

Subject: Strong Opposition to the Yellowhead Copper Mine (Reference 89694) Due to Unacceptable Risks to Harper Creek and North Barriere Lake Salmon Habitat\*\*

I am vehemently opposed to the proposed Yellowhead Copper Mine project. While I recognize the potential for economic development, the projected risks to the pristine and ecologically irreplaceable watershed of Harper Creek and North Barriere Lake are too severe, too probable, and too permanent to justify its approval.

My opposition is founded on the project's direct threat to a critical salmon spawning habitat, the inadequacy of proposed mitigation measures, and the violation of the Precautionary Principle that should guide all development in such a sensitive environment.

North Barriere Lake is not just a body of water; it is the heart of a complex ecosystem and a cornerstone of the regional food web. Harper Creek is a vital artery feeding this system, providing: Critical Salmonid Habitat: The creek and the lake's tributaries are designated essential spawning and rearing grounds for multiple salmonid species, including Sockeye, Chinook, and Rainbow Trout. These populations are already under stress from climate change, habitat loss, and other industrial pressures. This project introduces an additional, catastrophic threat they cannot withstand. This Biodiversity Hub and health of the entire watershed—from invertebrates and insects to birds, bears, and other wildlife—is intrinsically linked to the health of the salmon runs and the water quality of Harper Creek and North Barriere Lake.

The mine's location upstream of this sensitive watershed creates multiple pathways for irreversible harm. Water Contamination from Leachate and Acid Mine Drainage (AMD). Copper mining exposes sulphide-bearing ore to air and water, creating sulphuric acid. This AMD can leach heavy metals (e.g., copper, lead, arsenic, cadmium) from the rock, creating a toxic cocktail.

While the proponent promises state-of-the-art water treatment, the history of mining is a history of mitigation failure. Liners leak, treatment systems fail during power outages or extreme weather events, and holding ponds can be breached. Even a minor, undetected leak over time can bioaccumulate toxins in the food web, devastating aquatic life.

Copper is particularly toxic to salmon, impairing their sense of smell (preventing them from finding spawning grounds or avoiding predators), damaging their gills, and causing neurological damage at concentrations as low as a few parts per billion.

The project will require massive tailings impoundments to store millions of tonnes of toxic waste, \*in perpetuity\*. Placing such a structure upstream of a salmon watershed is an unconscionable gamble. A dam failure, whether due to seismic activity, extreme precipitation, or structural flaw, would result in a catastrophic tidal wave of toxic sludge obliterating Harper Creek and suffocating North Barriere Lake, ending its function as a spawning ground for generations.

The mine's operations will require massive water withdrawals, potentially altering the natural flow regime of Harper Creek. Changes in water volume and timing can de-water redds (salmon nests), strand juvenile fish, and increase water temperature—another critical stressor for cold-water salmon species.

The proponent's plans for water treatment and monitoring are presented as a solution, but they represent a profound burden and risk shift. The need for water treatment does not end when the mine closes. It becomes a forever liability. Who will bear the cost and responsibility for monitoring and treating this water for hundreds of years after the company is gone? History shows that public taxpayers often inherit these bankrupting and failing legacies.

In a high-precipitation environment, achieving true zero discharge is practically impossible. Contaminated seepage and the eventual release of "treated" effluent are near certainties, introducing a constant low-level threat to the ecosystem.

The commercial, recreational, and Indigenous food fisheries that depend on North Barriere Lake's salmon stocks represent a renewable economic engine. Jeopardizing this for a non-renewable extractive project is poor economic planning. The region's reputation for pristine lakes and world-class fishing drives a significant tourism economy. A mine accident, or even the perception of risk and pollution, would severely damage this sector.

The area is of profound cultural and spiritual significance to local First Nations, for whom salmon is a dietary staple and a cultural cornerstone. The project directly threatens their constitutionally protected rights to harvest fish and practice their culture, a threat they have not consented to.

The Precautionary Principle dictates that where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.

The science is clear on the toxicity of copper to salmon. The history is clear on the failure of mining mitigations. The geography is clear on the dire consequences of a failure. The risk to North Barriere Lake is a risk we cannot take.

I urge you to reject the Yellowhead Copper Mine project application. The health of our watershed, the survival of our salmon, and the economic and cultural well-being of our communities are not negotiable. The potential cost of getting this wrong is absolute and forever.

Respectfully.