Fifteen Mile Stream Mine - Environmental Impact Statement Response

Lindsay Lee April 30, 2021

In light of the twin crises of biodiversity loss and climate change, it would be unduly reckless to permit the Fifteen Mile Stream open-pit gold mine to proceed.

The stated purposes of the Nova Scotia Environment Act is to "promote the protection, enhancement and prudent use of the environment" while recognizing goals such as "maintaining environmental protection as essential to the integrity of ecosystems, human health and the socio-economic well-being of society." Given that this is the very first goal of the Act, please explain why a development with this magnitude of environmental impact should even be considered. Short-term jobs cannot reasonably be used to justify severe and long-lasting environmental damage; as such, the possibility of jobs should not be included in the Proponent's answer.

Please explain why the Proponent feels it is appropriate to devastate the ecological integrity of the Eastern Shore; short-term jobs cannot reasonably be used to excuse such severe and long-lasting environmental damage.

The sixth mass extinction is an ongoing extinction event, the likes of which has never before been seen in human history. The Center for Biological Diversity reports, "The current rate of extinction of species is estimated at 100 to 1,000 times higher than natural background rates." The UN warns, "Around 1 million animal and plant species are now threatened with extinction, many within decades, more than ever before in human history."

Please use the precautionary principle to accurately assess and prevent the loss of biodiversity that this project would cause. Why does the Proponent feel it is appropriate to exacerbate the ongoing biodiversity crisis? (Again, short-term jobs cannot reasonably be used to excuse severe and long-lasting environmental damage.)

A landmark report from the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) has shown that "grave impacts on people around the world [are] now likely" as a result of the biodiversity crisis. Experts warn that we're already seeing serious repercussions of our broken relationship with nature. The Covid-19 pandemic is one such consequence.

Please explain how habitat destruction, habitat fragmentation, and destruction of biodiversity on the Eastern Shore could impact the spread of zoological diseases in Nova Scotia, including but not limited to, Lyme disease, Human granulocytic anaplasmosis, Babesiosis, Borrelia miyamotoi, and Powassan virus.

We have lost 60% of the planet's wildlife in less than 50 years, according to the World Wildlife Fund's 2020 Living Planet Report. Populations of Canadian species that are of global conservation concern have declined (in Canada) by an average of 42% between 1970 and 2016. Populations of Canadian species that are of national conservation concern have declined by an average of 59% between 1970 and 2016.

It is vital that we accurately assess possible impacts to wildlife, such as habitat integrity, direct mortality, and sensory disturbances.

Given that our current conservation efforts are failing to adequately protect threatened species and their habitats, why should the government permit an ecologically devastating project that would further imperil endangered species in Nova Scotia? (Short-term jobs cannot be used to excuse severe and long-lasting environmental damage.)

The Proponent admits, "The FMS Study Area is located within a mainland moose concentration area, within the Liscomb Game Sanctuary." The Liscomb Game Sanctuary was established in 1928 with the goal of protecting wildlife. Please explain why the Proponent feels it's reasonable to destroy wildlife habitat in a Game Sanctuary. Please explain why this destruction and fragmentation of habitat will be less harmful to wildlife than hunting would be. Please use case studies from other mines to support your response.

According to the Significant Habitat layer of the Provincial Landscape Viewer, **the entire PA (Project Area)** is identified as a Mainland Moose Concentration Area, as identified in "Endangered Mainland Moose Special Management Practices "(Nova Scotia Department of Lands and Forestry).

Given that the entire project area is "significant habitat" for an endangered species, please give a detailed explanation of why this is a justifiable location for an open-pit gold mine project.

The Proponent states, "Twenty-eight observations of mainland moose were documented within, and adjacent to the FMS Study Area through baseline environmental work completed in 2017, 2018 and 2019 (24 pellet piles and 4 track observations)."

This is highly significant, given that the mainland moose is endangered in Nova Scotia. Indeed, the mainland moose population is even less robust than the EIS and the Department of Lands and Forestry have suggested.

"According to NSDNR (2007), the mainland moose (Alces americana) population has been reduced to approximately 1200 individuals, restricted to small, isolated subpopulations."

But in fact, these numbers are no longer considered accurate. Scientist Thomas Millette, commissioned by the Department of Lands and Forestry, undertook aerial surveys using special thermal-imaging equipment to search for the endangered mainland moose in 2017 and 2018. His estimates showed that there could be fewer than 100 mainland moose in Nova Scotia. Please adopt updated figures for the mainland moose population and clarify the origin of these updated figures. Please enumerate

and explain the ways in which the revised population estimates will affect the Fifteen Mile Stream gold project. If the more accurate population estimates will not affect any plans or mitigation efforts, please explain why not.

"The Recovery Plan for Moose in Mainland Nova Scotia (NSDNR 2007) identifies several limiting factors to moose abundance and distribution. These include disease and parasites, poaching, access to habitat, development, forest practices, acid rain, and climate change. Of highest concern are threats related to disease and parasites, poaching, access to moose habitat, and development."

For the mainland moose, habitat loss and habitat fragmentation also leads to increased diseases, parasites, and poaching. Therefore, habitat changes through development affect **all** of the factors of highest concern for mainland moose abundance and distribution.

Why, then, has the Proponent classified habitat loss, habitat fragmentation, and anthropogenic disturbances (such as noise, light, vibration, and traffic) as "not significant" for species at risk? How will the Proponent address and repair this error? If the Proponent will not address this error, how can we have any confidence in this EIS?

The Proponent states that avian diversity is high in the proposed open-pit mine area. The Proponent notes that 69 bird species (protected under the Migratory Birds Convention Act have been recorded in the area and will likely be affected by mine development.

Given that there are 2.9 billion fewer birds in North America today than there were in 1970 and that 2.5 billion of those birds lost have been migratory species, why does the Proponent feel it is justified to exacerbate the ongoing decline of the North American avifauna? (Short-term jobs cannot reasonably be used to excuse severe and long-lasting environmental damage or potential ecosystem collapse.)

Please explain in detail how the Proponent will implement the precautionary principle to avoid damage to migratory bird populations. Specifically, please explain how the Proponent will implement the precautionary principle to respond to each of the following threats:

- Habitat loss
- Habitat fragmentation
- Dust
- Noise
- Lighting
- Vehicular collisions

Of the birds recorded at the site, 16 species depend on intact interior forest habitat. Please explain in detail how the Proponent will implement the precautionary principle to avoid damage to forest-dependent bird species, which have declined by 64% since 1970. Specifically, please explain how the Proponent will implement the precautionary principle to respond to each of

the following threats:

- Habitat loss
- Habitat fragmentation
- Dust
- Noise
- Lighting
- Vehicular collisions

The Proponent argues that mobile and avian species can leave the area and utilize other suitable habitat(s). This ignores the fact that some birds, when they lose their habitat, do not breed elsewhere. Please rank all of the bird species recorded/observed in terms of site fidelity. Please include full references for this data.

Using the precautionary principle, please provide a detailed explanation of how the Proponent will implement additional mitigation measures for each of the species with reasonably high site fidelity.

The Proponent alleges that the open-pit gold mine development will improve habitat for some bird species, such as the Olive-sided flycatcher. Please use case studies of other mine developments to support this claim.

Please undertake more comprehensive research to better estimate the baseline of birds in the area. This should include radar and acoustic surveys to better assess the presence of native and migratory bird species.

Please provide assurances that the Proponent will not clear any trees during nesting season, which would violate the Migratory Birds Convention Act.

Please detail mitigation efforts for birds that breed on the ground.

In regards to mitigating threats, the Proponent has qualified its statements with phrases such as "where practicable." Please explain in each of those instances why mitigation efforts may not be possible.

The Nova Scotia Environment Act states, "The precautionary principle will be used in decision-making so that where there are threats of serious or irreversible damage, the lack of full scientific certainty shall not be used as a reason for postponing measures to prevent environmental degradation."

If indeed mitigation efforts *are* possible (even if they are not attractive to the Proponent), please explain why the Proponent feels it is justified not to take appropriate measures to prevent this ecological harm.

The Proponent alleges that the open-pit gold mine development will improve habitat for some bird species, such as the Olive-sided flycatcher. Please use case studies of other mine developments to support this claim.

Wetlands are incredible carbon sinks. Natural climate solutions are more important than ever. Please explain why the Proponent feels it's appropriate to impact or destroy 336 wetlands during a climate crisis. (Jobs cannot reasonably be used to

excuse severe and long-lasting environmental damage when more environmentally friendly jobs are possible.)

The Fifteen Mile Stream gold project would have prolonged, negative impacts on the Eastern Shore's ecosystems, communities, and tourism futures. The very first words on the Eastern Shore tourism website are "pristine wilderness." Yet the Moose River Consolidated Gold Project (Atlantic Gold's "string of pearls") would directly contradict the key tourism feature of the area. How will the Proponent contribute to ecotourism along the Eastern Shore?