

Enclosure 2: Federal Authority Advice Record – Summary of Issues, and Potential Tailored Impact Statement Guidelines and Permitting Plan

Project: Northern Road Link Project

Proponent: Marten Falls First Nation and Webequie First Nation

CIAR No.: 84331

Response due by: **March 17, 2023**

All comments should be submitted via the **Submit a Comment** feature available on the Project's Canadian Impact Assessment Registry page (Reference 84331)¹. Letters and forms can be uploaded using this feature. If you have any difficulties submitting this way, please contact the Agency at NorthernRoad-RouteDuNord@iaac-aeic.gc.ca for assistance.

Department/Agency: Environment and Climate Change Canada (ECCC)	
Date of Advice: March 17, 2023	
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1. Expertise

Please identify and describe the specialist or expert information or knowledge within your department or agency that is relevant to an assessment of the Project.

Environment and Climate Change Canada (ECCC) possesses specialist or expert information that may be relevant to the impact assessment in the areas listed below; in each of these subject areas we have expertise related to establishing an adequate baseline, assessing potential effects to biophysical valued components, effectiveness of mitigation measures, methods for monitoring and follow-up, as well as information regarding federal policies, standards, and regulations that may be relevant to the assessment (Note: ECCC does not assess proposed projects for regulatory compliance). Once the scope of the project and of the assessment are established by the Agency, this list may change if additional project activities or components should come into scope.

Air Quality: ambient air quality; sources of emissions; emissions estimation and measurement; atmospheric transport, transformation and dispersion modelling; and follow-up monitoring.

Greenhouse gas emissions and climate change: estimations of greenhouse gas (GHG) emissions (net and upstream); impact on carbon sinks; GHG mitigation measures and determination of Best Available Technologies/Best Environmental practices (BAT/BEP); credible plan to achieve net-zero GHG emissions by 2050; climate change science to inform evaluation of potential changes to the environment and project resilience to effects of climate change; climate change policies; and national GHG projections.

¹ <http://iaac-aeic.gc.ca/050/evaluations/proj/84331?culture=en-CA>

Water quality and quantity: surface water quality; water quality predictions and modelling; contaminant sources for surface water; runoff effects; management of contaminated soils or sediments; freshwater dredging; hydrology (streamflow rates data and modelling, flooding and extreme events management, drainage control, water levels, water balances); geochemistry; follow-up and monitoring.

Wildlife, species at risk, and habitat: priority species and places as outlined in the *Pan-Canadian Approach to transforming species at risk conservation in Canada*²; migratory birds, their nests, eggs, and habitat; COSEWIC³ assessed species, species at risk, individuals, their residences, habitat and critical habitat including recovery strategies, action plans and management plans; ecological function of wetlands; ecotoxicology. Species at risk expertise may be particularly important in supporting the Proponent in providing information throughout the assessment required by the Agency to meet requirements under s79 of the *Species at Risk Act* (SARA), namely: 1) notifying the competent Minister of the project if it is likely to affect a listed wildlife species or its critical habitat; 2) identifying adverse effects of the project on listed wildlife species and their critical habitat, and 3) if the project is carried out, ensuring that measures are taken in a way that is consistent with recovery documents to avoid or lessen the adverse effects and to monitor the adverse effects of the project.

Environmental emergencies: emergency management planning and guidance; atmospheric transport and dispersion modelling of contaminants in air; fate and behaviour, hydrologic trajectory modelling of contaminants in water.

Climate and Meteorology: long-term climate patterns and norms; weather; ice.

2. Key issues and solutions

Respond to the following using **Table 1 on page 3**

(a) From the perspective of the mandate and area(s) of expertise of your department or agency, what are the key issues that are material and relevant to decision-making and should be addressed? In identifying key issues, be mindful of the Project's context (size, scope, geography, policy) and the definitions of *effects*,² *sustainability*³ and *public interest*.⁴

(b) For each **key** issue:

- i. Identify the relevant valued component(s) within your mandate and describe the key pathway of effect, or describe the nature of the issue. This may consider⁵ positive and negative effects on components of the environment or on health, social and economic conditions.
- ii. Identify any clarifications or commitments the Proponent could make in its Detailed Project Description and Response to the Summary of Issues that would build confidence that issues can be addressed and managed without further impact assessment⁶, or that can help focus the Tailored Impact Statement Guidelines⁷, if an impact assessment is required.
- iii. Identify, at a very high-level, any information or studies that should be required of the Proponent in the Tailored Impact Statement Guidelines, if an impact assessment is required.⁸

(c) For each issue and solution discussed, provide a concise, plain-language summary that is appropriate for inclusion in the Summary of Issues.

Response to question 2 in Table 1.

3. Operational guidance and powers, duties and functions

(a) Within the mandate and area(s) of expertise of your department or agency, list specific operational policies or guidance documents that could help address issues and manage effects relevant to the project context.

² Note: *effects*, *direct and incidental effects*, and *effects within federal jurisdiction* are defined in section 2 of the *Impact Assessment Act*, which can be found at <https://www.canada.ca/en/impact-assessment-agency/corporate/acts-regulations/legislation-regulations.html>

³ Guidance: Considering the Extent to which a Project Contributes to Sustainability <https://www.canada.ca/en/impact-assessment-agency/services/policy-guidance/practitioners-guide-impact-assessment-act/guidance-considering.html>

⁴ Policy Context: Public Interest Determination under the *Impact Assessment Act* <https://www.canada.ca/en/impact-assessment-agency/services/policy-guidance/public-interest-determination-under-impact-assessment-act.html>

⁵ Other considerations may include sources of high uncertainty that complicate predictions; the purpose and need for the Project and selected alternatives.

⁶ This could mean that mitigation measures that the proponent has committed to implement, in the Detailed Project Description, are referenced in the Tailored Impact Statement Guidelines.

⁷ For example, regulatory instruments, operational guidance or well-understood mitigation and monitoring measures of proven effectiveness

⁸ Federal authorities are asked what should be included in the Tailored Impact Statement Guidelines with specific rationale that is commensurate to the project context. Please also identify studies that are not necessarily based on the information provided by the proponent and based on project context.

Air Quality:

Cheminfo Services Inc., 2005. "Best Practices for the Reduction of Air Emissions From Construction and Demolition Activities", available at: <http://bieapfrempp.org/Toolbox%20pdfs/EC%20-%20Final%20Code%20of%20Practice%20-%20Construction%20%20Demolition.pdf>

Species at Risk:

SARA Registry - species profiles, status reports, assessments, recovery status and related documents, including Action Plans, Critical Habitat Descriptions, and Recovery Strategies: <https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry.html>

Migratory Birds:

The *Migratory Birds Convention Act 1994* (MBCA) and the *Migratory Birds Regulations, 2022* (MBR 2022) protect migratory birds and prohibit the disturbance or destruction of migratory bird nests when they contain a viable egg or a migratory bird themselves (young or adult). The legislation and regulations apply to all lands and waters in Canada, regardless of ownership.

[Schedule 1 of MBR 2022](#) provides year-round nest protection for 18 species; nests of these species cannot be damaged, destroyed, removed or disturbed, even when they are unoccupied, unless the following conditions of the regulations have been met:

- a notification of the unoccupied nest has been submitted/received through the [Abandoned Nest Registry](#); and
- the wait time designated in the regulations has passed, and during this time the nest was not occupied by a migratory bird

Planning can help proponents comply with the law and manage the risk of detrimental effects to migratory birds. Assessing risk is a first step for developing appropriate prevention and mitigation measures that help maintain sustainable populations of migratory birds. Depending on the location, the time of year, and the presence of nests that are protected year round, some activities can pose a risk to migratory birds. It is the proponent's responsibility to comply with the MBCA and its regulations.

The main sensitive period to consider is the breeding season. With respect to disturbance or harm to nesting birds, the principal risk factors are location and time of year. ECCC publishes a web site (<https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratorybirds/reduce-risk-migratory-birds.html>) to aid in the planning of activities in order to reduce the risk of detrimental effects to migratory birds, their nest and eggs, in accordance with the purpose of the MBCA.

More information on the MBR 2022 can be found on the ECCC web site: (<https://www.canada.ca/en/environment-climate-change/services/migratory-game-bird-hunting/statusupdate-modernization-regulations.html>).

Guidance on general nesting periods: <https://www.canada.ca/en/environment-climatechange/services/avoiding-harm-migratory-birds/general-nesting-periods.html>

Wetlands:

The activities linked to the construction, operation, and decommissioning of a linear disturbance (e.g. roads, rail, and transmission lines) could have negative effects on wetlands and their ecological functions that are important to migratory birds and other wildlife. Carrying out the project, particularly the activities related to construction, is likely to alter the existing hydrological regimes essential for maintaining wetlands and thus affect the quality or availability of habitat for migratory birds and other wildlife. The destruction and modification of wetlands is likely to cause negative effects on or harm

migratory birds and species at risk that use these areas for breeding and migration, as well as for foraging or resting areas. A linear disturbance is also more likely to create introduction and dispersal pathways for invasive species. The spread of invasive species may pose a threat to wetlands.

The Federal Policy on Wetland Conservation: <http://publications.gc.ca/collections/Collection/CW66-116-1991E.pdf>

Climate Change/GHGs:

Both the Strategic Assessment of Climate Change and Draft Technical Guide are available at:

<https://www.strategicassessmentclimatechange.ca/>

(b) List the potential powers, duties, or functions, including federal funding, that your department or agency may be required to exercise or perform to enable the Project to proceed, in whole or in part. Validate whether the information in the Initial Project Description is accurate.

Species at Risk Act permits

ECCC is responsible for all species at risk listed on Schedule 1 of SARA, except for those occurring on lands administered by the Parks Canada Agency and for aquatic species, as defined by the *Fisheries Act*. All information below pertains only to species for which ECCC is responsible.

For species listed in Schedule 1 of the *Species at Risk Act* (SARA) as Extirpated, Endangered or Threatened, a permit may be required from ECCC (section 73 of SARA) for activities that affect a listed terrestrial wildlife species, any part of its critical habitat, or the residences of its individuals, where those prohibitions are in place. Such permits may only be issued: if all reasonable alternatives to the activity that would reduce the impact on the species have been considered and the best solution has been adopted; all feasible measures will be taken to minimize the impact of the activity on the species or its critical habitat or the residences of its individuals; and if the activity will not jeopardize the survival or recovery of the species. Permits are also required by those persons conducting activities that contravene the critical habitat destruction prohibitions (subsection 58(1)).

Prohibitions are in place for individuals and residences on federal lands in a province, reserve or any other lands under the *Indian Act*, or lands under the authority of the Minister of the Environment, and for birds listed under the *Migratory Birds Convention Act, 1994* wherever they occur regardless of land tenure. For some migratory bird species listed under the SARA, the residence prohibition will protect nest and/or roost sites that are not active, as some species re-use these sites in subsequent years.

Furthermore, prohibitions may be in force on land other than federal land pursuant to other orders or regulations under SARA. It is possible that further prohibitions may come into force in the future through orders in Council for individuals, residences and critical habitat on non-federal lands and / or through ministerial order for critical habitat on federal lands. It is also possible that, over the course of the assessment or after the assessment, additional species could be listed under SARA; permits may be required for project activities that affect these additional species. Proponents are advised to monitor for such developments on the SARA Registry <https://www.canada.ca/en/environment-climatechange/services/species-risk-public-registry.html>.

If prohibitions were to come into force, examples of activities that could require a SARA permit include:

- Species surveys that would affect individuals or residences;
- Site preparation (clearing, grubbing, site access, staging, blasting, excavation);
- Deconstruction/decommissioning of infrastructure;
- Construction and operation of temporary and permanent works and infrastructure;
- Creation of new roads or power lines;

- Infilling or dewatering of wetlands or watercourses;
- Site restoration
- Any monitoring that requires capture/release of individuals; and
- Sensory disturbance effects (artificial lighting, noise, vibration, human activity, vehicular traffic).

ECCC will require detailed information on the potential effects of a project, including locations and/or occurrences of species at risk, their use of habitat and critical habitat within the project area, and specific effects on federal land, in order to determine whether a SARA permit is required.

Based on the Initial Project Description, ECCC notes that SARA permits will likely not be required given that there is no federal land, and currently no order in place to bring prohibitions into effect on non-federal land, within the project area. However it may possible that a SARA permit could be required should Chimney Swifts be likely to nest or roost in the project area. Residences (nests and roosts) of this species are protected year round. The proponent should contact ECCC regarding potential SARA permitting requirements if Chimney Swift residences may be destroyed during site clearing.

Links to publicly available documents:

- Guidelines for permitting under Section 73 of Species at Risk Act
<https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry/policies-guidelines/permitting-under-section-73.html>
- Species at Risk Permitting Policy
<https://species-registry.canada.ca/index-en.html#/consultations/2983>

(c) For each power, duty or function:

- i. Explain any associated framework to address effects on valued components within your mandate.
- ii. Describe any Indigenous consultation activities that would occur, potential timelines for Indigenous participation, and how potential impacts to Indigenous communities are addressed by your department or agency.
- iii. Describe any public participation opportunities that would occur, and potential timelines for public participation.

i)

Addressing effects to species at risk is integral to the permitting process under SARA and a broad framework for doing so is written into the Act itself. As per s. 73(3), a SARA permit may only be issued if: all reasonable alternatives to the activity that would reduce the impact on the species have been considered and the best solution has been adopted; all feasible measures will be taken to minimize the impact of the activity on the species or its critical habitat or the residences of its individuals; and if the activity will not jeopardize the survival or recovery of the species. The Guidelines for permitting under Section 73 of Species at Risk Act (<https://www.canada.ca/en/environment-climatechange/services/species-risk-public-registry/policies-guidelines/permitting-under-section-73.html>) and the Species at Risk Permitting Policy (<https://species-registry.canada.ca/indexen.html#/consultations/2983>) help clarify these requirements.

ii)

Should a SARA permit be required, ECCC's consultation activities with Indigenous communities would begin following receipt of a SARA permit application and be consistent with s. 73(5) of the Act. These activities would typically begin with an initial letter to the band council or wildlife management board responsible for the lands where the activity is proposed. This initial contact is then followed by emails,

phone calls and/or in person discussions as appropriate. Consultation on SARA permits would be coordinated with consultation during the assessment where possible and may include review of permit terms and conditions.

iii)

Should a SARA permit be required, as per section 73 of the SARA, there is no public participation in the process to issue a SARA permit. If a permit is issued, the description of the activity and how SARA's preconditions were met will be posted on the SARA Registry here: <https://speciesregistry.canada.ca/index-en.html#/permits>

(d) Has your department or agency already exercised a power, or performed a duty or function, under any Act of Parliament in relation to the Project; or taken any course of action that would allow the Project to proceed in whole or in part? Specify as appropriate.

No.

4. Is your department or agency aware of any additional information related to the geographic context of the Project (e.g. potential effects to Indigenous protected and conserved areas, migratory bird sanctuaries, federal species at risk, sensitive/vulnerable health, social or economic conditions)?

Not at this time.

Table 1: Key Issues and Solutions Material and Relevant to Decision-making

Comment ID	Document Reference	Valued Component	Description of Key Issue (Context and Rationale)	Solutions for the Proponent	Summary of Issues
General					
ECCC – 01	IPD	Surface water Fish and fish habitat Migratory birds Groundwater Species at risk	<p>The Proponent has not identified potential spill scenarios and emergency response procedures. The Proponent should outline emergency spill response procedures to clearly demonstrate measures that will be implemented following a spill into the surrounding environment. This would allow a more accurate assessment of the residual effects of an accident or malfunction, after mitigation has been applied.</p> <p>The proponent must show that they meet the requirements of the <i>Canadian Environmental Protection Act</i> (CEPA, 1999), the <i>Migratory Birds Convention Act</i> (MCBA, 1994), <i>Migratory Bird Regulations</i> (MBR, 2022) and the pollution prevention provisions of the <i>Fisheries Act</i>, and that any risks that may put the proponent in contravention of these Acts, are addressed.</p> <p>ECCC encourages proponents to demonstrate, in their environmental assessment submission, how they have evaluated the potential for accidents or malfunctions, the environmental impacts of these events and what they have done to prepare for and mitigate spills or releases of hazardous or deleterious substances that are likely to result from unplanned accidents and malfunctions.</p>	To facilitate articulation of potential direct and indirect effects on the surrounding environment, provide a section on the environmental effects of malfunctions or accidents that may occur in connection with the project. This section should identify the potential risk associated with an accidental release of fuel and other contaminants, mitigation measures that will be implemented such as a spill response plan and the assessment of residual effects after mitigation measures have been applied.	<p>Potential direct and indirect effects, related to accidents and malfunctions, during all phases of the project.</p> <p>Need to identify spill scenarios and emergency response procedures.</p>
10. Project Activities, Infrastructure, Permanent or Temporary Structures and Physical Works					
ECCC – 02	Section 10.2.3 Operation Activities, pg. 49 Winter maintenance – snow clearing and de-icing	Fish and Fish Habitat – Surface Water Quality	The Proponent has not provided adequate information regarding the de-icing substance(s) to be used. De-icing substances can enter the receiving environment via surface runoff and can potentially have adverse effects on the receiving environment.	<p>Identify the potential de-icing substance(s) to be used, including rationale.</p> <p>Describe and justify mitigation measures that will be put in place to prevent any adverse effects on the receiving environment.</p>	<p>Potential direct and indirect effects on surface water quality, during all phases of the project.</p> <p>Need for information on de-icing substances and mitigation measures.</p>
ECCC – 03	Table 10-2: Summary of Project Activities by Phase, pg. 50 Blasting, as required for aggregate extraction and/or road development	Fish and Fish Habitat – Surface Water Quality	<p>The Proponent has not adequately articulated materials used for blasting and contaminants that could potentially be generated and deposited into the receiving environment.</p> <p>Contaminants from blasting could potentially enter the receiving environment through:</p> <ul style="list-style-type: none"> • surface runoff and/or, • aggregated pits and quarries and be deposited via dewatering. 	<p>Identify additional contaminants from blasting that could enter the receiving environment via surface runoff and dewatering, including rationale.</p> <p>Describe and justify mitigation measures that will be put in place to prevent these additional contaminants from having any adverse effects in the receiving environment.</p>	<p>Potential direct and indirect effects on surface water quality, during all phases of the project.</p> <p>Need for additional information and mitigation measures on contaminants resulting from blasting.</p>

ECCC – 04	Table 10-2: Summary of Project Activities by Phase, pg. 50 Stockpiling of soils and aggregate	Fish and Fish Habitat – Surface Water Quality	The Proponent has not adequately articulated mitigation measures that will be used to prevent contaminants from stockpiles from entering the receiving environment. Stockpiles of soils and aggregates could potentially release contaminants to the receiving environment via surface runoff.	Describe and justify mitigation measures that will be put in place to prevent total suspended solids and any other contaminants from stockpiling of soils and aggregates from entering the receiving environment.	Potential direct and indirect effects on surface water quality, during all phases of the project. Need for mitigation measures for contaminants resulting from stockpiles.
15. Description of the Physical and Biological Environment					
ECCC – 05	Section 15.1.1.2 Air Quality-Proposed Baseline Studies, pg. 71	Air Quality	The Proponent has not adequately articulated substances to be included in the baseline assessment related to air quality. The Proponent provided the list of some of the substances that are part of monitoring program from the Marten Falls Community Access Road Project (MFCAR). Based on information provided, carbon monoxide (CO) and PM10 will be included in the list of baseline substances to be monitored.	Provide a complete list of baseline air quality substances/pollutants that will be monitored and ensure all substances that will be generated from the project including CO and PM10, are included in the baseline assessment-	Need to verify all substances are included in baseline assessment and that the list is complete and accurate.
ECCC – 06	Section 15.1.1.2 Air Quality-Proposed Baseline Studies, pg. 72	Air Quality	The Proponent has not adequately articulated the appropriate assessment surrogate to assess total polycyclic aromatic hydrocarbons (PAHs) related to air quality. The Proponent states that BTEX and particulate matter will be used as surrogates for PAHs and diesel particulate matter, which cannot be sampled for due to equipment limitations coupled with serviceability challenges given the remote location of the community. Concentrations of specific relevant contaminants such as acetaldehyde, formaldehyde, 1,3-butadiene, and acrolein will be estimated based on monitored BTEX concentrations and published emission factors, such as the US EPA AP-42 emissions database (US EPA, 2021). ECCC recommends for baseline and project impacts of PAHs, it is preferable to use benzo(a)pyrene [BaP] as a surrogate to assess the total PAHs and not BTEX. Alternately, PAH assessment based on reliable and verifiable information may be proposed, such as measured data at other stations.	Demonstrate and justify the use of BaP as a surrogate to assess total PAHs or alternatively, use of verified measured data at other monitoring stations.	Need for baseline data for PAHs.
ECCC – 07	Section 15.1.5.2 Proposed Baseline Studies, pg. 76 - Field Studies - Surface water samples will be collected from the maximum feasible number of accessible crossings during field investigations and sent for laboratory analyses. To capture seasonal variability in baseline surface water quality,	Fish and Fish Habitat – Surface Water Quality	The Proponent has not identified major water crossings for surface water sampling and duration of sample collection. A minimum of two years of surface water quality data is needed to illustrate inter-annual variability in baseline surface water quality. Furthermore, winter sampling has not been proposed and it is recommend that winter sampling be conducted to illustrate seasonal variations, if possible.	Identify the major water crossings where surface water samples will be collected and provide a figure showing sampling locations. Gather a minimum of two years of baseline surface water quality data to illustrate the seasonal and inter-annual variability in baseline surface water quality, including possible changes due to groundwater-surface water interactions.	Potential direct and indirect effects on surface water quality, during all project phases. Need for identification of major water crossings pertaining to locations of surface water sampling.

	<p>surface water sampling will be conducted as follows:</p> <ul style="list-style-type: none"> › Fall period (typically October); › Spring period (typically April and May); and › Summer period (typically July and August). <p>No winter sampling is proposed due to limited location access and related health and safety concerns.</p>			Gather water quality data from winter sampling. Provide justification if winter sampling was not undertaken.	Need for baseline surface water quality data.
ECCC – 08	<p>Section 15.1.5.2 Proposed Baseline Studies, pg. 77</p> <ul style="list-style-type: none"> - Metals (including hexavalent chromium and mercury [total mercury and methylmercury]) 	Fish and Fish Habitat – Surface Water Quality	The Proponent has not adequately articulated whether surface water quality samples will be analyzed for both total and dissolved metals. Some of the guidelines for metals included in the Canadian Council of Ministers of the Environment (CCME) Canadian Water Quality Guideline for the Protection of Aquatic Life have dissolved metal concentrations rather than total metal concentrations.	Need for analysis of surface water samples for total and dissolved metals.	<p>Potential direct and indirect effects on surface water quality, during all project phases.</p> <p>Need for information on total and dissolved metals in surface water.</p>
ECCC – 09	<p>Section 15.1.5.2 Proposed Baseline Studies, pg. 77</p> <ul style="list-style-type: none"> - Surface water quality will be reviewed against the best available water quality guidelines. In most cases sample results will be compared against provincial water quality objectives; however, the CCME Canadian Water Quality Guideline for the Protection of Aquatic Life may be more appropriate, specifically for suspended sediment and turbidity, and where CCME guidelines are based on newer available science. 	Fish and Fish Habitat – Surface Water Quality	The Proponent did not confirm the Federal Environmental Quality Guidelines (FEQGs) will be factored into the review of surface water quality data.	The Proponent should include use of FEQGs as part of the review of surface water quality data.	Need for incorporation of FEQGs pertaining to surface water quality.
ECCC – 10	<p>Sections:</p> <ul style="list-style-type: none"> 15.2.3 Birds and Bird Habitat 15.2.4 Plants and Vegetation Communities 15.2.5 Species at Risk 	Species at risk, birds, wetlands	<p>Study plans related to species at risk, birds and wetlands need to adequately describe survey design, effort, and site selection, as well as associated estimates of sampling bias and uncertainty.</p> <p>Sampling design is very influential on analytical results and subsequent estimates of effects, therefore, sampling should occur</p>	<p>Ensure study plans and surveys are based on survey designs, sampling effort, and site selection methodology that enable robust analysis and minimize sampling bias and uncertainty.</p> <p>Describe and justify the factors included in study plans.</p>	Potential direct and indirect effects on species at risk, birds and wetlands during all project phases.

	Detailed methods for surveys to be presented in study plans being developed for the project.		across the project study area (PSA) and local study area (LSA), as well as representation within the regional study area (RSA), for each valued component.		Need for development of comprehensive study plans.
ECCC – 11	Section 15.2.3 Birds and bird habitat	Birds and their habitat	The Proponent has not provided adequate data to characterize effects on birds and their habitat.	<p>Consider the following bird groups as separate valued components:</p> <ul style="list-style-type: none"> • raptors, such as hawks, eagles, falcons • waterfowl, such as ducks, geese, swans • waterbirds, such as loons, gulls, terns • marshbirds, such as grebes, rails, herons • shorebirds, such as sandpipers, plovers, snipes • forest birds, such as warblers, vireos, thrushes • other landbirds, such as owls, swallows, kingfishers <p>Ensure the associated studies provide adequate data to characterize:</p> <ul style="list-style-type: none"> • abundance (including relative abundance in each habitat type), population status, and distribution; • life cycle, seasonal ranges, migration, movements; • frequency and timing of occurrence; • seasonal and annual variation in abundance, distribution and habitat use; • habitat association(s) and requirements for all relevant life cycle stages; and • sensitive periods (e.g. seasonal time of day); <p>Incorporate recent information on the potential occurrence of birds at the project site such as a list of species known to occur or with the potential to occur within the study area.</p>	<p>Potential effects on birds and their habitat found within the study area, during all project phases.</p> <p>Need for baseline information on birds known to occur and with the potential to occur at the project site, including seasonal and annual variation, distribution, and habitat use.</p>
ECCC – 12	Section 15.2.4 Plants and vegetation communities	Wetlands	<p>The Proponent has not adequately articulated effects on wetlands and wetland function assessment.</p> <p>A wetland function assessment to quantify existing hydrological, biogeochemical, habitat, and climate functions and to estimate potential impacts will be required if the impact assessment goes forward. The relevant studies to provide this information (see Appendix A in Wetland Ecological Functions Assessment: An Overview of Approaches) should be included in section 15.2.4 (or cross referenced to other sections) and coordinated across related disciplines.</p>	<p>Consider wetlands/peatlands as a separate valued component.</p> <p>Provide information to demonstrate that the studies undertaken for groundwater, surface water, geology, terrain, and soils, and any other relevant disciplines, will support the wetland function assessment.</p>	<p>Potential direct and indirect effects on wetlands and wetland functions, during all project phases.</p> <p>Need for wetland function assessment.</p>
ECCC – 13	Section 15.2.5 Species at risk Table 15-2, pg. 84 Table 15-4, pg. 92	Species at risk and their habitat	The Proponent has not adequately articulated effects on species at risk and their habitat and each species at risk should be considered as a separate valued component.	Consider each species at risk as a separate valued component and describe any potential effects (even if minimal) related to the project on individuals, residences, and habitat.	Potential direct and indirect effects on species at risk individuals, residences, and habitat, including Woodland

			<p>Ensure differences in baseline conditions and potential effects between boreal caribou and eastern migratory caribou are adequately addressed.</p> <p>While the main pathways of potential effects are identified, no information is provided on the impact of those effects on individuals or local and regional populations, and habitat. Standard mitigation measures are listed but no information is provided on the potential for residual effects after mitigation has been applied. Measures must be consistent with applicable recovery documents for the species. Residual and cumulative effects to species at risk are possible.</p> <p>Consideration of baseline conditions and potential effects pathways is required for all species potentially impacted by the project that are listed on SARA Schedule 1, as well as species assessed as at risk by COSEWIC, to ensure that measures are taken in a way that is consistent with recovery documents to avoid or lessen the adverse effects and to monitor the adverse effects of the project.</p> <p>Since Eastern Migratory Caribou and Boreal Caribou cannot be differentiated by observation, and it is possible Eastern Migratory Caribou could be in the project area, Table 15-2 should indicate 'Woodland Caribou' rather than specify Boreal population.</p> <p>Caribou Although the Missisa and federal Far North range are both above the federal 65% undisturbed habitat threshold as outlined in the <i>Woodland Caribou, Boreal population Amended Recovery Strategy</i>, ECCC considers all existing habitat in a range without a range plan (as is the case for all Ontario ranges) to be critical habitat.</p> <p>Bats It is not clear whether the proposed studies and surveys for bats in section 15.2.5 will meet objectives related to describing abundance and distribution, as well as identify potential roosts, hibernacula, foraging habitat and, in particular, travel corridors in the local area and determine whether the Project will impact these habitats or their functions as bat habitat.</p>	<p>Explicitly address whether the biophysical attributes of species at risk critical habitat occur within the project site or whether there is the potential to be indirectly impacted by the project.</p> <p>Provide information on the potential for residual effects after mitigation has been applied.</p> <p>Update table 15-2 to state 'Woodland Caribou'.</p> <p>Update table 15-4 as follows:</p> <ul style="list-style-type: none"> • Eastern Migratory Caribou – not currently listed under SARA but assessed by COSEWIC as EN • Common Nighthawk – recently downlisted to SC under SARA • Eastern Wood-pewee – SC under SARA • Olive-sided Flycatcher – recently downlisted to SC under SARA • Peregrine Falcon – recently removed from Schedule 1 of SARA <p>Specifically for Boreal Caribou, provide information (consistent with Recovery Strategy definitions) on the impact to "disturbance" levels at the scale of the range, impact to "existing habitat", impact to "biophysical attributes" currently within the project study areas, potential impact on connectivity, and the potential predator/prey access to "undisturbed" habitat.</p> <p>Specifically for bats, provide clarification on whether studies and surveys will meet objectives related to describing abundance and distribution and identifying important habitat features, as well as estimating impacts to these aspects.</p>	<p>Caribou and bats, during all project phases.</p> <p>Need for baseline information on species at risk at the project site, including seasonal and annual variation, distribution, and habitat use.</p> <p>Need for information on potential residual effects on species at risk individuals, residences, and habitats.</p> <p>Need for updates to Tables 15-2 and 15-4.</p> <p>Need for information to determine extent of boreal caribou critical habitat destruction.</p>
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20. Fish and Fish Habitat, Aquatic Species and Migratory Birds					
ECCC – 14	Section 20.1 Potential Changes to Fish and Fish Habitat Under the <i>Fisheries Act</i> , pg. 128	Species at risk, birds, wetlands	<p>The Proponent has not adequately articulated effects on species at risk, birds and wetlands and related mitigation.</p> <p>The project will create year-round access to terrestrial and wetland areas, which has the potential to result in increased risk of introduction of invasive species (as indicated in the IPD). This</p>	Address potential effects associated with increased risk of introduction of parasites and disease to terrestrial habitats and species.	Potential direct and indirect effects on species at risk, birds, wetlands and associated mitigation, during all project phases.

	<i>The Project will provide year-round access to the areas in the Far North, which is likely to increase access to waterbodies for recreational use. This increased access to waterbodies for recreational use has the potential to result in an increase in angling pressure on fish populations, higher risk of the introduction of invasive aquatic species, parasites and disease, and the accidental release of contaminants to waterbodies.</i>		increased access may also increase the risk of introduction of parasites and disease that affect wildlife, including species at risk and birds. The introduction of invasive species including parasites and diseases is of particular concern for wetlands.		Need for effects assessment and mitigation related to the potential for increased risk of introduction of parasites and disease to terrestrial habitats and species.
ECCC – 15	Section 20.3 Potential changes to migratory birds under the <i>Migratory Birds Convention Act, 1994</i>	Birds and their habitat	<p>The Proponent has not adequately articulated effects on migratory birds and their habitat.</p> <p>The <i>Migratory Birds Convention Act 1994</i> (MBCA) and <i>Migratory Bird Regulations</i> (MBR 2022) protect migratory birds and prohibit the disturbance or destruction of migratory bird nests when they contain a viable egg or a migratory bird themselves (young or adult). Schedule 1 of MBR 2022 provides year-round nest protection for 18 species. The legislation and regulations apply to all lands and waters in Canada, regardless of ownership. The main sensitive period to consider is the breeding season. With respect to disturbance or harm to nesting birds, the principal risk factors are location and time of year. More information on the MBR 2022 can be found at: https://www.canada.ca/en/environment-climate-change/services/migratory-game-bird-hunting/status-update-modernization-regulations.html.</p> <p>Migratory birds, the nests of migratory birds and/or their eggs can be inadvertently harmed or disturbed as a result of many activities, including but not limited to clearing trees and other vegetation, draining or flooding land, or using fishing gear; this is known as incidental take. This inadvertent harming, killing, disturbance or destruction of migratory birds, nests and eggs is prohibited under the MBCA. Incidental take, in addition to harming individual birds, nests or eggs, can have long-term consequences for migratory bird populations in Canada, especially through the cumulative effects of many different incidents. For further details, please refer to the Avoiding Harm to Migratory Birds website at: https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds.html.</p>	Confirm whether any species on Schedule 1 of MBR 2022 have the potential to breed in the project area.	<p>Potential effects on migratory birds and their habitat, including habitat loss, alteration or fragmentation, mortality, or disturbance due to site alteration, vegetation clearing, vehicle operation, accidents and spills, and increased noise levels and light pollution, during all project phases.</p> <p>Need for additional information on migratory bird breeding.</p>

			The active season for migratory birds is from the end of March to the end of August.		
24. Potential Effects of the Project on Other Components of the Environment					
ECCC – 16	Section 24.1.1 Potential Effects, pg. 146	Air Quality	<p>The Proponent has not provided adequate information to understand effects and appropriate mitigation related to air quality.</p> <p>The IPD identifies emissions for some substances that will affect air quality during the construction and operations phase of the project. However, only a partial list of substances/air pollutants that will be released was provided. In addition, the Proponent has not provided emissions estimates and any required dispersion modeling (using the latest approved model in Ontario for assessing contaminants).</p>	<p>Provide air quality assessment results for all phases of the project including: emission estimates and assumptions, dispersion modelling, an inventory of all equipment, and a complete list of substances/air pollutants that will be generated from the project, which includes: nitrogen dioxide, sulphur dioxide, dust (total suspended particles), PM10, PM2.5, carbon monoxide, ozone, volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), diesel particulate matter (DPM) and any other substances that may be released.</p> <p>Model worst-case emission scenarios that will maximize the impacts on the air quality for each project phase.</p>	<p>Potential direct and indirect effects on air quality related to fugitive dust from land clearing, material handling, and vehicle emissions, during all phases of the project.</p> <p>Need for a complete list of air pollutants to be generated and released.</p> <p>Need for assessment and modelling data for all emission scenarios.</p>
ECCC – 17	Section 24.1.2 Preliminary Proposed Mitigation, pg. 146, 147	Air Quality	<p>The Proponent has not adequately articulated procedures for implementing mitigation measures related to air quality emissions. Information provided on mitigation measures does not include the benchmarks/thresholds, timing and frequency of monitoring of air quality emissions to determine implementation of mitigation measures to reduce air emissions, and adaptive management measures to ensure a timely response to any potential exceedances.</p> <p>ECCC recommends best practices be incorporated into a best management plans based on the following document: Cheminfo Services Inc., 2005. “Best Practices for the Reduction of Air Emissions From Construction and Demolition Activities”: http://bieapfrempp.org/Toolbox%20pdfs/EC%20-%20Final%20Code%20of%20Practice%20-%20Construction%20%20Demolition.pdf</p>	<p>Provide additional information on best management practices including: the application of mitigation measures; the methodology for implementing mitigation; and inspection, record keeping, timing and frequency of application of mitigation measures.</p>	<p>Potential direct and indirect effects on air quality, related to emissions, during all phases of the project.</p> <p>Need for additional information on mitigation measures.</p>
ECCC – 18	Section 24.10 Plants and vegetation communities	Wetlands	<p>The Proponent has not adequately articulated effects on wetlands and related mitigation.</p> <p>While the main pathways of potential effects are identified, no information is provided in terms of the amount of wetland loss expected and the extent to which functions may be impacted (directly or indirectly). Standard mitigation measures are listed but no information is provided on the potential for residual effects after mitigation has been applied. Residual and cumulative effects to wetlands are possible.</p>	<p>Describe any potential effects (even if minimal) related to the project on wetlands and wetland functions.</p> <p>Provide supporting information to show that the mitigation measures outlined in the IPD related to surface water, groundwater, erosion and sedimentation, and accidents and spills will mitigate potential indirect effects to wetlands or wetland functions.</p> <p>Provide information on the potential for residual effects to wetlands after mitigation has been applied.</p>	<p>Potential direct and indirect effects on wetlands and wetland functions during all project phases.</p> <p>Need for mitigation measures specific to avoiding and minimizing effects to wetlands and wetland functions.</p>

			Offsetting or compensation plans may be required for wetlands.	<ul style="list-style-type: none"> Refer to The Federal policy on Wetland Conservation: http://publications.gc.ca/collections/Collection/CW66-116-1991E.pdf <p>Confirm if offsetting plans will be required for wetlands.</p> <ul style="list-style-type: none"> Refer to ECCC's framework: Operational Framework for Use of Conservation Allowances - Canada.ca 	<p>Need for information on the potential residual effects on wetlands and wetland functions during all project phases.</p> <p>Potential need for offsetting plans for wetlands.</p>
ECCC – 19	Section 24.9 Birds and their habitat	Birds and their habitat	<p>The Proponent has not adequately articulated effects on birds and their habitat and related mitigation.</p> <p>While the main pathways of potential effects are identified, no information is provided on the impact of those effects on individuals, local and regional populations, and habitat. Standard mitigation measures are listed but no information is provided on the potential for residual effects after mitigation has been applied. Residual and cumulative effects to birds are possible.</p> <p>Offsetting or compensation plans may be required for bird habitat loss, such as the loss of upland esker habitat.</p> <p>Note that offsetting of effects to migratory bird individuals and/or nests should not be necessary as these impacts must be avoided to be in compliance with the MBCA and MBR 2022.</p>	<p>Describe any potential effects (even if minimal) related to the project on individuals and habitat.</p> <p>Provide information on the potential for residual effects after mitigation has been applied.</p> <p>Confirm if offsetting plans may be required for bird habitat.</p> <ul style="list-style-type: none"> Refer to ECCC's framework: Operational Framework for Use of Conservation Allowances - Canada.ca 	<p>Potential effects on birds and their habitat, including habitat loss, alteration or fragmentation, mortality, or disturbance due to site alteration, vegetation clearing, vehicle operation, accidents and spills, and increased noise levels and light pollution, during all project phases.</p> <p>Need for information on potential residual effects on birds and their habitats.</p> <p>Potential need for offsetting plans for bird habitat.</p>
ECCC – 20	Section 24.11 Species at risk Potential Effects, Construction pg. 159 <i>A loss or a reduction of available landscape features that contribute to Boreal Caribou winter habitat at a range scale as a direct result of vegetation clearing on the esker.</i>	Species at risk and their habitat	<p>The Proponent has not adequately articulated effects on species at risk and their habitat and related mitigation.</p> <p>Many species, including birds and species at risk other than caribou, could also be affected by loss or reduced availability of rare habitats in the project area such as eskers.</p> <p>Offsetting or compensation plans may be required. Furthermore, Section 24.11 is missing information in the list of preliminary mitigation measures pertaining to surveys and project activities with respect to white-nose syndrome in bats.</p>	<p>Identify and justify mitigation measures that will be applied to ensure surveys and project activities avoid the spread of white-nose syndrome.</p> <p>Confirm if offsetting plans may be required for species at risk and their habitats.</p> <ul style="list-style-type: none"> Refer to ECCC's framework: Operational Framework for Use of Conservation Allowances - Canada.ca 	<p>Potential direct and indirect effects on species at risk individuals, residences, and habitat, including Caribou, bats and migratory birds, during all project phases.</p> <p>Need for measures to avoid the spread of white-nose syndrome through project activities.</p> <p>Potential need for offsetting plans for species at risk and their habitat.</p>
27. Waste, Discharges and Emissions					
ECCC – 21	Table 27-1: Project Waste, Discharges and Emissions	Fish and Fish Habitat – Surface Water Quality	The Proponent has not adequately articulated contaminants in water generated from dewatering activities, including the	Provide information on the contaminants in water generated from dewatering activities and how the dewatering discharge	Potential direct and indirect effects on surface water

	Dewatering Discharge - Groundwater and surface water will be dewatered to facilitate construction of roads and watercourse crossings. Water generated from dewatering activities will be treated if necessary and returned to the natural environment.		treatment required to prevent these contaminants from having any adverse effects on the receiving environment.	will be treated prior to being returned to the receiving environment.	quality, during all project phases. Need for information on contaminants generated from dewatering activities and associated treatment measures.
Appendix F					
ECCC – 22	Table F-1: Summary of Potential Effects and Preliminary Proposed Mitigation Measures, pg. F-2 Changes in fish and aquatic species (including Species at Risk [SAR] habitat) habitat due to water quality changes such as changes in temperature regime, flow regime, increased contaminants due to accidental releases, or changes to water quality as a result of erosion/sedimentation. This in turn may lead to changes in survival and reproductive success.	Fish and Fish Habitat – Surface Water Quality	The Proponent has not provided adequate information on how the project will lead to changes in the temperature of surface water. Changes in surface water temperature could potentially have adverse effects on the receiving environment.	Provide information on how the project will lead to changes in the temperature of surface water. Describe and justify mitigation measures that will established to minimize changes to surface water temperature.	Potential effects on surface water quality, during all project phases. Need for information and mitigation measures on changes in surface water temperature, resulting from project activities.