature are fully impermeable or produce zero diffusion risks. It would be foolish to expect such a scenario in the case of the VMF, where very high-risk wastes are to be stored. 16. Scientific literature has shown that even in anaerobic water covers, pH can still be below 6, which are still ARD conditions despite a water cover (Zhang et al., 2023). Despite being based on a single experiment, the kinetic test performed on submerged concentrate tailings (appendix J) clearly shows that concentrate tailings still present significant ARD and ML potential, mainly in the form of copper, but also for chromium, cobalt, zinc and water pH. It is therefore critical to characterize the metal loadings from ML of the concentrate tailings and diffusion through the overlying capping materials. 17. Appendix K-2 states that the pit walls for VMF will have a clay-rich overburden cover. On this basis the appendix dismisses risks of ARD and ML originating from pit walls. This mention of clay-rich covers however does not seem to be echoed anywhere else in the IS. This brings into question whether this clay-rich cover is indeed the Proponent's strategy for the VMF pit walls. 18. If the strategy for the VMF does include a clay-rich cover on the pit walls, this would be a non-standard approach to reclamation and would require a wealth of empirical data of its effectiveness in order to integrate this into a water quality model meaningfully, something the model does not consider in any way, and rather just assumes (in a very non-conservative way), that this strategy will be perfectly effective. 19. If such a strategy were ever proven to be highly effective, there are no suggestions anywhere that it would be deployed in the LP pit, despite having the same pit wall geochemistry and exposed to the same geochemical processes. Yet the model for the LP pit also suggests that pit walls will not contribute to ARD or ML, regardless of lake mixing regime. This discrepancy further adds to a lengthy list of problems, casting extremely serious doubts about the validity of the assumptions and boundary conditions, and the	quality empirical data (such as from experiments discussed above) and real-life case studies as handrails. E. Importantly, these new and updated water quality models need to provide the necessary information on contaminant seepage to the surrounding groundwaters in order to further model loadings to the receiving environment (further discussed in topic 8).

#	Topic	Comments	Recommendations
		overall quality of the pit lake models, their results, and more problematically, the decisions based on them. The water quality model for VMF presented in appendix K-2 carries the same problems as those for the LP pit, in that it contradicts (i) scientific principles of water quality and geochemistry, (ii) the empirical results from the Proponent's own kinetic tests, and (iii) the weight of the scientific literature on long-term pit lake water quality, including in settings similar to Great Bear. Additionally, it (iv) makes several very bold assumptions with no empirical or scientific data to support them, (v) is not consistent with its own assumptions, and (vi) is not conservative in its approach. As per topic 6 above, the very premise that a shallow pit lake containing very high-risk tailings and occurring in a PAG, ML and arsenic-enriched environment would reach water quality regulations in its natural state is highly problematic. LSFN and WFN therefore do not recognize the validity of the results presented in the water quality model for the VMF pit lake proposed in appendix K-2.	
8.	**Appendix K-2: metal loadings and mixing zones in surrounding water bodies**	Appendix K-2 states that any and all contributions of water from both pit lakes will not impact the water quality of the receiving water bodies, on the basis that the pit lake waters are expected to meet regulatory requirements in their natural state during post-closure. Considering all the points discussed above, this statement raises major concerns. The hydrogeological models performed (appendix H-2) recognize that very significant amounts of pit lake-contact waters will report to local water bodies (mainly Dixie Creek), whether through groundwater flow or sporadic overflow events, especially during post-closure. From this reality alone, a model of the mixing zones in the receiving water bodies would be required, and is currently missing in the IS. In light of the high risk of contaminant loadings from the pit lakes discussed above, along with the close proximity of Dixie Creek, a detailed re-assessment of water quality impacts to the receiving water bodies is necessary. While receiving water bodies mixing models were performed (appendix K-3), they only focused on the treated water effluent discharge in the Chukuni River.	LSFN & WFN require the Proponent to perform updated water quality models for the receiving bodies of pit lake-contact waters. These models need to include a characterization of the mixing zones, as well as models of contaminant loading and dilution, using a mixing modelling software such as CORMIX or equivalent. These models should separate out the various loading components (e.g., groundwater reporting vs. surface overflow events), and describe maximum loadings (and associated contaminant concentrations in the receiving water bodies) during acute events (such as overflow events) as well as for continuous groundwater flow, based on updated and relevant pit lake geochemistry models, as discussed in topics 6 and 7.

#	Topic	Comments	Recommendations
		Discussions on water quality impacts on Dixie Creek therein are based on highly problematic conclusions on pit lake water quality.	
9.	**Appendices K-2 & S: pit lake closure process & long-term water quality**	The Proponent proposes to accelerate pit filling by routing Chukuni River water into the pits. While this would indeed dramatically increase the rate of pit filling, it raises other serious questions about the process of monitoring water quality of pit lakes during closure and post-closure. Specifically, this creates the conditions whereby the pit lakes will be geochemically very far from equilibrium with their physical setting (i.e., surrounded by PAG and ML rocks) for a period of time, since the geochemistry of the Chukuni River is defined by conditions very different than those of the pit environments and associated groundwaters. Furthermore, the onset of ARD may not have occurred by the time of closure or early in post-closure. This is made evident in the geochemical models of pit lake water quality proposed in appendix K-2. The models start at year 31, entering passive closure, at which point concentrations of various compounds are presented to be at their highest (e.g., ~ 55 mg/L for SO_4). Yet at that point, the pits will have just been filled with river water that has much lower concentrations (e.g., ~ 5 mg/L for SO_4 in the Chukuni River, as per appendix K-1). No consideration has been made for the evolution of pit lake water quality during filling (years 27 – 30), which represent the first 4 years of the closure water quality monitoring program. Without this information, it is entirely possible (if not likely) that the pit lake waters will still be undergoing transient increases in contaminant concentrations, in which case the pit lake monitoring program will produce water quality results that will reflect transient and skewed pit lake geochemistry, thus misrepresenting the risks of contaminant loadings and potentially influencing, wrongly, the decision process to enter post-closure. This has important implications since, as discussed in topics 6 - 8, the pit lakes present long-term and serious risks of contaminant loadings to Dixie Creek and the Chukuni River. As discussed in topic 3, any contaminant loadings to the Chukuni watershed will exacerbate an already difficult situation. As it stands, the IS does not provide enough information to generate confidence that the pit lakes	LSFN & WFN require the Proponent to: A. Building upon topics 6 & 7, the updated pit lake water quality models need to reflect the closure strategy of the mine. This includes modeling the kinetics of evolving geochemical conditions associated with filling the pits with far-from equilibrium waters. B. Expand the passive closure timeline (or specifically the pit lake water quality monitoring and adaptive management) to reflect the time required for pit lakes to reach chemical equilibrium with the pit walls. This would include the water quality conditions following the onset of ARD.

#	Topic	Comments	Recommendations
		can enter post-closure in conditions that protect the surrounding environment and the Nation's interests long-term.	
10.	**IS section 5: adaptive management for pit lake water impacts**	Considering the expected risks of seepage from the tailings management facility (TMF), the IS proposes an adaptive management strategy to monitor closely and manage impacts surrounding the TMF continuously. LSFN & WFN recognize the Proponent's efforts with this. However, the same adaptive management approach is lacking for risks relating to the LP and VMF pits. In light of the serious problems with pit lake geochemistry models discussed above (topics 6 - 9), and the associated risks of contaminant loadings from the pit lakes to Dixie Creek, LSFN & WFN believe that an adaptive management plan tailored to risks with pit lake-contact waters and Dixie Creek is necessary. This is true both during operations, as the VMF will actively be hosting very high-risk wastes, as well as during closure and post-closure for both pit lakes.	LSFN & WFN require the Proponent to develop an adaptive management plan for risks to receiving water bodies surrounding the LP and VMF pits, during operations, closure and post-closure. This plan should provide a detailed, continuous monitoring program of groundwater quality, along with contingencies and associated triggering thresholds in order to ensure contaminants will not report from the pits to Dixie Creek or other surrounding water bodies.
11.	**Appendix S & IS section 5: sulphate & chloride loadings**	The IS uses the British Columbia water quality guidelines of 218 mg/L as a limit for sulphate concentrations in effluents. This value is 38 times higher than the sulphate concentrations in the Chukuni River (average of ~ 5 mg/L, appendix K-1). Similarly for chloride, where the limit proposed is 41 times higher than the baseline levels in the Chukuni River (120 mg/L vs. ~ 2.9 mg/L). Additionally, sulphate and chloride will not be treated and removed from many effluents. Fig. 5.14-5 describes that only contact waters from the TMF will undergo membrane filtration. However, waters from the East Viggo pit will contain high levels of sulphate during operations (since this pit will receive most mine-contact waters and will contain the uncapped concentrate tailings). During closure both pit lakes also have the potential to generate sulphate through pit wall weathering, and the membrane filtration reject solutions remaining by the end of operations. Yet these waters will only be treated at the WTP (without membrane filtration). This creates a gap in water protection, whereby effluents may still contain contaminants, and the Project has no mechanism to remove them. Common ions such as sulphate and chloride are not typically removed by traditional WTP processes. Considering the very high degree of mercury risks in the	LSFN & WFN require the Proponent to: A. Provide a clear, robust process or mechanisms to remove ionic contaminants from waters that will not go through the membrane filtration unit. B. Revise their sulphate and chloride concentration limits in effluents to values that reflect the baseline concentrations of the Chukuni River. C. Expanding the scope of membrane filtration to treat all mine waters that will contain sulphate concentrations above those from the baseline data.

#	Topic	Comments	Recommendations
		Chukuni watershed, and the importance sulphate plays in the methylation process, LSFN & WFN are extremely concerned that the effluent limits proposed are inadequate for the purpose of protecting the environment and the Nations, especially from risks with mercury.	
12.	**IS section 5: construction material selection quality assurance**	The IS proposes to use NPAG and low-arsenic content rocks as construction materials for critical mine structures. While a matrix was established for the selection process of these rocks (e.g., figure 4-1 in appendix K-2), LSFN & WFN express serious concerns with the lack of monitoring and segregation models, or quality assurance and quality control protocols for the continuous selection and validation of these materials throughout the excavation and construction process. Additionally, the IS suggests that there may not be enough NPAG and low-arsenic materials available to supply all construction requirements. The IS lacks details on alternative sources of adequate construction materials should there be an insufficient supply of these materials. With a lack of continuous segregation and quality assurance protocols, and uncertainty regarding the supply of adequate materials, LSFN & WFN express serious concerns with potential risks of inadequate materials being used for construction, leading to risks of long-term ARD and ML, impacting ground and surface waters.	LSFN & WFN require the Proponent to: A. Produce volumetric models for materials classification, along with segregation protocol for the excavation of the NPAG, low-arsenic materials meant for construction. This protocol also needs to include a continuous geochemical testing schedule to validate the model projections and ensure that the materials selected continue to meet the selection matrix. B. Provide details on alternative sources of adequate materials for construction in case of insufficient supply with the planned excavations. C. Perform comprehensive geochemical characterization of ARD and ML risks on materials originating from these alternative sources of construction materials, and integrates them in the protocols discussed in point A above.
13.	**IS section 5: metal leaching risks with low grade stockpiles**	The IS describes the base pads for low-grade ore stockpiles (LGOs) as being constructed with NPAG materials only, and, unlike the run of mine, would not include a low-permeability layer. As discussed in appendix J, these NPAG materials, even with low arsenic contents, still present ML risks (including selenium, zinc, lead and still potentially arsenic). LGOs will also host a steady-state quantity of ore, which must be expected to present both ARD and ML risks. This is particularly problematic during the construction phase, where ore from the Viggo pit will be accumulating but groundwater drawdown will not have started. This is also a problem during post-	LSFN & WFN require the Proponent to: A. Add a low-permeability layer to the base of the LGO pads. B. Start dewatering the LGO area during the construction phase. C. Remove the pad materials during closure and store them appropriately.

#	Topic	Comments	Recommendations
		closure, as the pad will remain in place in perpetuity, exposed to percolating groundwaters. LSFN & WFN express concerns that despite runoff collection ditches, LGOs present a risk for groundwater contamination, as the base pad seems to offer no protection against seepage, and is itself made of materials that present ML risks. These risks to groundwater quality were not included in appendix K-2.	D. Develop an adaptive management plan for risks to receiving water bodies surrounding LGOs during operations, closure and post-closure. This plan should provide a detailed, continuous monitoring program along with contingencies and associated triggering thresholds.
14.	**IS section 5: metal leaching risks with mine rock stockpiles**	Echoing the comments in topic 13 above, the IS describes the base pads for the PAG section of the mine rock stockpile (MRS) as being constructed with a rock pad. The nature and characteristics this pad material are completely lacking, which raises serious concerns with LSFN and WFN. Similarly, the NPAG section of MRS has no plans for a base pad of any kind, despite these materials still having ML risks (as shown in appendix J). The Proponent plans on implementing compaction efforts to mitigate seepage risks at MRS. However, such measures are no guarantees against water percolation, and a low-permeability layer at the base of the MRS would be appropriate considering the pervasive ARD and ML nature of the project rocks stockpiled in MRS. These risks to groundwater quality were not included in appendix K-2.	LSFN & WFN require the Proponent to: A. Perform a complete suite of geochemical characterization for the materials expected to be used for the MRS base pad. B. Add a base pad to the NPAG component of MRS. C. Add a low-permeability layer to the base pad of both MRS components. D. Review and update risks to groundwater quality (appendix K-2) to include the risks of ML and loading from MRS contact waters. E. Develop an adaptive management plan for risks to receiving water bodies surrounding MRS during operations, closure and post-closure. This plan should provide a detailed, continuous monitoring program along with contingencies and associated triggering thresholds.
15.	**IS section 5: metal leaching risks from dam structures**	The IS proposes to construct critical dam structures for the TMF and its associated ponds (TMF pond and mine water pond, MWP) with NPAG and low-arsenic contents. However, as discussed in appendix J, these materials still present ML risks. While the Proponent does have an adaptive management plan for seepage risks at the TMF, the nature of dams is such that they cannot be rehabilitated in the	LSFN & WFN require the Proponent to: A. Review and update risks to groundwater quality (appendix K-2) to include the risks of ML and loading from dam structures contact waters.

#	Topic	Comments	Recommendations
		same manner as mine waste structures, and can be more likely to generate permanent ML risks during post-closure. These risks to groundwater quality relating to the dam structures themselves were not included in appendix K-2 and in the adaptive management plan, which further raises serious concerns with LSFN & WFN about the validity of the results from appendix K-2.	B. Integrate risks of ML relating to dam structures as part of the TMF adaptive management strategy.
16.	**IS section 7: adaptive management for Chukuni River effluents**	The Chukuni River and its watershed are of particular importance to LSFN & WFN due to uses for sustenance as well as traditional cultural practices, raising concerns with risks to water quality degradation. The IS discusses broadly the concept of adaptive management, but fails to give specifics such as possible mechanisms for water quality degradation, planned responses and associated trigger values. Currently, it is unclear how the Proponent intends to maintain water quality in events such as WTP failure or down time (whether planned or unplanned), or an inadequate level of turbulent mixing in the Chukuni river, or other similar unexpected development. A detailed adaptive management plan tailored to water quality in the Chukuni river would provide resilience during unforeseen events and ensure that risks of water quality degradation are addressed early.	LSFN & WFN require the Proponent to develop an adaptive management plan or protocol for risks relating to Chukuni River water quality degradation associated effluent discharges. This plan should identify possible mechanisms for water quality degradation, identify redundancies and relief systems, as well as contingencies and associated triggering thresholds.
17.	**IS section 5: progressive rehabilitation**	The IS offers a progressive rehabilitation plan for stockpiles such as LGOs, MRS and TMF. LFSN & WFN recognize the Proponent's efforts to ensure quality in the rehabilitation process. However, detailed monitoring of runoff and ground waters are not included for MRS and LGOs. This creates a risk of failing to identify the most effective rehabilitation strategy for the specific protection of runoff and groundwaters. It is LSFN & WFN's experience with other mines that contaminant seepage from various stockpiles can go unnoticed for too long, and strategies identified through the progressive rehabilitation process can fail to mitigate groundwater contamination. Complementing the comments in topic 14 above, including a detailed water monitoring protocol within the progressive rehabilitation plan, would help ensure the protection of groundwaters during post-closure.	LSFN & WFN require the Proponent to integrate a detailed runoff and ground water quality monitoring as part of the progressive rehabilitation process for stockpiles (MRS, LGOs), with the expressed focus on the protection of mine site water quality during post-closure.

#	Topic	Comments	Recommendations
18.	**Appendices N-1, N-2: human health impacts**	The impacts from environmental degradation on the health of our Nations' members was assessed in appendices N-1 and N-2. These however used data from appendices K-2 and K-3 as inputs for their models. As discussed in topics 6 - 9, 13, 14 and 15 above, these data are based on highly problematic water quality models, which results cannot be considered accurate for the purposes of assessing risk. Similarly, risks of contaminant loadings to terrestrial plants was only assessed through dust deposition, and did not consider contaminant transfer through impacted groundwaters. This is particularly problematic for fruit and berry-bearing plants as well as for fungi in areas with risks to groundwater quality. LSFN & WFN are very concerned that risks to human health may be underestimated in these reports, especially for toxicity pathways relating to fish harvesting risks and the bioaccumulation of contaminants such as arsenic and mercury, as well as land use and foraging.	LSFN & WFN require the Proponent to review and re-assess the risks to human health utilizing updated water quality models, as discussed above. This should be done for toxicity pathways related to both aquatic and terrestrial ecosystems.
Mercury			
19.	**Appendix T: Section 3.2.2.3 Fish and Fish Tissue**	Length ranges used for calculating and comparing fish tissue total mercury (HgT) concentrations and methylmercury (MMHg) concentrations temporal variability. It is best to use fish of similar size or age ranges (see Table 5.2). The ranges used throughout the study; however, were based on the standardized sizes of the fishes normally consumed by communities. In some cases, this may lead to a lower statistical power and precision. This needs to be tightened up.	LSFN & WFN require the Proponent to conduct regression analysis to check for correlations between length and mercury concentrations. For example, if we compare the length of yellow Perch with [HgT] and [MMHg] we get R^2 values of 0.62 and 0.50, respectively (Table C1-2 Appendix L-1). If the regression slopes between years are not homogeneous (which can be checked using ANCOVA) then it can lead to a lessening of statistic power and the ability to quantify change (i.e. less precision). If the slopes are different then it suggests that the annual rate of up-take of mercury with age (length) in these fishes may be different and are therefore not very comparable. In the example above, the precision of the annual means can be increased by excluding the 97 mm and 182 mm fish used to calculate the mean which is then used in subsequent statistical

#	Topic	Comments	Recommendations
			analysis. Looking at Figures such as 5.1-5.4 it does not appear that there are any observed statistically significant differences between baseline and modelled Proj+Base concentrations.
20.	**Appendix T: Section 5.4. Baseline and Modelled Project-Related Fish Tissue Results; Section 6.5. Uncertainty, Conservative and Sensitivity Analysis.**	Using BAFs (Water/fish) assumes that mercury in the fish (especially top predators) respond proportionally and immediately to water concentrations. Even if you try to control for size variability as noted in topic 1, the magnitude differences will make it very difficult to link changes in fish concentrations directly to the water (Log BAF). This seems evident from Appendix T Figures 5-1 to 5-6.	LSFN & WFN require the Proponent to: A. Conduct a statistical power analysis to assess the time series (number of years) and sample numbers required to detect a log-linear change in mercury [HgT and MMHg] using a two-sided F-test at a 5% significance level (a = 0.05) for individual fish species by water body. Small samples sizes and number of years monitored may lead to high Type II error rate (failing to detect a real effect). Best to model this a *priori* perhaps over the life of the mine and a few years beyond its closing (years -3 to 29). Perhaps only monitoring second year would be enough over a 32-year time -period (Morris et al., 2022). B. Conduct annual monitoring and analysis of a selection of predominant zooplankton species in each (or selected) water body (Appendix L-1, Figures A2-1 to A2-6). Biomass required would be based on baseline [HgT] and [MMHg] and analytical detection limits. Copepods such as *Clclops* could be a good choice (0.5 – 5 mm long). Ploina such as *Brachionus leydigii* (150 to over 250 mm) would also be good but isolating the required biomass may require both picking and sieving. This should be done at the same time each year (or season) to reduce variability [Late summer to early fall (August to September), when warm water temperatures and peak food availability (phytoplankton) drive maximum biomass and perhaps during the secondary peak shortly after ice-out in spring]. As with the fish, *a priori* calculations should be done to determine the required number of sample collections and years).

#	Topic	Comments	Recommendations
			C. Conduct stable isotope analysis ($\delta^{15}N$ and $\delta^{13}C$) on all individual fish and bulk species-specific zooplankton biomass samples. This will help determine if there are any shifts in feeding behavior (trophic status) over time. This could be a factor over the long-term considering the warming climate. This can be corrected for using ANCOVA if required. D. Including individual "keystone" zooplankton species and SI analysis will help discern differences in food web structures both within (temporally) and between water bodies. Similarly for invertebrates. E. Analyze $\delta^{15}N$ and $\delta^{13}C$ in sediments to normalize for spatial and temporal variability in the baseline of the water body food webs. $\delta^{15}N$ and $\delta^{13}C$ values can vary across aquatic ecosystems due limnological differences and variability.
21.	**Appendix T: General comment**	The warming climate may contribute to increasing mercury in sediments and may obscure any influence of mine relate increases of water sulphate concentrations to MMHg concentrations.	LSFN & WFN require the Proponent to include a study of sediment cores in selected lakes, as it may provide valuable insight into these processes relative to increasing water column sulphate inputs. Parameters in the analysis of these cores should include ^{210}Pb and ^{137}Cs (sedimentation rates), total carbon and organic carbon (S1, S2), titanium, HgT and MMHg. An important issue not discussed in the three-climate change-related appendices (appendices W-3 to 5) are those changes associated with longer ice-free seasons higher, more variable sedimentation rates and altered diversity and abundance of biological communities. For example, all the above have been associated with increasing autochthonous primary productivity (APP) in water bodies. Studies have shown that climate driven increases in APP, can lead to increased mercury scavenging by algae and/or suspended detrital algal matter (increased Hg flux to the bottom sediments) (Outridge et al., 2007, 2019; Carrie et

#	Topic	Comments	Recommendations
			al., 2010). This is tied to Hg^{2+} being thermodynamically favored by an abundance of (SH-) groups in algal organic matter. While these studies are focused primarily on Arctic and sub-Arctic lakes it may be one of several climate driven mercury remobilization processes which may give rise to higher aquatic accumulation of mercury in mid-latitude lakes.
22.	**Appendix T: Section 6.3 (Toxicity Assessment)**	The IS makes no prediction of increases in MMHg or HgT HQ values with respect to Project case relative to Baseline ratios. This; however, is based only on water to fish BMFs. This may be underestimated as it does not take into account the BMF associated with the relative water bodies' benthic and pelagic aquatic food webs and their length. This needs to be more clearly defined.	LSFN & WFN require the Proponent to define more clearly HQ values. Assuming a 5% increase in fish HgT and MMHg concentrations over the entire operation and closure period of the mine, what would be the projected increases of the relative HQ values?
Aquatic Ecology			
23.	**Pit Lake Model**	Dixie Creek has cultural significance to LSFN and WFN. Because of this, the communities are particularly concerned that the proposed location of the LP central pit and sections of the haul road are only a few hundred meters away from the creek, and the Proponent plans for water from the LP central pit to report to Dixie Creek during post-closure. The LP central pit is the receiving body for many runoff and overflow waters across the property during post-closure, and would therefore be the point source of any potential contaminants emerging from many parts of the property. This creates a high risk of detrimental impacts to aquatic life within the creek through contamination via dustfall and seepage to groundwater pathways, vibration disturbances as the pit is excavated, and water quantity changes from changes to runoff and shallow groundwater pathways.	LSFN & WFN require the Proponent to: A. Complete new pit lake water chemistry models for the LP pit (as per topics above), and once this has been completed, the Proponent must perform an assessment of alternative options of water bodies that could receive discharge from the pit once the project is post-closure phase. The Proponent must subject the LP central pit water chemistry, seepage, groundwater interaction, and post-closure discharge modelling to independent third-party peer review, with that review shared with LSFN & WFN before any final closure pathway is accepted. B. Commit that no post-closure discharge from the LP central pit to Dixie Creek will occur unless and until effluent quality meets criteria agreed upon with LSFN and WFN. C. Commit to a blasting management plan that (i) maintains overpressure below 50 kPa and peak particle velocity at or

#	Topic	Comments	Recommendations
			below 13 mm/s in spawning habitats, (ii) prohibits blasting during biologically sensitive timing windows to protect fish eggs and larvae, and (iii) includes pre-blast risk screening, real-time verification of thresholds, and contingency measures if these thresholds are approached or exceeded. D. Develop a management plan to monitor and reduce seepage to Dixie Creek. This plan should provide a detailed, continuous monitoring program along with contingencies and associated triggering thresholds. E. Develop and implement a long-term Environmental Effect Monitoring-style fish health, fish tissue, benthic invertebrate, caged bivalves (including bioaccumulation of metals in tissues), sediment quality, and water quality monitoring program in Dixie Creek, with baseline and post-closure sampling, analysis of trends over time, and community review of monitoring results. F. Develop a Dixie Creek-specific contingency response plan that identifies, in advance, the corrective actions that will occur if monitoring detects seepage, dust-related contamination, harmful flow alteration, habitat degradation, or fish health impacts.
24.	**Appendix L-2: Draft Fisheries Act Offset Plan and MDMER Schedule 2 Fish Habitat Compensation Plan**	The Proponent's primary offsetting measure is the creation of the East Pond immediately next to the Potentially Acid Generating (PAG) stockpiles. This is deeply inadequate due to the high risk that the pond will become contaminated from the stockpiles through surface runoff or groundwater pathways. The pond is at high risk of being exposed to the same types of hydrological or environmental pressures that the plan is trying to compensate for. Furthermore, the proposed location of the East Pond is undesirable to LSFN and WFN community members wishing to exercise their rights to fish and travel waterways, and raises well-founded concerns regarding the safety of consuming fish that may be exposed to mine contamination.	LSFN & WFN require the Proponent to: A. Remove East Pond as an offsetting measure. If it remains in the Plan, it should not count toward offset accounting and balancing and should be treated only as a contingency measure. B. The Proponent must revisit alternative areas for habitat creation and restoration away from the PAG stockpiles, with priority given to locations that are hydrologically stable, at

#	Topic	Comments	Recommendations
		Although not as close as the East Pond, the Dixie Creek Pond Complex is also downstream and downgradient from the mine site, and sits in a wetland between Dixie Creek and the Chukuni River. This makes it exposed to (i) extant contaminants present in the Chukuni River from legacy mining activities, (ii) potential contaminants (even if temporary exceedance events) entering the Chukuni River from the effluent discharge, and (iii) any contaminants entering the Dixie Creek watershed from the mine site, including potential seepage from the pits (as discussed in topics 4 - 16 above). Points i and ii are particularly concerning during high water events such as freshet where Chukuni River water can easily overflow into the compensation area. Cumulatively, this raises similar concerns of contamination, making it an ineffective compensatory measure. LSFN & WFN would like to emphasize that one of our Nations' highest concerns relates to the chronic harm to water quality and ecosystems of the Chukuni watershed caused by legacy mining activities. Accordingly, some of our Nation's priorities include permanently remediating and restoring the Chukuni watershed (including Balmer Lake and Balmer Creek) to conditions that are protective of water quality, ecosystems and our Treaty Rights, and reflective of pre-mining conditions.	low risk of contamination, and acceptable to LSFN & WFN community members. C. Co-design an alternative offsetting plan with LSFN and WFN, revisiting both the location and type of habitat compensation. LSFN and WFN require that DFO require this without delaying Project timelines. D. Demonstrate that any replacement habitat will be safe, functional, and accessible for the exercise of fishing and travel rights, including water quality and fish tissue safety considerations. E. Actively engage with LSFN & WFN to explore Kinross' involvement in achieving our Nations' objectives relating to regional remediation. LSFN & WFN are fully prepared to collaborate meaningfully with Kinross to engage with regulators and other stakeholders as needed to help catalyze this goal.
25.	**Appendix L-2: Draft Fisheries Act Offset Plan and MDMER Schedule 2 Fish Habitat Compensation Plan**	The offset and compensation plan relies mainly on creating lentic habitat (i.e., East Pond and the Dixie Creek Pond Complex), whereas the habitat being lost the mine footprint is a combination of lentic and lotic environments (e.g., portions of Unnamed Watercourses 1, 3, 6A, and segments of Dixie Creek). LSFN & WFN are concerned that the plan may not fully replace the types and functions of habitats that would be lost.	A. The Proponent must revise the offset and compensation plan to include additional lotic habitat creation and restoration measures, such as stream channel reconstruction, riffle-pool complexes, connectivity enhancements, riparian restoration, and in-stream habitat features (e.g., spawning and rearing habitat, aquatic vegetation, complex substrate, in-stream cover), so that the plan better reflects the types of habitats and ecological functions being lost. B. Lentic offsetting measures should not be counted as fully compensating for lotic habitat losses unless the Proponent can demonstrate, through clear habitat accounting and functional assessment, that those measures will replace the

#	Topic	Comments	Recommendations
			lost lotic habitat functions for affected species and life stages. C. The Proponent should reassess available opportunities for lotic habitat restoration and enhancement in or near affected watersheds, including stream reconstruction, basin reconnections, fish passage, and road crossing improvements.
26.	**Appendix L-2: Draft Fisheries Act Offset Plan and MDMER Schedule 2 Fish Habitat Compensation Plan**	Constructed ponds such as the proposed East Pond often provide less ecological complexity, biodiversity, and long-term stability than natural systems. Accordingly, LSFN & WFN are concerned that an offsetting strategy focused primarily on lentic habitat creation may not fully or reliably compensate for habitat losses. Only a few offsetting measures are proposed to be implemented, which further reduces the likelihood of adequate offsetting if these measures underperform.	A. The Proponent must commit to additional contingency offsets now (specifically complementary measures for the Nations), so that if the proposed compensation underperforms or becomes contaminated, additional habitat creation/restoration has been implemented without delay. B. LSFN and WFN strongly encourage DFO to allow off site measures that would remediate contamination elsewhere in the Red Lake mining camp to be included as complementary measures.
27.	**Appendix L-2: Draft *Fisheries Act* Offset Plan and MDMER Schedule 2 Fish Habitat Compensation Plan**	Section 8 of the proposed Fish Habitat Offset and Compensation Plan contains a significant gap, as it does not provide a clear framework for monitoring water temperature and dissolved oxygen (DO) concentrations within the constructed pond habitats. The proposed East Pond and Dixie Creek Pond Complex are predominantly shallow basins, with most habitat occurring at depths of less than approximately 3 to 4 metres. Shallow, still-water systems are inherently vulnerable to thermal stratification, overheating during summer months, and oxygen depletion under winter ice cover. These risks are amplified by the ponds' design, which includes extensive macrophyte growth and surrounding vegetation that can exacerbate oxygen swings and promote organic loading, further reducing DO concentrations. Despite these well-recognized vulnerabilities, the monitoring program outlined in the FHOCP does not commit to thermal profiling, dissolved oxygen monitoring, winterkill risk assessment, or modelling of thermal resilience under future climate	LSFN & WFN require the Proponent: A. Develop and implement a comprehensive water temperature and dissolved oxygen (DO) monitoring program into the offsetting strategy, including seasonal temperature profiling, continuous DO logging, and winter oxygen assessments. These parameters are essential for determining whether the offset habitats can sustain sensitive species. B. Establish adaptive management triggers to address emerging thermal or oxygen limitations, ensuring the constructed habitats remain viable and meet DFO's requirement for equal or better long-term habitat productivity.

#	Topic	Comments	Recommendations
		scenarios. Instead, the proposed monitoring focuses primarily on fish presence, habitat structure, and general vegetation performance across years 1, 2, 3, 5, and 10, without monitoring core limnological parameters that determine whether these constructed habitats can support the target species over the long term. This omission is particularly concerning because several of the fish species identified in the area (e.g., Walleye and Lake Whitefish) rely on cool, well-oxygenated water and are highly sensitive to elevated temperatures and low DO concentrations. Given the importance of ensuring that compensatory habitat function as intended, a comprehensive monitoring plan is fundamental, including long-term modelling and monitoring. Without these elements, the long-term viability of the offset habitats remains uncertain, and the plan risks failing to support the species it is intended to benefit.	
28.	**Appendix K-1: Water Quality Baseline Report pg. 38-41**	The baseline exceedances of aluminum (Al) concentrations are of notable concern, as they surpass the CCME Guidelines for the Protection of Aquatic Life long-term. It is well documented that aluminum, under conditions of low pH and low water hardness, poses a serious threat to fish health. Under acidic conditions, aluminum forms precipitates that bind to fish gill membranes, impairing respiration and ultimately reducing growth, condition, and reproductive success (Botté et al., 2022). Aluminum levels already exceed WGQ PAL guidelines at nearly all monitoring locations in Dixie Creek (SW02, SW03, SW05, SW06, SW07, SW08a, SW10, and SW15). The CCME guideline for long term aluminum exposure is 0.100mg/L when pH is greater than 6.5. Many of these monitoring sties recorded aluminum concentrations regularly above the 0.100 mg/L guideline. Furthermore, when pH falls below 6.5, the long-term aluminum exposure guideline drops sharply to 0.005 µg/L, meaning that exceedances become significantly more severe under acidic conditions and low hardness. If industrial activities continue to expand, increased leaching and acidic runoff will very likely further depress pH, pushing the system toward long term conditions	LSFN and WFN require that the Proponent model aluminum concentrations in the Impact Statement using the most conservative applicable guidelines. Although the FEQG-based calculation for aluminum tolerance may be scientifically defensible, long-term protection of aquatic life should ultimately be assessed against CCME guidelines, particularly given the potential for 30 years of mining operations to result in prolonged exposure in these systems. This more conservative approach would help ensure that protective thresholds remain appropriate under conditions of depressed pH associated with climate change and industrial activity.

#	Topic	Comments	Recommendations
		below pH 6.5. LSFN & WFN are concerned that this increasing acidity, combined with anticipated increased aluminum concentrations and already low total hardness (> 30 mg/L), could have serious consequences for all aquatic life in the watershed.	
29.	**IS Summary pg. 44**	LSFN and WFN strongly maintain that open-bottom culverts or bridges should be the preferred design for all water crossings, both existing and proposed. The Nations emphasize that water crossing designs must exceed minimum regulatory requirements and avoid "naturalizing" benthic structures. Open-bottom structures preserve better natural streambed conditions, maintain continuous fish passage, and protect the benthic invertebrate habitat by retaining the natural substrate and hydrologic dynamics.	LSFN & WFN require the Proponent to commit to open bottom culvert or bridge designs for all existing and new water crossings.
30.	**Appendix L-3: Fish and Fish Habitat Supplemental Report – Dixie Creek**	Table 5-1 shows modelled flow reductions at Dixie Creek nodes, which particularly notable reductions at DIX-03. LSFN & WFN are concerned that these decreases could affect important spawning habitat, including at reaches DC-02 and DC-03, which were noted as having consistently suitable spawning substrate in Section 3.2. Although this document does not include a figure showing the locations of DIX-01 to DIX-05, it appears from the descriptions in Section 5.1 that these nodes are likely near DC-02 and DC-03. This suggests that the areas expected to experience the greatest flow reductions may also be the areas with preferred spawning habitat for species such as Walleye and White Sucker. For example, predicted flow reductions are as high as 13% in April, which coincides with the peak Walleye spawning season. The Proponent states that these flow reductions would lower water levels by up to 3 cm, and LSFN & WFN remain skeptical of the model results and are concerned that the assessment does not adequately consider impacts on flow velocity. Any reduction in flow could negatively affect spawning habitat, regardless of the Ontario Ecological Flow Classification's conclusion of "minor impact." Even small changes in flow can create unsuitable conditions during critical spawning periods. For this reason, a contingency measure should be developed to address potential losses to spawning habitat.	LSFN & WFN require the Proponent: A. Confirm the spatial relationship between modelled flow nodes DIX-01 to DIX-05 and the Dixie Creek spawning reaches, and clearly map the locations of the DIX-01 to DIX-05 modeling nodes, as well as any overlap between predicted flow reductions and known or potential spawning habitat. B. Model and monitor the effects of predicted flow reductions on spawning habitat quality, including flow velocity, water depth, substrate suitability, and egg incubation conditions during sensitive periods for Walleye and White Sucker. C. Commit to adaptive management measures to maintain suitable spawning conditions during critical reproductive periods if the model predictions prove inaccurate or if habitat degradation is detected. D. Consider the addition of spawning shoals as offsetting at areas where flow is expected to be relatively stable during the mine's operation, as a contingency-based offset to

#	Topic	Comments	Recommendations
			compensate for potential impacts to valuable spawning habitat resulting from expected flow reductions.
31.	**Appendix L-3: Fish and Fish Habitat Supplemental Report – Dixie Creek**	LSFN and WFN are concerned that mining activities and associated changes to water quality, water quantity, and aquatic habitat conditions may adversely affect the reproductive success of Walleye in Dixie Creek and the Chukuni River. Additional studies are needed to better characterize the extent of Walleye spawning activity, reproductive success, and early life-stage survival in these systems.	LSFN & WFN require the Proponent: A. Develop and implement Walleye spawning surveys in Dixie Creek and the Chukuni River, including targeted redd surveys and in-stream video monitoring. Conduct baseline monitoring to establish baseline conditions and conduct monitoring every three years during mine construction, operations, and closure. B. Develop and implement an assessment of Walleye egg development success in Dixie Creek and the Chukuni River, including spawning success, hatch rate, and general rearing conditions. Conduct baseline monitoring to establish baseline conditions and conduct monitoring every three years during mine construction, operations, and closure. A possible approach to achieve this would be to collect and artificially fertilize Walleye eggs into in-situ incubators. Leis and Fox, 1994 offers a relevant modelling approach.
32.	**Section 15: Cumulative Effects Assessment pg. 15-47 & 15-66**	WFN & LSFN strongly disagree with excluding water quality and fish and fish habitat from the cumulative effects assessment based on the conclusion that the Project will have no residual effects on these valued components. The Chukuni River watershed is already heavily burdened by cumulative pressures, including effluent from three active mining operations in the Red Lake area, legacy contamination from multiple closed mine sites, and ongoing disturbance associated with forestry, aggregate extraction, and infrastructure. In this context, any further mining-related disturbance has the potential to worsen existing water quality concerns in the Chukuni River watershed through pathways such as effluent discharge, seepage, runoff, or untreated spills. Given the existing burden on the watershed, the conclusion that cumulative effects on water	LSFN & WFN require the Proponent and IAAC draw on the findings of the LSFN and WFN cumulative effects study (that is underway and nearing completion) to provide the definitive analysis of cumulative effects in the region. This LSFN and WFN led study should be incorporated into the IS analysis.

#	Topic	Comments	Recommendations
		quality and fish and fish habitat will be negligible is not adequately justified, particularly where the assessment acknowledges that other projects may overlap temporally with the Project, and particularly given the shortcomings of the Proponent's water quality modeling (as per topic 5 and 7 above). The Chukuni River watershed is already under considerable stress, and its long-term aquatic ecosystem health requires a rigorous cumulative effects assessment and strong, precautionary protections.	
33.	**Appendix K-1: Water Quality Baseline Report, Appendix D Tabulated Surface Water Quality Data**	The Proponent did not measure field dissolved oxygen with collection of most surface water samples, despite committing to monitor parameters with applicable PWQO and iPWQO for aquatic life protection (which includes dissolved oxygen). This is a significant gap, as dissolved oxygen is critical for assessing aquatic habitat suitability, metal speciation, and metal bioavailability, as well as being a parameter that is often impacted by mining activities.	LSFN & WFN require the Proponent to commit to multi-season and multi-year monitoring of dissolved oxygen concentrations in all waterbodies within the Project ((i.e., The Chukuni River, Dixie Creek, Unnamed Watercourse 1, Unnamed Watercourse 2, Unnamed Watercourse 3, Unnamed Watercourse 4, Unnamed Watercourse 6, Unnamed Waterbody 6, Genessee Lake, Unnamed Waterbody 1, Dixie Lake, Gullrock Lake, and Pakwash Lake).
34.	**Appendix L-1: Fisheries Resources Baseline Report, Table A1-2A**	The Proponent has mixed up the CCME freshwater guidelines for pH and dissolved oxygen. A pH with the range of 6.5 (lower guideline) to 9.0 (upper guideline) is considered satisfactory on a long-term basis for fish and other freshwater aquatic life. For dissolved oxygen, the guidelines are defined by the life stage and temperature of the ecosystem (cold vs warm water), with minimum levels ranging from 5.5 to 9.5 mg/L, and no upper guideline.	LSFN & WFN require the Proponent to update the tables with the appropriate guidelines for pH and dissolved oxygen, and check throughout the document.
Terrestrial Ecology			
35.	**Section: 9 Analysis of Changes to Migratory Birds** **Section 7: Analysis of Changes to**	The Proponent has significantly relied on FRI mapping as the basis for many of the analyses relating to changes to migratory birds and pathway valued components. The Proponent assumes that the FRI mapping is sufficiently accurate to support these analyses. Given that virtually all of the FRI mapping for Forest Management Areas within the PA, LSA, and RSA's are at minimum 10 years old, with some nearing 20 years of age, LSFN and WFN disagree that the FRI mapping is sufficiently accurate to support analyses completed by the Proponent, and therefore believe that all confidence levels for changes to	LSFN & WFN require the Proponent to acknowledge the limitations of the FRI mapping datasets based on their respective ages, and indicate that all analyses completed using FRI mapping data should be considered low confidence.

#	Topic	Comments	Recommendations
	Pathway Valued Components **Vegetation and Wildlife pVC's Section 7.8 to Section 7.12**	migratory birds and pathway valued components generated through FRI mapping should be considered to be completed in low confidence.	
36.	**Section: 9 Analysis of Changes to Migratory Birds**	The Proponent has indicated that "progressive rehabilitation" will occur prior to Project closure when disturbance activities have been completed at select locations. While this approach seems desirable at face value, it is unclear if vegetation reestablishment during the life of the project will benefit plant species in the long-run, particularly plant species that could be impacted by ongoing mining operations through mechanisms such as covering by dust, uptake of undesirable substances, etc. This could create issues for some plant species, which may not occur if all rehabilitation after operations have ceased.	LSFN & WFN require the Proponent to demonstrate that the effects of active operations will not impact plant species and individuals that are established during "progressive rehabilitation". Plant health must not be impacted during "progressive rehabilitation" for LSFN and WFN to consider this approach to be acceptable.
37.	**Section: 9 Analysis of Changes to Migratory Birds** **Section 7: Analysis of Changes to Pathway Valued Components** **Vegetation and Wildlife pVC's Section 7.8 to Section 7.12**	The Proponent continually states throughout analyses that worst case scenario assumptions have been utilized. However, even in the Proponent's "worst case scenarios", the Proponent assumes that rehabilitation of some sort will occur. LSFN and WFN do not agree that the Proponent's definition of the "worst case scenarios" is accurate. In the eyes of LSFN and WFN, the worst case scenario would occur if maximum damages were caused by the Project, without any type of mitigations or rehabilitation. This would lead to contaminated and impacted soils, water, air, plants, and wildlife.	LSFN & WFN require the Proponent to alter their use of "worst case scenario" assumptions to reflect the maximum environmental damage potential of the Project without any mitigations or rehabilitation.

#	Topic	Comments	Recommendations
38.	**Section: 9 Analysis of Changes to Migratory Birds**	The Proponent has determined that there will be no significant changes to habitat abundance, connectivity and quality of habitat, density and populations, and risk of mortality for migratory birds. For each category of changes, the Proponent states that the effects can be accommodated within the ecological context. However, the ecological context is set by the Proponent, with the Proponent selecting the size of the LSA and RSA, somewhat arbitrarily. The Proponent is also assuming that Post-Closure revegetation activities will supply suitable habitat for migratory birds. However, given that many migratory birds, including the proxy species, have highly specific habitat needs, it is unlikely that the revegetation process can adequately replace the habitat that was affected through the establishment of the Project.	LSFN & WFN require the Proponent to acknowledge that there will be significant changes to habitat abundance, connectivity, quality, and density for migratory birds, given the complexity of habitat that will be irreversibly altered by the Project.
39.	**Section: 9 Analysis of Changes to Migratory Birds** **Section 7: Analysis of Changes to Pathway Valued Components** **Vegetation and Wildlife pVC's Section 7.8 to Section 7.12**	The Proponent frequently notes that habitats within the PA, LSA, and RSA's are fragmented, often stating that fragmentation has been caused by forestry practices and wildfires. In the eyes of the Proponent, many areas, particularly the PA have a baseline of being fragmented, and therefore restoration and rehabilitation requirements should only need to occur at a level that restores vegetation to a fragmented state. LSFN and WFN note that wildfire is a natural part of forest ecology and forest succession, and therefore should not be considered to be a source of habitat fragmentation. Furthermore, LSFN and WFN note that the impacts of forestry on forest ecosystems are typically much less invasive than mining, with forests much more likely to recover naturally from forestry than from mining. As a result, while somewhat fragmented, forest areas that have been impacted by forestry should still be considered to have high site potential with the possibility of reaching the highest stages of forest succession. Fragmentation caused from forestry should not be considered to be equivalent with fragmentation caused by mining, as mining activity is much more likely to alter forests in ways that are irreversible, changing vegetation community potential in perpetuity.	LSFN & WFN require the Proponent to not consider recently burned areas to be fragmented, and must acknowledge that fragmentation caused by forestry is not equivalent with fragmentation caused by mining. Site potential must be the ultimate deciding factor for determining the vegetation rehabilitation requirements of the Project.
40.	**Section: 9 Analysis of Changes to Migratory Birds**	The Proponent states that migratory bird species affected by the Project will return to the PA following reclamation. Given that the Proponent has not committed to revegetating the PA to the exact plant community composition existing in the baseline conditions, this statement appears to be completely unfounded, with no evidence to support this claim. As a result, the claim that	LSFN & WFN require the Proponent to acknowledge that there is no basis for assuming that all affected migratory bird species will return to the reclaimed PA, given the reclamation plan. Furthermore, the Proponent must acknowledge that residual

#	Topic	Comments	Recommendations
		there will be no residual effects from changes in migratory bird densities and populations also appears to be false.	effects from changes in bird densities and populations are expected to occur as a result of the Project.
41.	**Section: 9 Analysis of Changes to Migratory Birds**	The Proponent states that wildlife will be discouraged from inhabiting contact water ponds including the TMF pond, mine water pond and collection water pond. However, the methods to be used for this "discouragement" were not provided.	LSFN & WFN require the Proponent to explicitly state the methods that will be used to discourage wildlife from inhabiting the contact water ponds.
42.	**Section: 9 Analysis of Changes to Migratory Birds** **Section 7: Analysis of Changes to Pathway Valued Components** **Vegetation and Wildlife pVC's Section 7.8 to Section 7.12**	The Proponent has not indicated whether or not the Project will have an effect on Arsenic levels within plant and animal species discussed in Sections 7 and 9. This is alarming, as many Nation members are deeply concerned about the effects of arsenic on country foods and human health.	LSFN & WFN require the Proponent to provide information on arsenic interactions with all species and valued components discussed in sections 7 and 9.
43.	**Section: 9 Analysis of Changes to Migratory Birds** **Appendix M-2 Terrestrial Technical Methods and Results**	The use of Mallard as a proxy species for all waterfowl is problematic, as Mallard is a highly generalist species, able to thrive in a variety of habitats, including habitats that are highly impacted from anthropogenic disturbances. In addition, mallards are dabbling ducks varying significantly in ecology and behavior from diving duck species. As a result, Mallards are highly unlikely to reflect impacts to many waterfowl species through the waterfowl proxy assessment.	LSFN & WFN require the Proponent to use proxy species that are the most sensitive to anthropogenic impacts when grouping species for a proxy assessment.

#	Topic	Comments	Recommendations
44.	**Section 7: Analysis of Changes to Pathway Valued Components** **Vegetation and Wildlife pVC's Section 7.8 to Section 7.12**	The Proponent states that the creation of ponds during fish habitat compensation may create plant foraging opportunities. However, even if desirable plants establish as a result of pond creation, Nation members may not feel confident in the plants as a source of food or medicines. Therefore, making the benefit of desirable plant establishment negligible for community members.	LSFN & WFN require the Proponent to remove any wording suggesting that foraging opportunities created through fish habitat compensation will provide a benefit to Nation members.
45.	**Section 7: Analysis of Changes to Pathway Valued Components** **Vegetation and Wildlife pVC's Section 7.8 to Section 7.12**	The Proponent states that test plot revegetation studies may be completed during operations to support progressive rehabilitation efforts.	LSFN & WFN require the Proponent to commit to completing these test plot studies. These studies must be completed in partnership with LSFN and WFN.
46.	**Section 7: Analysis of Changes to Pathway Valued Components** **Vegetation and Wildlife pVC's Section 7.8 to Section 7.12**	While LSFN and WFN commend the Proponent for committing to the Wild Rice Enhancement Project, it is important to note that the extent of damages and perceived damages to Wild Rice that will result from the Project. While Unnamed Waterbody 1 will result in a permanent loss of ~10 hectares of wild rice, the Project's impact on Unnamed Waterbody 6 is also substantial, as ~222 hectares of wild rice are located on Unnamed Waterbody 6. Given that Unnamed Waterbody 6 will receive groundwater seepage from the project, Nation members are unlikely to trust the wild rice from this waterbody as a food source, despite claims from the Proponent that the rice will be unaffected. This perception will result in a real loss felt by community members, and therefore needs to be accounted for with the Wild Rice Enhancement Project.	LSFN & WFN require the Proponent to commit to establishing/reestablishing over 232 hectares of Wild Rice in perpetuity that is available and accessible for harvesting from Nation members. This will compensate for the loss of 10 hectares through the destruction of Unnamed Waterbody 1 and the lack of trust in the wild rice located in Unnamed Waterbody 6. This work must be completed in partnership with LSFN and WFN.

#	Topic	Comments	Recommendations
47.	**Section 7: Analysis of Changes to Pathway Valued Components** **Vegetation and Wildlife pVC's Section 7.8 to Section 7.12**	The Proponent claims that there will be no effects on Moose populations during construction, operation, or closure phases of the Project after mitigation. This is simply an untrue statement. Even if the Project were to only reduce the Moose carrying capacity of the WMU by a couple of individuals, that still constitutes an effect on the population. Furthermore, given the PA's accessibility, the removal of moose habitat from the PA is likely to disproportionately impact LSFN and WFN hunters' ability to harvest moose, making the impacts feel greater to hunters who rely on moose as a food source.	LSFN & WFN require the Proponent to acknowledge that the Project will have an effect on the moose population within the WMU in which the Project is located.
48.	**Section 7: Analysis of Changes to Pathway Valued Components** **Vegetation and Wildlife pVC's Section 7.8 to Section 7.12**	The WMU-scale assessment of moose and other animal hunting impact is inadequate for LSFN & WFN. Impacts on our Nations' ability to exercise our harvesting rights must be assessed at the scale of where members hunt, not at the scale of a provincial wildlife management unit designed for general population management purposes. It is an administrative boundary and means nothing to our Nations.	LSFN & WFN request the Proponent to review their impacts on animal hunting based on our Nations' harvesting and treaty rights and traditional land use.
49.	**Section 7: Analysis of Changes to Pathway Valued Components** **Vegetation and Wildlife pVC's Section 7.8 to Section 7.12**	A Bald Eagle nest was located in the PA. The Proponent assumes that all vegetation will be removed from the PA, which would include the Bald Eagle Nest.	LSFN & WFN require the Proponent to compensate for the loss of this nest through the creation of an artificial nesting structure nearby to the PA, and ensure that a mating pair of bald eagles successfully nest on the structure. Prior to removing the existing nest from the PA, the Proponent must allow LSFN and WFN to remove any items from the nest that may be of cultural importance (such as eagle feathers).

#	Topic	Comments	Recommendations
50.	**Section 7: Analysis of Changes to Pathway Valued Components** **Vegetation and Wildlife pVC's Section 7.8 to Section 7.12**	Two sharp-tailed grouse leks have been detected in very close proximity to the PA. Given that these leks are likely to be impacted by the Project, and may be abandoned, the Proponent must compensate for the loss of these leks.	LSFN & WFN require the Proponent to commit to establishing two new sharp-tailed grouse leks, that accommodate the same number of individuals as the leks that were impacted by the Project. This work must be completed in partnership with LSFN and WFN.
51.	**Section 7: Analysis of Changes to Pathway Valued Components** **Vegetation and Wildlife pVC's Section 7.8 to Section 7.12**	The Proponent has indicated that a loss of two potential bat hibernacula will likely occur. The Proponent must compensate for this loss.	LSFN & WFN require the Proponent to commit to establishing two potential bat hibernacula that are in similar or greater quality than the hibernacula that are lost as a result of the Project. This work must be completed in partnership with LSFN and WFN.
Climate Change			
52.	**Appendix W-1: low-carbon electrification of the Project**	The IS states that in the base case scenario, 49% of greenhouse gas (GHG) emissions will come from natural gas-based electricity generation and heating. Another 36% will come through mobile fleet emissions. Scenario 1 would address these major sources of emissions through full on-grid, low-carbon electrification of the Project. This scenario depends on improvements in regional power production and grid capacity. While this is not under the direct control of the Proponent, LSFN & WFN express chronic concerns relating to activities that will exacerbate the major global risks associated with climate change, since climate change will directly and permanently impact our Nations' treaty rights.	Considering the high impact on GHG emission of fossil-fuel based power and heating generation, LSFN & WFN require the Proponent to develop a detailed and proactive strategy to engage with power producers, grid operators and regulators in order to help catalyze, as much as is within the limits of its abilities, the full electrification of the Project. This is particularly relevant in the context of the First Nations owned Dryden transmission line currently being developed with accelerated priority.

#	Topic	Comments	Recommendations
53.	**Appendices W-1, W-2: carbon credits and offsets**	The IS discusses means to purchase carbon offsets to compensate for scope 1 and 2 emissions in the time periods and scenarios where these emissions cannot be eliminated. These focus on renewable/clean energy certificates and various forestation-based efforts. Such projects, however, have suffered in the past from problems with monitoring, reporting and verification, as well as permanency issues. The IS has omitted to include new high-quality alternatives for carbon credit purchases such as ocean-based or geochemical-based carbon dioxide removal (CDR) providers. Many companies globally, and several Canadian companies (e.g., Planetary, Arca, etc.) offer such services. and are growing rapidly.	LSFN & WFN require the Proponent to include a wider range of carbon credit and offset options to reflect the growing range of CDR options currently available to emitters in their net-neutral strategy.
54.	**Appendix W-1: compensating for all GHG emissions at all stages of the mine life**	The tailored impact statement guidelines (TISG) state that minimizing GHG emissions should be prioritized as early as possible and throughout the Project lifespan. Appendix W-1 (section 6) states that the Proponent is aiming for 30% reduction in GHG emissions compared to baseline by 2030. Limited effort seems to be made to maximize GHG offsets or credit purchases as a mechanism to offset emissions during the earlier years of the Project.	LSFN & WFN require the Proponent to include as part of their plan offsetting up to 100% of their emissions for all years of the Project, leveraging more ambitiously the purchase of carbon offsets and credits, in order to achieve net carbon neutrality as soon as possible.
55.	**Appendix W-1: project implementation, reporting and accountability**	LSFN & WFN are concerned that the net-zero plan proposed in the IS lacks mechanisms for accountability and transparency across its design and implementation process. Table 6-2 in appendix W-1 lays out the net-zero roadmap. However, it lacks explicit timelines for implementation. Figures 6.1 and 6.2 highlight that the net-zero strategy and asset planning would take place in years -6 and -5 respectively (i.e., 2024 & 2025). In April 2026 these documents are not available. Similarly, appendix W-1 states that the tracking of progress towards achieving the net-zero targets will be discussed in the net-zero plan, which includes yearly updates. It is unclear, however, under which reporting framework this plan and its associated updates will be communicated to rights holders to inform on progress. Additionally, LSFN & WFN are concerned about the seeming lack of provisions in place should the Proponent fail to meet these net-neutral objectives. The Ontario emissions performance standards do not bind an emitter to net-zero specifically, and the federal legislative context is not directly binding to industrial emitters.	LSFN & WFN require the Proponent to: A. Provide specific timelines associated with the implementation of the net-zero road map. B. Provide clarity on the reporting specifics relating to the yearly updates on net-zero target communicated to rights holders. C. Include as part of the reporting process the tracking of key performance indicators (i.e., GHG emissions and net-zero trajectory) relative to the net-zero plan proposed in the IS. D. Include a Project-specific binding framework to achieve compliance of the net zero objectives.

#	Topic	Comments	Recommendations
Air, Dust and Blasting			
56.	**Appendix D-1: spatial scope — receptor coverage**	Air quality monitoring stations are located within or immediately adjacent to the mine site. No stations were positioned at a location that would capture air quality conditions at traditional harvesting areas, fishing sites, or travel corridors used by LSFN and WFN members. One station near the Chukuni River monitors standard air quality parameters but does not collect data on metals in settled dust. Winds at the Great Bear site predominantly come from the northwest, with the potential to carrying any mine emissions southward and southeastward toward Lac Seul and the Chukuni River watershed. There is no monitoring station in that downwind direction.	LSFN & WFN require the Proponent to: A. Confirm whether existing monitoring locations were established considering LSFN and WFN interests. B. Set up at least one air quality monitoring station at a location identified in consultation with LSFN and WFN — such as a site downwind of the mine near Lac Seul or along the Chukuni River — and maintain that monitoring through construction and operations.
57.	**Appendix D-2: dust control assumption — sensitivity and verification**	The air quality modelling report concludes that dust levels will not exceed Ontario standards at any nearby location during construction or operations. This conclusion depends heavily on the assumption that dust on unpaved haul roads will be kept 90% controlled throughout the entire construction and operating period. The sensitivity analysis illustrates how the outcome changes under different dust control scenarios, using the Operations Phase as an example: - At 90% control (primary scenario): At the mine boundary reaches 61% of the PM-10 Ontario air quality standard; - At 70% control: 84% of the standard; and - At 50% control: 111% of the standard. While 90% control is not required at all times (as this reflects the control needed under maximum production and worst-case meteorological events), a reduction to less than 70% control is a realistic scenario that could also be caused by equipment breakdowns, water shortages, or conditions where controls such as watering are not feasible (e.g., freezing temperatures). The assessment does not describe any mechanism for detecting and responding to dust control failures before standards are potentially exceeded at nearby locations.	LSFN & WFN require the Proponent to include enforceable conditions requiring: A. Dust monitoring at locations agreed with the Nations from the start of construction; B. Defined dust levels that trigger notification to LSFN and WFN; and C. Required operational responses when those levels are exceeded. This recommendation is supported by MECP's review of the IAMGOLD Coté Gold mine.

#	Topic	Comments	Recommendations
58.	**App. D-2 (Modelling) Points of Reception**	The modelling report identifies the locations where people live or spend time using provincial government databases of residences, cabins, lodges, and registered campsites. The finding that air quality standards are met relies on this list being complete. Traditional harvesting camps, seasonal fishing sites, and cultural gathering places used by LSFN and WFN members are not registered in provincial databases and may not have been included. If any of these locations are closer to the mine than the ones currently assessed, predicted air quality levels there would be higher than reported.	LSFN & WFN require the Proponent to work with LSFN and WFN to identify traditional use locations and include them in the air quality modelling.
59.	**Appendix D-2: HCN emissions — process upset scenario**	Hydrogen cyanide (HCN) emissions from the leach circuit are calculated using the Australian NPI method, with a design pH of 10.5 (the minimum operating pH) and a target cyanide concentration of 1,000 ppm. At these conditions, the predicted ambient HCN concentration at the nearest location is well below Ontario's air quality standard. However, the assessment does not evaluate what would happen if pH dropped below the 10.5 design minimum due to a process upset, power failure, or reagent supply interruption. HCN volatilization from solution is exponentially sensitive to pH. The report mentions a "closed-loop" system, but it is not clear if such a system would entirely prevent this outcome.	LSFN & WFN require the Proponent to confirm how a pH deviation would be detected and responded to, and that this scenario is explicitly addressed in the Emergency Response Plan and the air quality management program submitted as part of the air quality approval.
60.	**MECP Precedent applicable to appendices D-1 and D-2: Cote Gold EA response Comments #70 & #72 Road Dust**	Comment #70: IAMGOLD assumed that road dust would be 85% controlled. MECP found this too optimistic, required the assumption to be revisited, and required a verification program to confirm the efficiency was actually achieved on site. The Great Bear assessment assumes 90% control with no independent verification program and no binding enforcement mechanism. Comment #72: IAMGOLD used the Ontario Mining Association's Emission Inventory Guidance value of 9.14% — MECP confirmed this was the applicable	LSFN & WFN require the Proponent to: A. Provide site-specific silt content measurements from Great Bear haul road construction materials or justify why 5.8% is more appropriate than the 9.14% Ontario Mining Association value.

#	Topic	Comments	Recommendations
	Control Efficiency & Silt Content	Ontario value for gold mines but required site-specific measurement data to back it up at the approval stage. The Great Bear assessment uses 5.8%, drawn from US EPA AP-42 emission factors for taconite (iron ore) mining. A lower silt content directly reduces the amount of dust the model predicts: using 5.8% instead of 9.14% is a difference of approximately 35–40%. Site-specific silt measurements from the Great Bear site are not provided to justify the lower value, and no justification is given for why a 1970s American iron ore mining value is more appropriate for a 2025 Ontario gold mine than the Ontario Mining Association's own guidance for Ontario gold mines.	B. Model the 70% dust control scenario at all Nation-identified traditional use locations and share those results with LSFN and WFN.
61.	**MECP Precedent applicable to appendices D-1 and D-2: Cote Gold EA response Comments #118 & #336 Non-Detect Convention &**	Comment #118: MECP found that IAMGOLD's baseline metals monitoring reported chromium, lead, and nickel below the detection limit but provided no explanation of how those measurements were treated when calculating averages. When an instrument cannot detect a substance, it can be recorded as zero, as half the detection limit, or as the full detection limit — and the choice changes the reported average. For Great Bear, mercury is below the detection limit in 114 of 115 suspended particulate samples; arsenic and lead are rarely detected. The baseline report does not state which convention was used. This may matter because those average concentrations feed into the cumulative impact tables in Appendix D-2.	LSFN & WFN require the Proponent to amend appendix D-1 to explicitly state the convention used for below-detection-limit measurements for all metals in suspended particulate, dustfall, and mercury vapour sampling, and that average concentrations be recalculated accordingly, if required.
62.	**App. D-3: GHG monitoring, reporting and Nation access**	Under existing regulations, the project will be required to report its greenhouse gas emissions to provincial and federal government agencies each year. These reports go to regulators, not to LSFN or WFN. The Nations have an interest in knowing how actual emissions from the project compare to what was predicted.	LSFN & WFN require the Proponent to provide LSFN and WFN with a brief annual summary of actual greenhouse gas emissions, compared to what the assessment projected, noting any significant differences. Require that the proponent advise LSFN and WFN if actual or expected emissions are likely to be significantly higher than projected — for example, if plans for expanded grid power are delayed.
Archaeology			
63.	**Appendix P-2: manoomin field between Unnamed**	"These reports did not identify the CHER Study Area as a past or present manoomin harvesting site." One of the archaeological sites discovered on the study property sits on the south east extent of the study area (EfKj-1); the implication of nearby archaeological sites is that this was likely a harvesting area,	LSFN & WFN require the Proponent to cross-reference existing heritage data, which includes archaeological data. 'past' includes 11,000 years or more of local community use.

#	Topic	Comments	Recommendations
	Waterbodies 1 and 2 Page 5	whether or not descendent population currently or recently harvested there. In other words, it remains a culturally relevant (and likely curated) heritage landscape.	
64.	**Appendix P-2: Page 8**	"…wild and manoomin…" Ultimately this will result in the destruction of the manoomin's habitat.	LSFN & WFN require the Proponent to be clear on the effects of the project on local manoomin population.
65.	**Appendix P-2: Page 9**	"century, rice, along" wording is unclear and doesn't effectively name wild rice/manoomin.	LSFN & WFN require the Proponent to actively use Anishinaabemowin to reduce miscommunication or mislabelling of the plant.
66.	**Appendix P-2: Page 15**	"1. Unnamed Waterbodies 1 and 2 will be permanently changed as a result of Project development." Ultimately this will result in the destruction of the Manoomin's habitat.	LSFN & WFN require the Proponent to adopt different language that is less euphemistic and more realistic in its description.
67.	**Appendix P-2: Page 23**	Snake Falls is the location of EeKi-3, and so any reference to Snake Falls should be known to also reference a nearby cultural resource/site.	LSFN & WFN require the Proponent to ensure that the report accurately tracks existing heritage resources and their implications for evaluation.
68.	**Appendix P-2: Page 25**	"…Indigenous archaeological site approximately 200 m south of the manoomin bed…" This would be EfKj-1" it would be more helpful to briefly review the nature of such a nearby site in context with the manoomin site.	LSFN & WFN require the Proponent to contextualize nearby archaeological sites and how it may indicate manoomin gathering, consumption, and even horticulture.
69.	**Appendix P-2: Section 6.2**	"The preceding evaluation has determined that the Study Area has CHVI since it meets three O. Reg. 9/06 criteria"; we agree with this assessment" - We agree with this assessment. In addition, we believe that in our experience (and perhaps more importantly) it would meet the criteria of most Anishinaabe communities for a site of cultural significance.	LSFN & WFN require the Proponent to consider including Anishinaabe community standards alongside Ontario regulatory criteria.
70.	**Appendix P-3: Page 15**	"…suggest their inclusion within a broader traditional harvesting network." - Again, note here that the archaeology is relevant to the examination of 'current' cultural heritage value.	N/A

#	Topic	Comments	Recommendations
71.	**Appendix P-3: Table 5**	"…no harvesting activity has been documented during over three years of fieldwork and trail camera monitoring." It is entirely possible that this stand of wild rice was rarely exploited because it is not directly connected to a waterway and there are far more accessible harvesting sites, making this site less desirable.	N/A
72.	**Appendix Q-1: Stage 1 Archaeological Assessment, Proposed Kinross Gold Corporation Great Bear Project, Unorganized Territory, District of Kenora. Pages 2, 3, 19**	"…of not more than six centimetre mesh, the…" This should be 6mm mesh.	LSFN & WFN require the Proponent to address this consistent error throughout the report. It's a substantially different measurement than the S&Gs indicate.
73.	**Appendix Q-1: Stage 1 Archaeological Assessment, Proposed Kinross Gold Corporation Great Bear Project, Unorganized Territory, District of Kenora. Page 6**	Historic Context acknowledges traditional territories and Treaty 3 but examines land use almost exclusively through a Euro-Canadian fur trade historical lens, with no substantive discussion of Anishinaabe seasonal harvesting or lifeways relating to specific features, despite thousands of years of land use and occupation.	LSFN & WFN require the Proponent to revise this section to include Anishinaabe land use history, documented through formal traditional knowledge engagement.

#	Topic	Comments	Recommendations
74.	**Appendix Q-1: Stage 1 Archaeological Assessment, Proposed Kinross Gold Corporation Great Bear Project, Unorganized Territory, District of Kenora. Page 6**	Ted Binguis of LSFN listed as field assisted who provided insight; report provides no description of how the company solicited Ted's knowledge, recorded it, or incorporated it. Additionally, no indication that WFN was involved in this process.	LSFN & WFN require the Proponent to provide formal Indigenous knowledge protocol and community engagement record provided within the report, including input from both affected communities.
75.	**Appendix Q-1: Stage 1 Archaeological Assessment, Proposed Kinross Gold Corporation Great Bear Project, Unorganized Territory, District of Kenora. Page 6**	"Any development is proposed in any part of the subject property within 300 metres of registered archaeological site EeKi-3…" This is in reference to the Snake Falls site.	N/A
76.	**Appendix Q-1: Stage 1 Archaeological Assessment, Proposed Kinross Gold Corporation**	"Late palaeo…" According to Dr. Taylor-Hollings report to the MCM, EeKi-3 contained at least one paleo era point that was discovered and collected by the owner of the land the site sits on (Taylor-Hollings and Hamilton, 2007).	LSFN & WFN require the Proponent to include reference to information regarding local finds by Taylor-Hollings and reassess potential based on them.

#	Topic	Comments	Recommendations
	Great Bear Project, Unorganized Territory, District of Kenora. Page 7		
77.	**Appendix Q-1: Stage 1 Archaeological Assessment, Proposed Kinross Gold Corporation Great Bear Project, Unorganized Territory, District of Kenora. Page 8**	"…mist, organic soils" - Presumably this is meant to say "moist, organic soils".	LSFN & WFN require the Proponent to address this typographical error.
78.	**Appendix Q-1: Stage 1 Archaeological Assessment, Proposed Kinross Gold Corporation Great Bear Project, Unorganized Territory, District of Kenora. Page 9**	Report notes 20 sites within 25 km but documents no attempts to contact the local FN communities regarding site knowledge they may have that isn't registered by the OASD; the Ontario S&Gs strongly encourage consultation with communities as part of the background study; in a 9100 ha site, relying exclusively on the OASD is insufficient.	LSFN & WFN require the Proponent to incorporate FN communities' knowledge visibly to inform on local site locations not tracked by the OASD.

#	Topic	Comments	Recommendations
79.	**Appendix Q-1: Stage 1 Archaeological Assessment, Proposed Kinross Gold Corporation Great Bear Project, Unorganized Territory, District of Kenora. Page 9**	"There is one registered archaeological site within one kilometer of the property (Table 1). The site, EeKi-3, was reported from the tourist camp on the east bank of the Chukuni River at Snake Falls." While there in no information in the Ministry database regarding this site, it is discussed in Stage 2 Archaeological Research at Pakwash and Bruce Lakes, Northwestern Ontario (Taylor-Hollings and Hamilton, 2007).	LSFN & WFN require the Proponent to incorporate information into the report from Taylor-Hollings' report; reassess potential as a result.
80.	**Appendix Q-1: Stage 1 Archaeological Assessment, Proposed Kinross Gold Corporation Great Bear Project, Unorganized Territory, District of Kenora. Page 10, table 1**	"Table 1: Registered archaeological sites within 25 km of the subject property (OASD)." This table is incomplete, as there are several sites at Lake Pakwash that are not registered with the MCM. See the appended map taken from Stage 2 Archaeological Research at Pakwash and Bruce Lakes, Northwestern Ontario (Taylor-Hollings and Hamilton, 2007).	LSFN & WFN require the Proponent to complete the table.
81.	**Appendix Q-1: Stage 1 Archaeological Assessment, Proposed Kinross Gold Corporation**	"…clay rich…" This has potential as a resource for ceramics.	LSFN & WFN require the Proponent to include language acknowledging clay as a gathering and industrial resource.

#	Topic	Comments	Recommendations
	Great Bear Project, Unorganized Territory, District of Kenora. Page 11		
82.	**Appendix Q-1: Stage 1 Archaeological Assessment, Proposed Kinross Gold Corporation Great Bear Project, Unorganized Territory, District of Kenora. Page 11**	"…fur trade posts and 'cabins.' The latter may be Indigenous occupations, or…" Specifying which historical sources and following up with local First Nations may have helped to pinpoint the locations of these structures. There is no indication this happened.	LSFN & WFN require the Proponent to include engagement strategy with local communities, as per topic 78.
83.	**Appendix Q-1: Stage 1 Archaeological Assessment, Proposed Kinross Gold Corporation Great Bear Project, Unorganized Territory, District of Kenora. Pages 12-15**	Report notes all accessible parts of the 9100 ha property were covered by a site visit with only two staff. S&Gs Section 1.2 require sufficient inspection to evaluate the full property. This seems unlikely with one project direct and one field assistant.	LSFN & WFN require the Proponent include a map overlay that compares areas physically inspected with the full lease area so as to delineate any areas not inspected and related reasons; those areas should be assigned potential conservatively rather than defaulting to low archaeological potential.

#	Topic	Comments	Recommendations
84.	**Appendix Q-1: Stage 1 Archaeological Assessment, Proposed Kinross Gold Corporation Great Bear Project, Unorganized Territory, District of Kenora. Page 13**	"The absence of a report in the ministry database suggests that it may have been registered on the basis of a report from the property owner, rather than a detailed field survey." Though our investigations we were able to determine that the report about this site by Dr. Taylor-Hollings was filed but the sites contained within have not been registered (save for EeKi-3, and it is not linked to the report). The report is available from the Ministry but its contents have not been entered into the database.	LSFN & WFN require the Proponent to include findings of the Taylor-Hollings reporting as per topic 79.
85.	**Appendix Q-1: Stage 1 Archaeological Assessment, Proposed Kinross Gold Corporation Great Bear Project, Unorganized Territory, District of Kenora. Page 14**	"remarkably dense wild rice…" – wild rice was a regular food source harvested by both historical and descendent communities.	LSFN & WFN require the Proponent to expand on the significance of manoomin to local communities as a staple and cultural indicator.
86.	**Appendix Q-1: Stage 1 Archaeological Assessment, Proposed Kinross Gold Corporation**	"…Chukuni River. There is no information available on the nature of this site, and it is likely that it represents a surface collection of artifacts from disturbed context at the existing camp property. The S&Gs require that an area of at least 300m from the site is evaluated…"	LSFN & WFN require the Proponent to include findings of the Taylor-Hollings reporting as per topic 79.

#	Topic	Comments	Recommendations
	Great Bear Project, Unorganized Territory, District of Kenora. Page 16		
87.	**Appendix Q-1: Stage 1 Archaeological Assessment, Proposed Kinross Gold Corporation Great Bear Project, Unorganized Territory, District of Kenora. Page 16**	There are only 42 GPS readings and 4 pages of field notes indicated for 9100 ha inspected over 27 days, which appears to be thin field document recording for a property this size.	LSFN & WFN require the Proponent to provide rationale of thin documentation, and consider providing supplementary field documentation, such as GPS track logs, notes, etc.; attaching summary table or map of all GPS waypoints recorded during inspection.
88.	**Appendix Q-1: Stage 1 Archaeological Assessment, Proposed Kinross Gold Corporation Great Bear Project, Unorganized Territory, District of Kenora. Page 17**	Evaluation of the Chukuni River is 'mixed' though this water body is identified as a primary historical travel route used for millennia. Restricting archaeological potential to a 100m buffer from the high water may underestimate the actual potential; there isn't adequate justification of this buffer.	LSFN & WFN require the Proponent to justify the buffer and provide a record of engagement ensuring First Nations are in agreement with buffer as a means of protecting their heritage.

#	Topic	Comments	Recommendations
89.	**Appendix Q-1: Stage 1 Archaeological Assessment, Proposed Kinross Gold Corporation Great Bear Project, Unorganized Territory, District of Kenora. Pages 21, 88**	"the Ministry of Tourism, Culture and Sport…" This is an outdated title, the previous name for the current Ministry of Citizenship and Multiculturalism.	LSFN & WFN require the Proponent to adjust template with the MCM name as this is many years outdated.
90.	**Appendix Q-1: Stage 1 Archaeological Assessment, Proposed Kinross Gold Corporation Great Bear Project, Unorganized Territory, District of Kenora. Page 30**	Map 6: Archaeological potential. Using practically identical colours to indicate either proximity to water or a historic travel route is confusing and not optimal design	LSFN & WFN require the Proponent to adjust colour theory in mapping to ensure visual clarity.
91.	**Appendix Q-1: Stage 1 Archaeological Assessment of the Proposed Natural Gas**	"The database shows no sites within five kilometers of the property." Snake Creek (EeKi-3) sits within 5km of the property, though not within 5km of this section. The Teardrop Lake site was later discovered within 5km of this section of property.	LSFN & WFN require the Proponent to include indicated sites in report and use to reassess potential.

#	Topic	Comments	Recommendations
	Connection at Tuzycks Road and Highway 105, Unorganized Territory, District of Kenora, Ontario. Page 7		
92.	**Appendix Q-1: Stage 1 Archaeological Assessment of the Proposed Natural Gas Connection at Tuzycks Road and Highway 105, Unorganized Territory, District of Kenora, Ontario. Full text**	This report relies heavily on the Stage 1 overall report for context, and the determination of low potential was reached with limited field investigation. Additionally, the pipeline would cross undisturbed ground.	LSFN & WFN require the Proponent to reassess the conclusion of low potential more critically, as parcel is on glaciofluvial soils and an esker that are regularly associated with potential in northern Ontario. Waiving of Stage 2 should include rationale with reference to specific S&G criteria.
93.	**Appendix Q-1: Stage 1 Archaeological Assessment of the Proposed Natural Gas Connection at Tuzycks Road and Highway**	Historic Context section is recycled from main overall report with the same issues noted in earlier comments regarding FN participation. This is a pipeline projected to be constructed through undisturbed forest, and so meaningful community engagement is essential. The report suffers from the same limitations as the main Stage 1 report in this regard.	LSFN & WFN require the Proponent to provide documented community engagements. including a brief summary of any input from affected FN communities, even if it was confirming no specific concerns.

#	Topic	Comments	Recommendations
	105, Unorganized Territory, District of Kenora, Ontario. Pages 4-5		
94.	**Appendix Q-1: Stage 2 Archaeological Assessment, Proposed Kinross Gold Corporation Great Bear Project, Unorganized Territory, District of Kenora. Page 3**	"if development is proposed in any part of the subject property within 300 metres registered archaeological site EeKi-3, Stage 2 archaeological assessment conforming to the direction found in the S&Gs Section 2.1.1, will be required" According to the report by Dr. Taylor-Hollings (2007), there are at least three sites within the southeastern boundary of the property. They are not, however, registered with the MCM. Should this issue be resolved, it would extend this buffer deeper into the subject property.	LSFN & WFN require the Proponent to include data from the Taylor-Hollings report and use to reassess recommendations.
95.	**Appendix Q-1: Stage 2 Archaeological Assessment, Proposed Kinross Gold Corporation Great Bear Project, Unorganized Territory, District of Kenora. Page 3**	"once Stage 3 site-specific assessment is complete, and that the sites be set apart for long term avoidance and protection." The Stage 3 report is currently awaiting approval at the MCM	LSFN & WFN require the Proponent to adjust with more recent information.

#	Topic	Comments	Recommendations
96.	**Appendix Q-1: Stage 2 Archaeological Assessment, Proposed Kinross Gold Corporation Great Bear Project, Unorganized Territory, District of Kenora. Page 4**	"archaeological site EfKj-4 is understood to be a large multicomponent or single component lithic scatters." For unknown reasons the Stage 3 report for EfKj-4 is cancelled on the MCM website.	LSFN & WFN require the Proponent to provide clarity from the MCM regarding this and include it as an element of reassessment.
97.	**Appendix Q-1: Stage 2 Archaeological Assessment, Proposed Kinross Gold Corporation Great Bear Project, Unorganized Territory, District of Kenora. Page 9**	"…mist, organic soil" - Presumably a typo copy pasted from previous reports	LSFN & WFN require the Proponent to address the error.
98.	**Appendix Q-1: Stage 1 Archaeological Assessment of the Proposed Natural Gas**	The report indicates water levels were low in August 2023, but doesn't adequately address the water-level variability's effect on survey completeness. How would changes in water-levels realistically affect survey?	LSFN & WFN require the Proponent to add a section reviewing variability of water levels on the effectiveness of survey. Consider whether there is a need to reassess certain areas based on water levels.

#	Topic	Comments	Recommendations
	Connection at Tuzycks Road and Highway 105, Unorganized Territory, District of Kenora, Ontario. Pages 13-14		
99.	**Appendix Q-1: Stage 1 Archaeological Assessment of the Proposed Natural Gas Connection at Tuzycks Road and Highway 105, Unorganized Territory, District of Kenora, Ontario. Pages 15-16**	EeKi-4 (Pakwash Beach) is potentially the most culturally significant site identified in this assessment, but the analysis is brief and there's no mention of the site's affiliation with local descendent communities.	LSFN & WFN require the Proponent to draw connections between this site and local descendent communities' affiliations. Provide record of engagement on the site.
100.	**Appendix Q-1: Stage 1 Archaeological Assessment of the Proposed Natural Gas Connection at Tuzycks Road and Highway**	The issue with the Ministry not assigning Borden numbers to the examined sites or to properly register Dr. Taylor-Hollings report is a failure on the part of the Ministry, and should not mean that the company conducting the assessment on the subject property can simply ignore them. While they are technically adhering to the S&G, the knowledge that these sites exist should be taken into consideration. Dr. Taylor-Holling's report indicates there are several unregistered sites within 5 km of the subject property.	As per topic 94, LSFN & WFN require the Proponent to include data from the Taylor-Hollings report and use to reassess recommendations.

#	Topic	Comments	Recommendations
	105, Unorganized Territory, District of Kenora, Ontario. Page 19		
101.	**Appendix Q-1: Stage 1 Archaeological Assessment of the Proposed Natural Gas Connection at Tuzycks Road and Highway 105, Unorganized Territory, District of Kenora, Ontario. Page 24**	archaeological site EfKj-1; this site is referenced in Dr. Taylor-Holling's report.	N/A
102.	**Appendix Q-2: Page iv**	As outlined in the CHIA (App P-3), Unnamed Waterbody 2 will be permanently altered and possibly destroyed to make way for project infrastructure. The combination of a large bed of Manoomin in Unnamed Waterboy 2, along with the presence of site EfKl-1 200m to the south the conditions have been triggered to perform an assessment.	N/A
103.	**Appendix Q-2: Page 9**	"…interpreted as geographically removed wilderness devoid of culture…" This has not been the interpretation for quite some time.	LSFN & WFN require the Proponent to adjust language to accommodate current archaeological and historical consensus.

#	Topic	Comments	Recommendations
104.	**Appendix Q-2: Page 9**	"Stage 3 Archaeological Site-Specific Assessment, EfKj-1, Teardrop Lake, Kinross Gold Corporation Great Bear Project, Unorganized Territory, District of Kenora" - This report has not been included in the Impact Statement package, and is still pending on the MCM website, so is inaccessible.	LSFN & WFN require that the Proponent ensure report is included in IS package and is reviewed.
105.	**Appendix Q-2: Page 9**	"LiDAR data collected by Great Bear Resources in September 2022 and provided to WSP in February 2023"; This data should also have been made available to the terrestrial archaeology team(s).	LSFN & WFN require that the Proponent consider sharing data across archaeological assessments, allowing reports to be updated to reflect new data.
106.	**Appendix Q-2: Page 20**	Details and recording of community engagement parameters and results are minimal in this report, with one note indicating the marine archaeologist and a representative one community attended site visits. No appropriate record of engagement or collection of community knowledge is documented.	LSFN & WFN require that the Proponent include a section on community engagement with appropriate record and details.
Socio-Economics			
107.	**Appendix N-2: Socioeconomic Baseline Statement pg. 36-37, Table 4-1, 198, Table 6-32**	Residual Effects on specified Determinant of Health, "Housing," marked as "No/Negligible" or "Yes/Minor" effects for all communities. The Proponent states on page 198, Table 6-32 that "existing housing concerns in the region included the limited availability of supportive housing, rising maintenance costs, and limited access to transitional and emergency shelter services outside of major centres such as the City of Kenora, with few facilities available in smaller municipalities such as Red Lake. Individuals with disabilities were identified as being particularly at risk of housing insecurity (Wesley 2025). Based on the assessment findings, the Project is not expected to affect Indigenous health through Project-related changes to housing for LSFN, WFN or ANA; therefore, effects to GBA Plus subgroups are not expected for these communities. Effects to GBA Plus subgroups may occur for NWOMC and RLEF." This interpretation is significantly contrasted by the statements highlighted in topics 110-118.	LSFN & WFN require the Proponent to rectify the Residual Effects statement to acknowledge that effects on Housing at the severity level of Major may occur for First Nations people, particularly those living off-reserve.
108.	**Appendix N-2:**	The Proponent states "that Project-related changes to population growth is expected to increase the cost of goods and services and increase demand for	LSFN & WFN require the Proponent to clarify whether the impacts are at an "individual level" or "population level," and

#	Topic	Comments	Recommendations
	Socioeconomic Baseline Statement pg. 198, Table 6-32, Table 6-33	housing, exacerbating existing challenges related to housing affordability and availability." However, it concludes that "these potential effects are anticipated in Kenora district hubs including RLEF. While some individuals may experience adverse health effects, a population-level shift in Indigenous health is not expected." These are conflicting statements that need to be reconciled – will population-level impacts occur on the cost of goods, services and housing, further exacerbating challenges that are central to houselessness (cost of living, availability of housing)?	define those terms to ensure that they align with the Residual Effects statement.
109.	**Appendix N-2: Socioeconomic Baseline Statement pg. 198, Table 6-32, Table 6-33**	The Proponent concludes that "these potential effects are anticipated in Kenora district hubs including RLEF. While some individuals may experience adverse health effects, a population-level shift in Indigenous health is not expected." However, data from comparable Projects is not provided to support this anticipated outcome. Data from nearby Geraldton, which recently underwent a community transition resulting from a Mine project, could serve as a useful proxy for the Proponent to provide a critical assessment of likely outcomes.	LSFN & WFN require the Proponent to obtain local data from before and after Mine project in Geraldton including housing affordability and availability, number of unhoused individuals, impacts on access to health and social services, and other Determinants of Health discussed in the Appendix.
110.	**Appendix N-2: Socioeconomic Baseline Statement pg. 30**	"LSFN also raised concerns related to potential increases in cost of living," yet the Proponent is describing the concern as "negligible" in Residual Effects Table.	LSFN & WFN require the Proponent to integrate perspectives of First Nations in Residual Effects statements, or explain why these may be misguided.
111.	**Appendix O-1: Socioeconomic Baseline Statement pg. 5**	The IS states that "A comprehensive review in 2011 projected that Red Lake's population could increase by 4,553 by 2031, to a total population of 9,079. To address the projected growth, the Official Plan notes that an additional 1,751 new dwelling units are required…This population growth will not only affect housing supply and demand, but also place significant demands on municipal infrastructure, including land supply, industrial and commercial space, the transportation network, community services and amenities." It is not clear if this modelling includes the mine. The Proponent's role in mitigating these impacts, beyond generating economic activity, is not made clear.	LSFN & WFN require the Proponent to clarify their responsibility to mitigating impacts of large population growth on housing availability, and the extent to which Proponent will align efforts with those of local Official Plan.

#	Topic	Comments	Recommendations
112.	**Appendix N-2: Socioeconomic Baseline Statement pg. 57**	"A 2022 Northern Policy Institute report found that northern Ontario, including the District of Kenora, is experiencing high and increasing rates of homelessness closely linked to mental health and substance use challenges, including rising opioid related harms, with many homeless individuals identifying as Indigenous." The term "linked to" appears to be establishing causality of substance use driving houselessness in this context, but this case is not supported by the regional PiT count reports or those conducted elsewhere. Cost of living is the key driver, along with health issues, and substance use challenges often follow houselessness, rather than the other way around. This is a critical point to ensuring that appropriate, evidence-based mitigation strategies are put in place.	LSFN & WFN require the Proponent to make a clear statement that the key drivers of houselessness are cost of living and access to health care, followed by secondary drivers such as substance use or poor mental health.
113.	**Appendix N-2: Socioeconomic Baseline Statement pg. 193**	"In 2021, the District of Kenora region reportedly had 3.1 homeless individuals per 1,000 persons, which was the third highest of the regions included in the study and represent larger homeless populations than some of the most populus cities in Ontario (Attachment A). In the District of Kenora, 65% and 75% of homeless individuals in 2021 reported they struggled with mental health and addiction, and 88% of homeless individuals in the District of Kenora self-identified as Indigenous in 2021. Given the high percentage of homeless individuals reporting to be struggling with addiction, it is noteworthy that addiction-related emergency department visits and deaths between 2017 and 2021 more than doubled in the NWHU (Attachment A)." These figures about mental health and addiction are incorrect and may lead to false conclusions about effective mitigation strategies. And while the figure concerning emergency department visits and deaths doubling emphasizes that the crisis is intensifying, the data do not show these are predominantly unhoused people.	LSFN & WFN require the Proponent to correct the statistics related to houseless individuals concerning mental health or substance use and ensure that the most pertinent drivers of houselessness are centred: cost of living (including housing), housing availability, and access to health care.

#	Topic	Comments	Recommendations
114.	**Appendix O-1: Socioeconomic Baseline Statement pg. 53**	"In Canada, research has shown a linear relationship between industrial camp populations and a rise in crime, sexual violence, and the trafficking of Indigenous women (Keith MacMaster, 2020). The remote locations of project sites and Indigenous communities result in low reporting rates. In addition, local community health centres lack the resources to address incidents of sexual assault." This does not appear to be mitigated in the Project plan. While there is no plan for a work camp, the existing strain on housing availability (as per topic 107 above) and the anticipated impacts owing to the Project will likely exacerbate the issues of crime, sexual violence and trafficking of Indigenous women.	LSFN & WFN require the Proponent to provide an explanation as to how the incoming population is expected to impact crime, sexual violence and trafficking of Indigenous women in the region, as well as how reporting of sexual violence will be facilitated by the Proponent.
115.	**Appendix O-1: Socioeconomic Baseline Statement pg. 54**	The Appendix claims that a 2021 Point-in-Time count "found that mental health issues (64.7%) and substance use issues (76.5%) were the leading causes of homelessness within the Red Lake and Kenora area." LSFN & WFN believe these figures are inaccurate. Addiction/substance use was cited for just 38.7% of respondents, while mental health issues were not cited at all in isolation. The top reason given for houselessness was Health (including hospitalization, treatment program, physical or mental health issue) at 41.2%. No contributing factor was cited by 64.7% or 76.5%. Further, available data from 2024 and 2025 PiT counts were not included. These are available at https://kdsb.on.ca/about-us/reports-and-plans/ and show: • The waiting list for housing has increased by 295% since 2011 • None of the seven reasons cited for people staying in shelters involved substance use or mental health • Seniors are currently at highest risk, particularly those spending >30% of their budget on housing	LSFN & WFN require the Proponent to refocus the attention from substance use as a driver of houselessness and shelter usage toward cost of living, housing availability and health as the primary concerns to be mitigated. This refocus will pay dividends as pressures increase, because rather than fighting losing battles over substance use (which is often a response to, rather than a driver of, houselessness), the first answers to houselessness can always be "housing" and "health care access."
116.	**Appendix O-1: Socioeconomic Baseline Statement pg. 53**	Red Lake / Ear Falls 2020 Community Safety and Well-Being Plan describes existing concerns related to substance use, housing, mental health, families and financial security. This is an opportunity to accelerate the region's objective implementation.	LSFN & WFN require the Proponent to ensure Project plan aligns with Red Lake / Ear Falls 2020 Community Safety and Well-Being Plan.

#	Topic	Comments	Recommendations
117.	**Appendix N-2: general comment**	Nearly every core WFN indicator was suppressed or unavailable — CWB Index, employment income, LIM-AT, Gini, housing affordability, crime severity — and the workaround is to substitute Kenora District data as a regional proxy. If the baseline doesn't accurately describe WFN's current conditions, the residual effect ratings built on top of it are not defensible.	LSFN & WFN request the Proponent to gather data that accurately represents LSFN & WFN's conditions, in order to provide confidence. If these data cannot be gathered, then the confidence projection must be described as low reflect this reality.
118.	**Appendix N-2: Socioeconomic Baseline Statement pg. 207**	The Proponent states that "further, as noted by the National Collaborating Centre for Indigenous Health (NCCIH 2019), 'Indigenous people are more likely to be diagnosed at a later stage of a disease than non-Indigenous people, thus contributing to poorer health outcomes and higher mortality rates' (NCCIH 2019).'" The new strain on existing services related to new cases of drug poisoning (topic 127), health impacts of houselessness (topic 107) or additional population (topic 111) will likely exacerbate this effect.	LSFN & WFN require the Proponent to: A. Make a statement on how the incoming worker population is expected to impact drug poisoning rates or health impacts of houselessness. B. Rectify the Determinant of Health, "Access to Health and Social Services" to a higher level to reflect the likely impacts of these outcomes on access to services. C. Acknowledge that reduced Access to Health and Social Services may aggravate the existing risks to houselessness, given the findings of the PiT count (discussed in topic 115).
119.	**Appendix N-2: Socioeconomic Baseline Statement pg. 36-37, Table 4-1**	Denotes the selection of criteria under consideration as risks, stating that it takes in a "broad consideration of factors that individually and collectively have the potential to influence human health." However, it omits key populations placed at risk by the Project – even according to resources presented in this Appendix. Therefore, the Determinants as set forth are insufficient to accurately capture the most important elements of health and wellness in the "broader holistic context" of the document's stated purpose. Among the omitted populations are: 2SLGBTQQIA people (folded into "women and girls"), sex workers, people subjected to human trafficking, people who use drugs, people being released from incarceration, and people who will be criminalized for activities that will increase as a result of this mine (including provision of drugs and sex). The specific needs and shortfalls around care for 2SLGBTQQIA should be clearly articulated, as they are distinct from those of women and girls. This is clarified in	LSFN & WFN require the Proponent to: A. Create a section describing mitigations specific to 2SLGBTQQIA people, sex workers, people subjected to human trafficking, people who use drugs, people being released from incarceration, and people who will be criminalized for activities that will increase as a result of this mine (including provision of drugs and sex). B. Ensure that portions of the Appendix discussing women and girls are inclusive of 2SLGBTQQIA people, and where they are not, include an additional section describing impacts and proposed mitigations.

#	Topic	Comments	Recommendations
		the MMIWG2S report, Chapter 6: "Deeper Dive: Understanding Distinctive Experiences of Danger in the Lives of 2SLGBTQQIA People" (MMIWG2S Final Report, Volume 1a). https://www.mmiwg-ffada.ca/wp-content/uploads/2019/06/Final_Report_Vol_1a-1.pdf	
120.	**Appendix N-2: Socioeconomic Baseline Statement pg. 36-37, Table 4-1**	Residual Effects on specified Determinant of Health, "Mental Wellness and Personal Behaviours," marked as "Yes/Minor" effects for all communities. This interpretation is significantly contrasted by topics 134 – 144 below.	LSFN & WFN require the Proponent to rectify the Residual Effects statement to acknowledge that effects on Mental Wellness and Personal Behaviours at the severity level of Major may occur for First Nations people, particularly those living off-reserve and those precariously housed.
121.	**Appendix N-2: Socioeconomic Baseline Statement pg. 36-37, Table 4-1, pg. 255**	Residual Effects on specified Determinant of Health, "Mental Wellness and Personal Behaviours," appears to universally denote substance use as a response to mental illness or personal behaviours. This is contradicted by the Proponent's statement on page 255 that "intergenerational trauma, isolation from traditional land, economic stress and material deprivation, rotational shift work, and other interrelated factors at both the individual and community level, can result in mental health effects for Indigenous people (PHAC 2024). These impacts can also result in biophysical stress responses that negatively affect immune, metabolic, and endocrine systems (PHAC 2024). Individuals may turn to alcohol and drugs to cope, though this often results in severe health and wellness consequences for the individual and their family." Therefore, the placing of substance use exclusively within a framework of "Mental Wellness and Personal Behaviours" does not adequately capture the effects of generations of systematic extractive colonialism on poverty, separation from traditional practices, and other outcomes that prompt some to "cope" by using drugs. An individual behaviours or mental wellness framing is, in this context, insufficient to preempt repeated propagation of the root causes of key struggles currently facing the region. Furthermore, as accidental drug poisoning is currently the leading cause of death among working-age people in the region, drug toxicity merits closer consideration under its own category of Determinant.	LSFN & WFN require the Proponent to create a separate Determinant focused specifically on Substance Use or Drug Toxicity, to correctly address its risks as they pertain to historical legacies that intersect with the current reality of an unregulated, toxic drug supply.

#	Topic	Comments	Recommendations
122.	**Appendix N-2: Socioeconomic Baseline Statement pg. 36-37, Table 4-1, and pg. 243**	Determinants fail to capture the essence of the risks in the uniform positioning of drug use under "Mental wellness and personal behaviours." The description reads that "if applicable, substance use [will be considered] in the absence of site-specific quantitative data on mental wellness." This is insufficient to capture the breadth of reasons for drug use while also placing the blame for drug use on the user. The Appendix acknowledges this is inaccurate on page 243: "Research has shown that health behaviours such as problematic substance use can be related to resource development, through increased stress, access to disposable income, time away from traditional, community, and social practices, and a culture of hyper-masculinity in the industrial workplace (Aalhus et al. 2018)." However, it never reconciles this within a framework of Potential Effects or Determinants/Indicators that can be managed.	LSFN & WFN require the Proponent to make a clear statement that many reasons underpin drug use and not all drug use is driven by mental health issues (for example, "blowing off steam" among mine workers, as described by Ruddell and Ray, 2018, cited multiple times in Appendix N-2).
123.	**Appendix N-2: Health**	Similar to topic 122, Appendix N-2 contains 49 mentions of "addiction" but zero mentions of "drug toxicity", "drug supply" or any other measure indicating a broader understanding of the primary drivers of the drug poisoning crisis, which are likely to be exacerbated by the Project. This creates challenges in accurately identifying evidence-based mitigation strategies.	LSFN & WFN require the Proponent to: A. Ensure the term "addiction" is used accurately in each context, and replace with "substance use" where no indication of substance use disorder is necessary or provided. B. Ensure the term "addiction" is not used in contexts where the toxicity of the drug supply is more accurately suited (such as describing overdose incidents).
124.	**Appendix N-2: Page 255**	Similar to topic 122, notes that "a study conducted in northern British Columbia found that the shift schedule associated with the mining sector have led to adverse effects, including problematic substance use and issues concerning family dynamics (Aalhus et al. 2018). '[R]esearch suggests that many camp workers spend large proportions of their income on alcohol and drugs' and that '[i]ndividuals who have worked in the oil and gas industry since they were teenagers reported that their entry into industry-related employment also provided them with an entry into a drug scene.' (Aalhus et al. 2018)."	LSFN & WFN require the Proponent to make a clear statement that the presence of the mine is likely to increase the local trade in both legal and illegal drugs.

#	Topic	Comments	Recommendations
		Page 33 explains that "NWOMC also raised concerns that the increased population due to employment may result in changes to hunting and fishing around the Project, affecting food availability, as well as increased drug and alcohol use that could impact communities and local infrastructure, including healthcare." Despite the Appendix claiming on multiple instances that drug use leads to houselessness (a framing that itself lacks necessary nuance), the matter of drug use is never placed within a "broader holistic context" that includes risks such as how resource development could lead to drug use and drug use in turn lead to downstream issues.	
125.	**Appendix N-2: Frequent workplace injuries**	Throughout the Appendix, considerable attention is paid to injuries as a major cause of death among Indigenous inhabitants (through substance use, assault, accidents, etc.) but little discussion of how frequent workplace injuries are expected to be or how injured workers will be cared for.	LSFN & WFN require the Proponent to make a clear statement indicating the expected frequency of workplace injuries and how injured workers will be cared for.
126.	**Appendix N-2: Health pg. 243, 268-9, Fig. 6-30**	On page 243, Proponent states that "health and social service providers working in the mining industry have also reported that during boom times of a mining project, there are increases in pregnancies, sexually transmitted infections, and mine-related injuries (Shandro et al. 2011)." On page 268-9, Figure 6-30 Proponent further states that "additional to the physical consequences of injury and / or illness, there may also be associated economic (i.e., livelihood impacted from inability to work) and social (e.g., ability to participate in cultural activities) consequences (CDC 2024)." However, there is no mention of chronic injury and its strong link with painkiller use, which can lead to dependence and eventual requirement to access the illegal supply after a prescription is cut off. This is a major risk factor that needs to be identified and mitigated, particularly concerning the traumatic backgrounds of many Indigenous workers that can drive greater susceptibility to drug dependence.	LSFN & WFN require the Proponent to make a clear statement linking workplace injuries, including chronic pain, with prescription drug use. Explain how workers who struggle with prescription drug use will be supported to avoid instances where they are forced to turn to the unregulated drug supply.

#	Topic	Comments	Recommendations
127.	**Appendix N-2: Health pg. 244**	Additional issues driving substance use include: "Increases in transient workforces, combined with increases in disposable income and sometimes stressful working conditions [which can] contribute to negative physical and mental health effects such as higher rates of substance use, gambling, and related harms such as violence against local women and girls. These effects can be exacerbated where access to health and social services is already limited (Gibson et al. 2017)." This is further expanded to include the rotational work schedule common in the mining industry: "There is potential for any rotational work schedule to have an impact on individuals, families, and the community. The mechanism in which effects are felt between these three distinct groups are different. The impact on individuals can include increased stress, alcohol and drug use, decreased ability to participate in cultural activities, and isolation from land and community. The impact may also be felt acutely by family units, leading to decreased participation in familial duties, and increased stress and tension between spouses, possibly also leading to increased domestic violence (Aalhus et al. 2018; Gibson et al. 2017)."	LSFN & WFN require the Proponent to acknowledge that the key drivers of increased substance use in the region will primarily be factors that are amplified by the presence of the mine.
128.	**Appendix N-2: Health pg. 56, 193, 209, 247, 257, Fig. 4-7**	While the concerns outlined in topics 124 - 127 largely deal with demand for drugs at an individual level (i.e. impacts on people who may turn to drugs to cope), a central matter lacking within this framework is impacts on the drug supply itself. As described in topic 126, the Appendix acknowledges that camp life, shift schedules and demanding work drive increased drug use. It is established fact that mine workers use drugs at higher levels that the typical population (Canadian Centre on Substance Use and Addiction, 2025, https://www.ccsa.ca/sites/default/files/2025-07/Research-Brief-Mining-en.pdf). People in trades (particularly construction) are also at highest risk among any employed professionals to suffer drug toxicity events, including death (Public Health Ontario, 2022. https://www.publichealthontario.ca/en/About/News/2022/Construction-workers-opioid-related-deaths). Together, these give rise to the obvious consequence that the Project itself will drive both higher regional drug consumption and higher drug toxicity events.	LSFN & WFN require the Proponent to: A. Make a clear statement that the increase in local trade of drugs will impact the criminalization of local inhabitants as well as attract distribution networks from outside. Both of these factors could have adverse effects on the quality and volatility of the drug supply, creating new risks for drug toxicity events. B. Support community-proposed mechanisms to mitigate the impacts of this outcome.

#	Topic	Comments	Recommendations
		Drug toxicities are acknowledged as a problem creating strains on emergency departments (p. 56, 193, 209, 247, 257, and Figure 4-7) and are flagged as having doubled in the region between 2017 and 2021 (p.193), but the impacts of the mine are never acknowledged as potential aggravating factors.	
129.	**Appendix N-2: Health Impact Assessment pg. 211**	The Appendix also notes on page 211 that "extractive industry projects can result in increased demand on emergency departments, primary care services, and healthcare staffing." This should be noted as impacting the Determinant, "Access to Health and Social Services."	LSFN & WFN require the Proponent to make a statement explaining why the Determinant, "Access to Health and Social Services," is designated as "Yes/Minor" in terms of Project impacts, and the extent to which health services should be expanded regionally to accommodate.
130.	**Appendix N-2: Health Impact Assessment pg. 170, 177**	"Education plays a key role in supporting better health outcomes; therefore, without the appropriate level of financial literacy, individuals who suddenly have higher disposable income may turn to harmful behaviours that can occur after natural resource-based rapid population growth such as substance use, domestic violence, and increased number of public order offences that can include alcohol or drug-related crimes or prostitution (Ruddell and Ray 2018)." This reference, "Profiling the life course of resource-based boomtowns: A key step in crime prevention," does not discuss financial literacy though it is cited here suggesting that it does. The basis for the claim that financial literacy will reduce substance use, domestic violence, drug-related crimes or sex work appear to be unsupported and may be interpreted as casting responsibility for these onto the population of people seeking economic opportunities. The point is repeated on page 177: "Financial literacy and money management skills have been shown to help to mitigate against adverse personal behavioural choices, including spending on alcohol and drugs. By making training available for all employees, and their families, this is expected to reduce the likelihood of adverse downstream health effects resulting from behaviours such as substance abuse, gambling and domestic violence." Financial literacy is doing a lot of heavy lifting here and throughout Table 6-27. What is the reference for this – what has "shown" this? Is this evidence-based?	LSFN & WFN require the Proponent to clarify the sources for the claim around financial literacy, and ensure that 'financial literacy' is not being used to deflect responsibility for issues rooted in trauma, colonialism, and residual harms from previous extractive projects.

#	Topic	Comments	Recommendations
131.	**Appendix N-2: Health Impact Assessment, pg. 210**	Proponent states that "in Red Lake there are currently no withdrawal management, residential addictions treatment facilities, or mental health centres providing psychiatric or psychological services, requiring members to travel to Kenora or Thunder Bay for these services (MNP LLP 2020)." This emphasizes one part of a continuum while excluding upstream and downstream portions, including frontline health care services, street outreach, harm-reduction services, employment and training opportunities, and varied forms of housing including supported housing.	LSFN & WFN require the Proponent to explain how upstream and downstream substance use mitigation measures will be integrated into support for withdrawal management, residential facilities, or mental health services.
132.	**Appendix N-2: Health Impact Assessment**	Proponent cites Aalhus et al. (2018) on 10 occasions, which states that "individuals who have worked in the oil and gas industry since they were teenagers reported that their entry into industry-related employment also provided them with an entry into a drug scene. They reported becoming surrounded by illegal drugs in industry settings, including crack cocaine (used as an 'upper' by fatigued workers) and alcohol. A review of industrial camps in northern BC calls on camps to provide workers with access to harm reduction supplies and services." However, the proponent omitted the final sentence of this paragraph from its analysis, describing harm-reduction supplies and services as a key direction being taken to mitigate drug poisoning by industrial development facilities across the country.	LSFN & WFN require the Proponent to explicitly incorporate onsite and offsite support for harm reduction supplies and services for workers to mitigate impacts of substance use and increased regional supply volatility that will likely accompany the mine.
133.	**Appendix N-2: Health Impact Assessment, pg. 213**	The Proponent states that "mine closure has been shown to coincide with higher reporting of stress, anxiety, depression and alcoholism (Shandro et al. 2011)." There does not appear to be a strategy to mitigate downstream impacts of mine closure.	LSFN & WFN require the Proponent to provide a statement explaining how mental health impacts will be mitigated as part of the mine closure plan.
134.	**Appendix N-2: Health Impact Assessment, pg. 291**	The Proponent proposes to "work in collaboration with Indigenous communities and local law enforcement to discuss safety considerations regarding the influx of additional workforce into the area, including the possibility of increases in violent crime and / or sexual harassment in local communities."	LSFN & WFN require the Proponent to include research on impacts of criminalization of substance use and houselessness on localized risks of drug toxicity, and propose alternative measures to increased policing that will alleviate these impacts.

#	Topic	Comments	Recommendations
		However, likelihood of greater demand for illegal drugs in the region because of the additional workforce is not acknowledged. Further, if the solutions to the public safety problems associated with the increased workforce are to be addressed through policing, an acknowledgement should be made that matters related to substance use and houselessness should be addressed through different lens than criminalization. Research shows: • Law enforcement seizures of drugs drive increased overdoses, including fatal overdoses, for weeks following the seizure (https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2831697 , https://dx.doi.org/10.2105/AJPH.2023.307291 , https://jech.bmj.com/content/79/2/147). • Removal of tent encampments (typically by law enforcement) drives increased overdoses (research summarized in https://www.naccho.org/uploads/downloadable-resources/FINAL-ES-Brief-Combined-7.28.2025.pdf)	
135.	**Appendix N-2: Health Impact Assessment, pg. 279**	Residual Effects on specified Determinant of Health, "Accidents," marked as "Negligible" effects for all communities and "Minor" for ANA, attributed to perception rather than real risk, with no population-level shift in Indigenous health. This interpretation is significantly contrasted by the finding in topic 136.	LSFN & WFN require the Proponent to rectify the Residual Effects statement to acknowledge that effects on Accidents at a higher severity level may occur for all First Nations communities in the region.
136.	**Appendix N-2: Health Impact Assessment, pg. 274**	"The available evidence, including community feedback and primary and grey literature sources (Ninomiya et al. 2023; Salerno et al. 2021; Shandro et al. 2017), suggests that perceived changes in safety, even in the absence of direct incidents, may affect community health and wellness. This is largely due to the introduction of a potential risk of spill-related accidents or malfunctions as a result of Project development, even if the actual risk of such events is negligible." Refers to several studies as "grey literature" but only one is such – the other two are peer-reviewed studies in high-impact journals with one referencing an actual spill – not hypotheticals or perceptions. One of these studies is published in The Lancet Planetary Health, another in the International Journal of Indigenous Health.	LSFN & WFN require the Proponent to correct the statement concerning "grey literature" to more accurately reflect the evidence basis for the impacts of spill-related accidents.

#	Topic	Comments	Recommendations
137.	**Appendix N-2: Socioeconomic Baseline Statement pg. 36-37, Table 4-1**	Residual Effects on specified Determinant of Health, "Actual and Perceived Public Safety," marked as "Negligible" effects for all communities. This interpretation is significantly contrasted if the impacts of the Project on Housing and Substance Use determinants are accurately analyzed: increased cost of housing will place housing affordability out of reach for people who are precariously housed or unhoused. This will have knock-on effects on perceptions of public safety in all affected regions, particularly town centres. Meanwhile, increased drug demand described in topic 124 will prompt greater drug distribution, including street vending, which will further aggravate impacts on perceived public safety.	LSFN & WFN require the Proponent to rectify the Residual Effects statement to acknowledge that effects on Actual and Perceived Public Safety at the severity level of Minor or Major may occur for First Nations members, particularly those living off-reserve in urban areas.
138.	**Appendix N-2: Socioeconomic Baseline Statement pg. 36-37, Table 4-1**	Residual Effects on specified Determinant of Health, "Safety of Indigenous Women and Girls," marked as "Yes/Minor" effects for all communities. This interpretation is significantly contrasted if the literature is examined from Mine projects elsewhere. These indicate that demand for sex work increases significantly during construction and operation of a Project, and these impacts can place women, girls and 2SLGBTQQIA people at increased risk of sexual violence as well as human trafficking. This is exhaustively discussed in the MMIWG2S report as well as a large body of literature, including literature cited in the Appendix (see topic 114).	LSFN & WFN require the Proponent to: A. Rectify the Residual Effects statement to acknowledge that effects on Safety of Indigenous Women and Girls at the severity level of Major may occur for all First Nations people in the region. B. Propose proactive solutions that do not rely on criminalization of sex workers while helping to prevent human trafficking.
139.	**Appendix N-2: Socioeconomic Baseline Statement pg. 36-37, Table 4-1**	Residual Effects on specified Determinant of Health, "Safety of Indigenous Women and Girls," marked as "Yes/Minor" effects for all communities. However, this appears to omit the impacts of greater housing precarity on creating economic imperative for subsistence sex work, which may expose Indigenous women, girls and 2SLGGBTQQIA people (in particular) to greater risk of sexual violence and exploitation.	LSFN & WFN require the Proponent to make a statement linking economic precarity related to housing affordability to the potential for increased risk of sexual violence and exploitation related to subsistence sex work that minimizes the potential of further criminalization of Indigenous women, girls, and 2SLGBTQQIA people.

8. LSFN & WFN Comments and Recommendations on the Preliminary Closure Plan (appendix S) for the Great Bear Gold Project

#	Topic	Comments	Recommendations
Water Resources and Geochemistry			
140.	**General Comment**	LSFN and WFN note that these comments are limited to the Preliminary Closure Plan that is part of the Impact Statement and that the Nations expect to have many additional comments on the operations phase Closure Plan that is prepared in draft for filing. LSFN and WFN will review the draft Closure Plan when made available to our Nations and these comments should be considered preliminary.	N/A
141.	**Section 10: surface waters monitoring program**	The CP does not propose any surface water quality or biological monitoring station in the watershed of the pond located on the east side of the MRS and north of OVB1 (in the vicinity of 50°52'25.9"N 93°35'57.2"W). This water body is situated very close to these stockpiles and may be exposed to significant amounts of seepage and contaminant loadings, should there be any issues with the runoff ditches (during operations), or the revegetated cover (during post-closure). LSFN & WFN are concerned that this watershed may be a vector for contaminant loadings to the surrounding environment.	LSFN & WFN require the Proponent to include a surface water quality or biological monitoring station in that small watershed to the monitoring program.
142.	**Sections 9 & 10: TMF groundwater monitoring and management**	As discussed in topic 15, LSFN & WFN are concerned that dam structures at the TMF create ML risks during post-closure. The CP has a seepage management program including a pumpback process, but is limited to the area near the Unnamed Waterbody 2 and does not account for seepage risks in of other flow paths such as on the south and west sides of the TMF (specifically where dam structures are located).	LSFN & WFN request the Proponent to: A. Add groundwater quality monitoring stations in groundwater flow path areas south and west of the TMF. B. Include provisions for pumping stations in these areas as part of the TMF management plan, in order to capture groundwater seepages and redirect them to the WTP until such time groundwater and seepage quality can meet regulations.

#	Topic	Comments	Recommendations
143.	**Section 9: groundwater seepage risks from stockpiles during closure**	As discussed in topics 13 and 14, LSFN & WFN are concerned that various stockpile structures could create ARD and ML risks during post-closure.	LSFN & WFN require the Proponent to include provisions for pumping stations in the areas nearby the stockpiles as part of the overall water quality management plan, in order to capture groundwater seepages and redirect them to the WTP until such time groundwater and seepage quality can meet regulations.
144.	**Section 9: groundwater seepage risks from pit lakes during closure**	As discussed at length in topics 5 - 8, LSFN & WFN are very concerned that pit lake waters (both VMF & LP pit) will not reach the quality levels predicted in appendix K-2 of the IS. While the CP has provisions to treat LP pit lake waters at the WTP until they reach regulatory criteria, those provisions are not made explicit for pit lake waters of the VMF. Additionally, the CP makes no provision to manage risks relating to seepage and contaminant transfer from both pit lakes to Dixie Creek via groundwater transfer.	LSFN & WFN require the Proponent to: A. Include the VMF pit lake waters and their quality as part of the closure water management strategy by treating them at the WTP until they meet regulatory criteria (in the same way LP pit lake waters are managed). B. Echoing some recommendations in topics 5 - 8, produce an adaptive management strategy for risks of seepage and contaminant transfer from the pit lakes to Dixie Creek. This could be devised in a way similar to the TMF management plan, whereby pumping stations can be installed in the area between both pits and Dixie Creek in order to capture groundwater seepages and redirect them to the WTP until such time groundwater and seepage quality can meet regulations.
145.	**Sections 8 and 9: state of inactivity and final closure**	The CP describes the states of inactivity and final closure measures as including the cessation of the membrane filtration process, while waste storage facilities will be rehabilitated. LSFN & WFN are concerned that this creates a risk to water quality for the discharge, as well as raises questions about the strategies for the storage of WTP wastes. This latter point is particularly concerning as these WTP wastes are typically very much enriched in metals and can be PAG.	LSFN & WFN require the Proponent to provide clarity on: A. How effluent quality criteria are expected to remain compliant during a state of inactivity or final closure if membrane filtration ceases. B. The strategies for the safe disposal of hazardous WTP wastes, since waste storage sites would be rehabilitated under these conditions.
Aquatic Ecology			
146.	**Section 9: pit lake reclamation**	LSFN and WFN suggest the addition of submergent vegetation into the pit lake at appropriate depths. Certain types of aquatic vegetation act as nutrient traps and help prevent excessive phytoplankton growth by releasing natural inhibitory compounds (Dunalska, 2025). Nutrient	LSFN & WFN require the Proponent to integrate submergent vegetation on the shores of the pit lakes as a rehabilitation strategy. The pit lake model should prioritize the development of continuous shallow, littoral shorelines with diverse substrate types to allow for healthy

#	Topic	Comments	Recommendations
		reduction and water clarity also saw improvements through the planting rooted vegetation as apart of lake restoration.	biogeochemistry. Water level modelling must show sufficient stability to sustain vegetation. Because the effectiveness of submerged aquatic vegetation is highly dependent on physical and chemical conditions that are often limiting in pit lake environments (e.g., steep bathymetry, limited littoral zone, water quality constraints), this addition cannot be planned as compensation for lost aquatic habitat.
Terrestrial Ecology			
147.	**Sections 9 & 10: groundwater & vegetation monitoring**	Considering the risks of long-term contaminant seepage into the groundwaters surrounding major, permanent structures (i.e., pits and pit lakes, mine wastes, etc.) throughout post-closure (as discussed in topics 140 - 144), LSFN & WFN are concerned that contaminants such as arsenic may transfer into soils and forage such as fungus, berries, mosses, etc.	LSFN & WFN require the Proponent to commit to study the health, bioaccumulation and toxicity risks in forage foods within the LSA during closure.
148.	**Sections 6 – 9: rehabilitation strategy**	LSFN and WFN are skeptical of the effectiveness and strength of the Proponent's revegetation plan. The Proponent has indicated that commercially available native and non-invasive seed sources will be used for revegetation. This wording seems to indicate that the Proponent will use seed that may be from genetic sources that are not local to the PA, and will consider using non-native species for revegetation, so long as they are non-invasive.	LSFN & WFN require the Proponent to commit to harvesting all seed for use in reclamation from within the PA and LSA, and must not use any non-native seed.

9. Conclusion

The Great Bear Project is located in an area which is highly sensitive and culturally significant to LSFN and WFN. This Project will set in motion a wide range of processes that cannot be stopped or undone. As soon as post-closure starts, the Proponent will be gone. The gold will be gone. The financial benefits will be gone. What will be left are LSFN & WFN, and their members, who will have to continue to live on their shared territory, and live with the permanent consequences of this Project.

The proposed Project will have significant adverse effects on our Aboriginal rights and interests which the Proponent and the Crown must avoid, mitigate, accommodate and/or compensate to obtain our consent for the Project.

LSFN & WFN believe in the premise that for every increment in uncertainty, an equal increment in safety margin needs to be built into a project. The IS currently has high levels of uncertainty with risks relating to:

- The protection of water quantity and quality, especially for Dixie Creek, and associated risks of contaminant loadings to the Chukuni River.
- The protection of aquatic and terrestrial habitats and ecosystems.
- The protection of Our Nations' traditional land uses, including foraging, hunting, fishing for subsistence and economic gain, as well as cultural and spiritual practices.
- The protection of Band members' lifestyles, security and wellness, including access to housing and food security.

LSFN & WFN are optimistic that, through ongoing good faith engagement with the Proponent and through our internal ALIA process, we will be able to minimize impacts to our rights and agree upon appropriate accommodation measures for the impacts which cannot be avoided or mitigated. LSFN & WFN look forward to responses to our technical comments from the Proponent and the information requests compiled by IAAC which will be directly use to inform our internal consent based decision on the project through our Anishinaabe-Led Assessment.

10. References

Botté, A., Zaidi, M., Guery, J., Fichet, D., and Leignel, V., 2022, Aluminium in aquatic environments: abundance and ecotoxicological impacts: Aquatic Ecology, v. 56, p. 751–773, doi:10.1007/s10452-021-09936-4.

Carrie, J., Wang, F., Sanei, H., Macdonald, R.W., Outridge, P.M., and Stern, G.A., 2010, Increasing Contaminant Burdens in an Arctic Fish, Burbot (Lota lota), in a Warming Climate: Environmental Science & Technology, v. 44, p. 316–322, doi:10.1021/es902582y.

Dunalska, J.A., 2025, Lake restoration techniques: A review of methods and future pathways: Science of The Total Environment, v. 979, p. 179450, doi:10.1016/j.scitotenv.2025.179450.

Herrell, M., Prestia, A., Bowell, R., and Bosley, G., 2022, Pit lake geochemical modelling methods for closure, *in* p. 429–438, doi:10.36487/ACG_repo/2215_29.

Hershey, R.L., 2010, Limnology, Arsenic Sorption, and Geochemical Modeling of Mine Pit Lakes [Ph.D.]: University of Nevada Reno.

Leis, A.L., and Fox, M.G., 1994, Effect of mine tailings on the *in situ* survival of walleye (*Stizostedion vitreum*) eggs in a northern Ontario river: Écoscience, v. 1, p. 215–222, doi:10.1080/11956860.1994.11682245.

Morris, A.D. et al., 2022, Temporal trends of mercury in Arctic biota: 10 more years of progress in Arctic monitoring: Science of The Total Environment, v. 839, p. 155803, doi:10.1016/j.scitotenv.2022.155803.

Outridge, Sanei, H., Stern, Hamilton, and Goodarzi, F., 2007, Evidence for Control of Mercury Accumulation Rates in Canadian High Arctic Lake Sediments by Variations of Aquatic Primary Productivity: Environmental Science & Technology, v. 41, p. 5259–5265, doi:10.1021/es070408x.

Outridge, P.M., Stern, G.A., Hamilton, P.B., and Sanei, H., 2019, Algal scavenging of mercury in preindustrial Arctic lakes: Limnology and Oceanography, v. 64, p. 1558–1571, doi:10.1002/lno.11135.

Proulx, C.L., Kilgour, B.W., and Petelina, E., 2025, Evaluating wild freshwater bivalves as alternative sentinel species in Canadian Environmental Effects Monitoring (EEM).: Environ. Monit. Assess., v. 197, doi:10.1007/s10661-025-14661-8.

Savage, K.S., Ashley, R.P., and Bird, D.K., 2009, Geochemical Evolution of a High Arsenic, Alkaline Pit-Lake in the Mother Lode Gold District, California: Economic Geology, v. 104, p. 1171–1211, doi:10.2113/gsecongeo.104.8.1171.

Shared Spirit, 2025, Chukuni Annual Monitoring Program.:

Taylor-Hollings, J., and Hamilton, S., 2007, Stage Two Archaeological Research at Pakwash and Bruce Lakes, Northwestern Ontario.:

Tempel, R.N., Shevenell, L.A., Lechler, P., and Price, J., 2000, Geochemical modeling approach to predicting arsenic concentrations in a mine pit lake: Applied Geochemistry, v. 15, p. 475–492, doi:10.1016/S0883-2927(99)00057-8.

Verbuyst, B.R., 2020, Evaluating Controls on Arsenic Geochemistry at the Long Lake Gold Mine in Sudbury, ON [M.Sc.]: University of Waterloo.

Zhang, A., Bain, J.G., Schmall, A., Ptacek, C.J., and Blowes, D.W., 2023, Geochemistry and mineralogy of legacy tailings under a composite cover: Applied Geochemistry, v. 159, p. 105819, doi:10.1016/j.apgeochem.2023.105819.