

Federal Authority Advice Record (FAAR)**FAAR Response must be submitted by July 3, 2026**

15-Mile Processing Hub Project – 15-Mile Minerals and Renewables.

Registry File: 90533

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1. Will your department or agency exercise a **power, perform a duty or function**, or provide **financial assistance**, related to the project to enable it to be carried out in whole or in part?

As relevant,

- a) Specify the power, duty or function, or financial assistance, and the likelihood that it will be required to construct the project, based on the Initial Project Description, as either Required, Potential, Likely, Unlikely or Not Required

Authorization to use a water body frequented by fish as a Tailings Impoundment Area under subsection 5(1) of the Metal and Diamond Mining Effluent Regulations (MDMER) of the Fisheries Act

Based on the information found in the Initial Project Description, an authorization under the MDMER may be required. Please see the attached MDMER Schedule 2 Amendment 101 for further details.

Species at Risk Act permits

For species listed in Schedule 1 of the *Species at Risk Act* (SARA) 2022 as Extirpated, Endangered, or Threatened, a section 73 SARA permit may be required from Environment and Climate Change Canada (ECCC) 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 species have been considered and the best solution has been adopted; all feasible measures will be undertaken to minimize the impact of the activity on the species or its critical habitat of the residences of its individuals; and if the activity will not jeopardize the survival 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 and water 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* (MBCA) wherever they occur regardless of land tenure.

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. It is also possible that, over the course of the assessment or after the assessment and during the lifetime of the Project, 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-climate-change/services/species-risk-public-registry.html>.

Examples of activities that could require a *Species at Risk Act* permit include:

- Species surveys that would affect individuals and residences;
- Site preparation (clearing, grubbing, site access, staging, blasting);
- Construction and operation of temporary and permanent works and infrastructure;
- Creation of new roads, rails or power lines;
- Infilling of wetlands or watercourses;
- Any monitoring that requires the capture/release of individuals; and
- Sensory disturbance effects (artificial lighting, noise, vibration, human activity, vehicular traffic).

For most projects, the requirement for a SARA permit will always remain a possibility due to the widespread presence of SARA-listed migratory birds protected under the *Migratory Birds Convention Act, 1994* across Canada. Permits for these species apply to activities on all types of land tenure. ECCC will require detailed information on the potential effects of the 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 and non-federal land, before ECCC can determine whether a SARA permit is required.

Note that a SARA permit for activities involving migratory birds is only possible if they do not contravene the *Migratory Birds Convention Act*.

Links to publicly available documents:

- Guidelines for permitting under Section 73 of the *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>.

In the event that a SARA permit is required, ECCC would evaluate and determine consultation requirements, if any. ECCC-led Indigenous consultation related to the issuance of SARA permits will be coordinated with consultation during the impact assessment where possible.

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://species-registry.canada.ca/index-en.html#/permits>.

Migratory Birds Convention Act Permits

The *Migratory Bird Regulations, 2022* (MBR 2022) protect migratory birds, their eggs and their nests, by prohibiting activities that may harm them. Unless a person has a permit or the regulations authorize it, it is prohibited to engage in the following activities:

- Capturing, killing, taking, injuring or harassing a migratory bird or attempting to do so;
- Destroying, taking or disturbing an egg; and
- Damaging, destroying, removing or disturbing a nest, nest shelter, eider duck shelter or duck nesting box, unless the following exceptions apply:
 - The nest does not contain a live migratory bird or a viable egg; and
 - The nest was not built by a species listed in Schedule 1.

Modernization of the MBCA in 2022 has additionally identified 18 species of birds whose nests are protected year-round (Schedule 1 of MBR 2022). The nests of species listed in Schedule 1 are protected at all times, unless the following conditions are met:

- Notification of the unoccupied nest has been submitted/received through the [Registry for Abandoned Nests](#); and
- The waiting time designated in the regulations has passed, during which time the nest has not been occupied by the migratory bird.

In some situations, it may be possible to obtain a permit to move or destroy an unoccupied nest of a Schedule 1 MBR 2022 species. For more information, please visit:

<https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds.html>.

ECCC advises that there is no mechanism under the MBCA and its regulations to grant a permit for activities that are not directly aimed at migratory birds, their nests and/or eggs, but which may harm them (e.g., land clearing).

Scientific Permits issued under the *Migratory Bird Regulations* may, for scientific purposes, including banding, or for rehabilitation or educational purposes, authorize the permit holder to: capture, kill, injure, or harass an individual; destroy, remove or disturb a nest; deposit bait under specific circumstances; exchange, give, or have in their possession a migratory bird, egg or nest; and if they are authorized to capture and band a migratory bird, take birds that are killed as a result of normal banding operations or that are found dead. Scientific permits are issued to authorize activities for scientific purposes that would otherwise be prohibited by the MBCA and its associated regulations, however, there are only certain exceptional situations where these types of permits may be available. These permits do not authorize activities that may adversely affect migratory birds.

The Canadian Wildlife Service (CWS) issues Scientific permits to authorize the capture and handling of migratory birds that become stranded at facilities that must be kept until they can be successfully released. These permits are most often associated with facilities and vessels with large amounts of artificial lighting that may attract seabirds and cause disorientation, stranding, or collisions, for which proponents are required to search and document such events at their facilities. The information gathered from capture and handling permits is being used to quantify the impact of artificial attraction (causing stranding events) on migratory birds. Stranded bird monitoring is conducted following CWS's *Procedures for handling and documenting stranded birds encountered on infrastructure offshore Atlantic Canada* (2017).

Links to publicly available documents:

For more information, please visit:

- [Migratory Birds Convention Act \(MBCA\) and Regulations;](#)
- [Fact sheet: Nest Protection under the Migratory Birds Regulations, 2022;](#) and
- [Frequently asked questions: Migratory Birds Regulations, 2022.](#)

The *Migratory Birds Regulations* were amended in July 2022 and include additional protection measures for the abandoned nests of the Pileated Woodpecker. The Pileated Woodpecker is included on Schedule 1 of the amended MBRs and required the notification of ECCC Minister, 36 months in advance, prior to destroying an abandoned nest.

Pileated Woodpecker will excavate Nesting Cavities in trees in proportion to the availability of suitable nest trees on the land scape. Factors that determine suitable nest trees include:

- Prevalence of tree diseases, insects, and physical conditions (rot, breaks, cracks) that can weaken trees and make them more suitable for cavity excavation;
- The tree's size. Nesting cavities have been in trees as small as 25 cm dbh (diameter at breast height), but are more often found in trees >40 cm dbh; and
- Nesting Cavity entrance holds are about 10 cm in diameter and found 8-15 m above the ground.

More information on nest cavities can be found on ECCC's [Pileated Woodpecker Cavity Identification Guide](#). For more information on the amended nest protections, frequently asked questions on how these protections apply to migratory birds, including Pileated Woodpecker, and your responsibilities for reporting abandoned nests, please visit [Fact sheet: Nest Protection under the Migratory Birds Regulations, 2022](#) and [Frequently asked questions: Migratory Birds Regulations, 2022](#). For more information on permits related to Pileated Woodpecker, please visit [Damage or Danger Permits for Nest Destruction: Pileated Woodpecker nesting cavities - Canada.ca](#) and [Damage to the Use of the Land: Pileated Woodpecker nesting cavities - Canada.ca](#).

b) Describe any associated Indigenous or public consultation, including timelines

Authorization to use a water body frequented by fish as a Tailings Impoundment Area under subsection 5(1) of the Metal and Diamond Mining Effluent Regulations (MDMER) of the Fisheries Act

Where proponents or mine owners are seeking to comply with the Fisheries Act by pursuing an amendment to Schedule 2 of the MDMER, once the information requirements are complete for both the proponent's alternatives assessment and a Fish Habitat Compensation Plan, ECCC will consult with impacted Indigenous communities and the general public. Proponents can support consultations by early and effective engagement with Indigenous communities prior to starting the regulatory process.

Where possible, consultations on amendments to Schedule 2 of the MDMER will be coordinated with the consultations undertaken during the impact assessment.

Species at Risk Permits

As noted above, for most projects, the requirement for a federal SARA permit issued under section 73 of the *Species at Risk Act* will always remain a possibility due to the widespread presence of SARA-listed migratory birds protected under the *Migratory Birds Convention Act, 1994* across Canada. In the event that a SARA permit is required, ECCC would evaluate and determine consultation requirements, if any (per sections 73(4) and 73(5) of SARA).

The *Permits Authorizing an Activity Affecting Listed Wildlife Species Regulation* specifies that the competent minister must either issue a permit or notify the applicant that the permit has been refused within 90 days following the notification, in writing, that the application has been received, with the 90-day timeline being suspended if an incomplete application is received. However, when additional consultations are required, including consultations with Indigenous groups, the 90-day time limit does not apply (see "Guidelines for permitting under Section 73 of the *Species at Risk Act*" <https://www.canada.ca/en/environment-climate-change/services/species-risk-public-registry/policies-guidelines/permitting-under-section-73.html>). ECCC-led Indigenous consultation related to the issuance of SARA permits will be coordinated with consultation during the impact assessment where possible.

- c) Describe any associated information requirements (e.g., alternative means assessment, habitat offsetting), and specify those that may be coordinated with the impact assessment process, if an impact assessment is required

Authorization to use a water body frequented by fish as a Tailings Impoundment Area under subsection 5(1) of the Metal and Diamond Mining Effluent Regulations (MDMER) of the Fisheries Act

Please see the attached MDMER Schedule 2 Amendment 101 for further details.

Where proponents or mine owners are seeking to comply with the Fisheries Act by pursuing an amendment to Schedule 2 of the MDMER, the following information requirements can be coordinated with the impact assessment process:

- The development and implementation of a fish habitat compensation plan (FHCP) to offset the loss of fish habitat that would occur as a result of the use of a fish-frequented water body for mine waste disposal
- Demonstrate that the disposal of mine waste (including tailings and waste rock) in these water bodies is the best approach from an environmental, technical, economic and socio-economic perspective in accordance with Environment and Climate Change Canada's Guidelines for the assessment of alternatives for mine waste disposal ([Guidelines for the assessment of alternatives for mine waste disposal - Canada.ca](#))

Species at Risk

For species listed in Schedule 1 of the *Species at Risk Act* (SARA) 2022 as Extirpated, Endangered, or Threatened, a section 73 SARA permit may be required from Environment and Climate Change

Canada (ECCC) 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 species have been considered and the best solution has been adopted; all feasible measures will be undertaken to minimize the impact of the activity on the species or its critical habitat of the residences of its individuals; and if the activity will not jeopardize the survival of the species. Permits are also required by those persons conducting activities that contravene the critical habitat destruction prohibitions (subsection 58(1)).

If a federal SARA permit is required to authorize the prohibited Project activities affecting SARA-listed migratory birds, the proponent must undertake an alternatives assessment to meet the precondition outlined in section 73(3)(a) of SARA that “all reasonable alternatives to the activity that would reduce the impact on the species have been considered and the best solution has been adopted”.

Additionally, should the Project result in potential jeopardy to a SARA-listed species (precondition 73(3)(c) of SARA), particularly migratory bird (regardless of land tenure) that cannot be avoided or mitigated, the proponent may be required to undertake habitat offsetting as part of the SARA permit. If possible, this should be coordinated with assessment of residual adverse effects on migratory bird SAR undertaken by the Impact Assessment process led by the Impact Assessment Agency of Canada (IAAC).

- d) Identify any associated project-specific guidance or issues of which the proponent should be aware, or information the proponent should provide

Authorization to use a water body frequented by fish as a Tailings Impoundment Area under subsection 5(1) of the Metal and Diamond Mining Effluent Regulations (MDMER) of the Fisheries Act

Where proponents or mine owners are seeking to comply with the Fisheries Act by pursuing an amendment to Schedule 2 of the MDMER, those proposals must meet various requirements before the Minister of the Environment can recommend the amendment to the Governor in Council. It is the proponent's responsibility to:

1. Submit the baseline fish studies report. In this report, the proponent must:
 - Identify all water bodies affected by the storage of mine waste;
 - Confirm the presence or absence of fish in these water bodies;
 - Provide the methodology used to document the presence or absence of fish; and
 - Provide information on the connectivity of these water bodies with other water bodies frequented by fish.
2. Submit a detailed figure (including legends) showing the water bodies frequented by fish and that will be overprinted or connected to these water bodies.
3. Determine, based on steps 1) and 2), whether each water body affected by the disposal of mine waste is considered a water frequented by fish.
4. Note: ECCC will confirm whether a water body is considered a water frequented by fish based on the information provided by the proponent and in consultation with Fisheries and Oceans Canada (DFO).
5. Steps 1) – 3) above apply only if a proponent proposes to overprint a water body with mine waste. If no waterbodies are to be overprinted, no determination is necessary.

Migratory Birds and Species at Risk

Please refer to the information provided in Table 1 below. ECCC has provided project-specific guidance and information related to the Project's effects on migratory birds, species at risk, and their habitats, including wetlands, for the proponent's consideration when completing the Impact Assessment.

Open Science Data Platform (OSDP)

The Open Science Data Platform (OSDP) provides information relevant to cumulative effects and development activities across Canada and is publicly available at the following website: <https://osdp-psdo.canada.ca/dp/en>. More specifically, the platform provides a single window to access data and

scientific knowledge relevant to understanding cumulative effects from existing federal, provincial, and territorial on-line databases and registries, including publications from the federal government and its scientists. It provides an interactive geospatial mapping tool to enable mapping of multiple datasets from multiple sources. It offers various features, including keyword-based searching, interactive data visualization on maps, and educational resources covering key topics such as cumulative effects, water, air, climate, biodiversity, land, economy and industry, health, and society and culture.

OSDP information may be of value to persons preparing and reviewing projects assessments, including cumulative effects assessments. The following are some examples of ECCC information available on the OSDP.

Water – quality and quantity

- National long-term water quality monitoring data
- Real time hydrometric data
- Canadian Aquatic Biomonitoring Network (CABIN)
- National Pollutant Release Inventory (NPRI)
 - Facilities that reported releases to water
- Find additional water-related resources (including publications, datasets and monitoring stations) from ECCC on the OSDP.

Biodiversity (e.g., birds, species at risk, wetlands)

- Critical habitat for species at risk (terrestrial)
- Range map extents – Species at risk
- Canadian wetlands
- Canadian Protected and Conserved Areas Database (CPCAD)
- Canadian Breeding Bird Census plots
- Priority places for species at risk
- Find additional biodiversity-related resources (including publications, datasets and monitoring stations) from ECCC on the OSDP.

Air Quality

- National Pollutant Release Inventory (NPRI), including: Facilities that reported release of criteria air contaminants
- Canadian Environmental Sustainability Indicators (CESI), including
- Average ambient fine particulate matter concentrations
- Peak ambient ozone concentrations
- Ambient volatile organic compound concentrations
- Average ambient sulphur dioxide concentrations
- Peak ambient nitrogen dioxide concentrations
- Find additional air-related resources (including publications, datasets and monitoring stations) from ECCC on the OSDP.

Climate, including climate change

- Hourly and daily climate observations
- Monthly climate observation summaries
- Climate normals, averages and extremes 1981-2020
- Homogenized surface air temperature
- Canadian homogenized monthly precipitation
- Adjusted precipitation
- Find additional climate-related resources (including publications, datasets and monitoring stations) from ECCC on the OSDP.

Beyond ECCC's mandate, the OSDP also contains resources on topics led by departments and other levels of government (e.g., human health, economy and industry). The OSDP also provides

access to regulatory registries that list government authorizations of other developments (e.g., Fisheries Act Registry), which can be useful in understanding the cumulative pressures on an area.

- e) Indicate whether your department or agency has identified any power that it will not be exercising or may not be able to exercise to allow the project to be carried out, in whole or in part.

As noted above, if a federal SARA permit is required to authorize the prohibited Project activities affecting SARA-listed migratory birds, the proponent must undertake an alternatives assessment to meet the precondition outlined in section 73(3)(a) of SARA that “all reasonable alternatives to the activity that would reduce the impact on the species have been considered and the best solution has been adopted”.

Additionally, should the Project result in potential jeopardy to a SARA-listed species (precondition 73(3)(c) of SARA), particularly migratory bird (regardless of land tenure) that cannot be avoided or mitigated, the proponent may be required to undertake habitat offsetting as part of the SARA permit. If possible, this should be coordinated with assessment of residual adverse effects on migratory bird SAR undertaken by the Impact Assessment process led by the Impact Assessment Agency of Canada (IAAC).

Additionally, please note that there is no permitting mechanism that authorizes the disturbance/harm to species at risk that is incidental to activities when the species is also protected by the *Migratory Birds Convention Act, 1994* (MBCA).

2. **Using Table 1**, identify project- and context- specific **key issues**, based on the expertise within your mandate¹ and the information in your possession, including the Initial Project Description, any exchanges with the proponent or others related to the project and known means to address the effects of the project. For each key issue:
- a) Specify the key issue (e.g., specific species and location)
 - b) Specify the project component or activity linked to the key issue
 - c) Explain why it's a key issue based on:
 - i. biophysical effect pathway(s) from the specific project component or activity
 - ii. concern unique to the project or a priority within your mandate
 - iii. the issue being material² to decision making under the *Impact Assessment Act*
 - d) Identify how the issue could be resolved, including through means other than an impact assessment
 - e) Identify additional information the proponent could provide including to give confidence on how the issue can be addressed through other means.

Stephen Zwicker A/Head,
Environmental Assessment

Name and title of Departmental /
Agency Responder

July 6, 2026

Date

¹ Refer to the [Memoranda of Understanding with IAAC](#).

² An issue is material to decision making if its analysis is anticipated to affect the conclusions on (1) whether adverse effects within federal jurisdiction or direct and incidental adverse effects (collectively adverse federal effects) are likely not significant, or of low, medium or high significance; (2) appropriate mitigation measures for significant adverse federal effects; or (3) justification in the public interest.

Table 1: Key Issues to inform the impact assessment process

This table should outline key issues to inform the impact assessment process, including whether an impact assessment is required and, if so, the scope of the assessment and tailoring of the Tailored Impact Statement Guidelines.

Key issues are the major concerns directly related to a project component or activity, the analysis of which is anticipated to be material to decision-making under the *Impact Assessment Act*.

Federal authorities' advice should be guided by the identification and resolution of key issues. If an impact assessment is required, it will be focused on key issues.

Comment ID	a) Key issue	b) Project component or activity	c)(i) Biophysical effect pathway(s)	c)(ii) Concern unique to the project or a priority within your mandate	c)(iii) Material to federal decision-making	d) Means for issue resolution	e) Additional information from the proponent
<i>Identify comments by organization and comment number.</i> <i>e.g.: IAAC-01</i>	<i>Specify the key issue (e.g., specific species and location).</i>	<i>Identify the project component or activity linked to the key issue.</i> <i>Be specific about the nature, scale, novelty and complexity or the component or activity.</i>	<i>Identify the specific biophysical effect pathway between the project component or activity and the affected environmental or human receptor (including Indigenous Peoples).</i>	<i>Describe why it's a key issue within the mandate of your department or agency, including in terms of priorities of the federal government and in terms of anticipated likelihood, severity or uncertainty of effects.</i> <i>Identify if the key issue is common for projects of this nature or in this sector, or whether it's unique to this project due to its complexity, size or novelty; a sensitive or rare receiving environment; and/or proximity of sensitive environmental or human receptors (including Indigenous Peoples).</i>	<i>Describe why the key issue is material to decision-making as either:</i> <i>an adverse effect within federal jurisdiction, or a direct or incidental adverse effect, that may be significant based on available evidence including:</i> <i>federal experts' knowledge and experience with past project assessments;</i> <i>presence of sensitive species, habitats or human receptors (including Indigenous Peoples);</i> <i>novel or complex project activities, components or technologies;</i> <i>high uncertainties in effects or in the effectiveness of mitigation measures;</i> <i>unknown or unproven mitigation; or</i> <i>a factor for the justification in the public interest anticipated to be material to decision-making such as a likely positive effect contributing to sustainability, to Canada's environmental obligations or climate change commitments or in supporting governmental priorities, such as reconciliation with Indigenous Peoples.</i>	<i>Describe how the key issue could be resolved or addressed by:</i> <i>Any means, including powers, duties, functions, frameworks, policies or guidance that your department or agency has;</i> <i>Any means, including powers, duties, functions, frameworks, policies or guidance from another jurisdiction, including the province;</i> <i>Common, proven, well-understood or standard mitigation measures to mitigate the effect or effect pathway(s); or</i> <i>Commitments made by the proponent (e.g., in the Initial Project Description).</i>	<i>Describe information the proponent can provide, or commitments the proponent can make, in their Response to the Summary of Issues that would provide confidence that the issue can be resolved by existing means.</i> <i>Consider whether information, studies, analyses or collaborative work with other authorities would be required to address the issue beyond existing means.</i>
ECCC-01	Migratory birds	The activities linked to the construction, operation, maintenance and decommissioning of the proposed Project could have adverse effects on migratory birds.	The nature of effects of the project on migratory birds will vary based on a number of factors, including: project location, duration, scale, and configuration; ancillary project activities (e.g., land clearing, operation, etc.); existing cumulative effects; the type of	<u>Habitat Loss/Alteration and Disturbance/Destruction caused by Project Activities</u> (example, land clearing and site preparation, mining activities, etc.) Clearing and other activities that cause habitat loss or alteration may lead to destruction, disturbance, and fragmentation of habitat	The federal Migratory Birds Convention Act (MBCA) and its regulations protect migratory birds and their eggs and prohibit the disturbance, damage, destruction or removal of migratory bird nests that contain a live bird or a viable egg. Migratory birds are protected at all times; all migratory bird nests are protected when they contain a live bird or viable egg; and the nests of 18 species listed in Schedule 1 of the MBR 2022 are protected year-round. These general prohibitions apply to all lands and waters in Canada, regardless of ownership.	ECCC provides the following recommendations to avoid and minimize potential adverse impacts on migratory birds. <u>Habitat Loss/Alteration and Disturbance/Destruction caused by Project Activities</u> Most migratory bird species construct nests in trees (sometimes tree cavities) and shrubs, but several species nest at ground level (e.g., Common Nighthawk), in hay fields, pastures or in burrows. Some bird species may nest on cliffs or in stockpiles of overburden material from mines or the banks of quarries. Some migratory birds (including certain waterfowl species) may nest in head ponds created by beaver dams. Some migratory	Further baseline information on the migratory birds that are present (or have the potential to be present) in the Project Area should be provided to evaluate the potential effects of the project on migratory birds. ECCC acknowledges that baseline surveys remain ongoing in 2025 and 2026. project on migratory birds.

			habitat that may be disturbed; and sensitivity of species found in the project area. The pathway through which potential effects are conveyed will depend on the land, air, and water constituents associated with the site along with the behavioural adaptability, presence and interaction with the species limiting factor (e.g., habitat supporting staging, nesting, roosting, or foraging) and population resilience.	(foraging, nesting), habitat avoidance, sensory disturbance, and the inadvertent disturbance and destruction of individuals, nests, and eggs of migratory birds. Projects involving the construction of linear footprints can cause the loss, fragmentation, and alteration of habitat and may result in direct adverse effects on migratory birds during breeding, migration, staging, and foraging. Linear disturbances may also cause connectivity issues and/or facilitate the movement of predators into an area and increase hunting access and efficiency. <u>Sensory Disturbance</u> Noise and vibration from site preparation, the use of heavy equipment and blasting, artificial lighting, human presence, and disturbance from construction, operation, maintenance and decommissioning activities may result in injury, mortality, sensory disturbance and change in habitat use. The amount, duration, frequency, and timing of disturbance are important to understand potential effects. Sensory disturbance may make adjacent habitats unsuitable for use by migratory birds and cause avoidance effects in many species. <u>Lighting Attraction</u> Night-flying birds may be attracted to lights,	For more information, please visit: Avoiding harm to migratory birds - Canada.ca. Section 5.1 of the MBCA describes prohibitions related to depositing substances harmful to migratory birds: “5.1 (1) No person or vessel shall deposit a substance that is harmful to migratory birds, or permit such a substance to be deposited, in waters or an area frequented by migratory birds or in a place from which the substance may enter such waters or such an area. (2) No person or vessel shall deposit a substance or permit a substance to be deposited in any place if the substance, in combination with one or more substances, result in a substance – in waters or an area frequented by migratory birds or in a place from which it may enter such waters or such an area – that is harmful to migratory birds.” It is the responsibility of the proponent to ensure that activities are managed so as to ensure compliance with the MBCA and associated regulations. Further information can be found at: https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds.html and Avoiding harm to migratory birds - Canada.ca.	birds (e.g., Barn Swallow, Cliff Swallow, Eastern Phoebe) may build their nests on structures such as bridges, ledges or gutters. In developing mitigation measures, it is incumbent on the proponent to identify the best approach, based on the circumstances, to comply with the MBCA. The following should be considered during project planning: • Avoid scheduling high disturbance activities, such as vegetation clearing and site preparation, during the regional nesting period for migratory birds. Information regarding regional nesting periods can be found at Nesting periods - Canada.ca. Some species protected under the MBCA may nest <i>outside</i> these timeframes. • Nest searches or pre-clearing surveys during the breeding season are not supported as mitigation in most habitat types (e.g., forests, grasslands, wetlands) due to low detectability and high likelihood disturbance to nesting birds. • Nest searches may be effective when conducted by experienced observers using appropriate methods in simple habitats with limited potential nesting locations or small migratory bird communities. Examples include urban parks with few trees, vacant lots with limited nest sites, previously cleared areas where ground nesters may use exposed soil or stockpiles, and structures such as bridges, towers, beacons, or buildings commonly used for nesting (e.g., by swallows, robins, phoebes, Common Nighthawks, and gulls). • The risk of impacting active nests or birds caring for pre-fledged chicks discovered during project activities <i>outside</i> of the regional nesting period can be minimized by measures such as the establishment of vegetated buffer zones around nests and minimization of activities in the immediate area until nesting is complete and chicks have naturally migrated from the area. • In developing and implementing a wildlife management plan, preventative measures to minimize the risk of impacts on migratory birds should be considered (see “Avoiding harm to migratory birds: guidelines to reduce the risk to migratory birds: at https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds/reduce-risk-migratory-birds.html). Some ground nesting species of migratory birds, including the “Threatened” (SARA) Common Nighthawk, and Killdeer, may be attracted to previously cleared areas for nesting in the spring and summer if there is a delay between clearing activities (e.g., clearing conducted during the fall/winter and construction scheduled in the spring/summer).	As a first step, ECCC recommends that information on migratory birds potentially occurring in the project area, including downstream habitats potentially affected by the project, should be obtained from the Atlantic Canada Conservation Data Centre (ACCDC http://accdc.com/index.html). If necessary, this information can be supplemented as, appropriate, with field surveys conducted by qualified individuals (with expertise in conducting the types of surveys required) at the appropriate time of year. Baseline information and any survey data can be used by the proponent to help develop mitigation measures to avoid adverse effects on migratory birds. It should be noted that although a species may not be confirmed in an area, it does not necessarily mean that it does not occur there, <u>especially if habitat appropriate for the species is available</u>. With regard to migratory birds, when providing information in an environmental assessment document, the proponent should give particular, but not exclusive, consideration to birds or habitats that meet one of the following criteria: • Species listed under the <i>Species at Risk Act</i> (SARA) and/or provincial species at risk legislation; designated, under review or identified as candidate species by the Committee on the Status of Wildlife in Canada (COSEWIC); and/or
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				resulting in possible injury or mortality: • Equipment and building strikes; • Disorientation and increased energy expenditure, which may lead to exhaustion and increased predation. <u>Accidental Releases of Hazardous Substances</u> (e.g., tailings, fuel, hydrocarbons, etc.) Adverse effects on migratory birds and their habitat could result from accidental release of hazardous substances. Depending on the nature of the release (e.g., toxicity, volume, exposure pathways), and the location and duration of the release, effects on wildlife could be acute, chronic, or both. Contamination of the environment through accidental spills can result in the destruction or disturbance of nests and eggs, contamination of feathers, which can be detrimental to waterproofing capabilities, and change in food quantity/quality.		In the event that a nest is discovered, it would be prudent for a proponent to consult ECCC or NSDNR(depending on the species) regarding appropriate buffers and other mitigation measures, and to prepare and implement a monitoring plan to verify their efficacy. The Pileated Woodpecker is listed on Schedule 1 of the Migratory Bird Regulations, 2022, which provides additional legal protection for its nests. To avoid impacts to this species, ECCC recommends: • Conduct targeted surveys within vegetation clearing areas to identify suitable Pileated Woodpecker nesting habitat and confirm cavity presence and occupancy (surveys are recommended in late June for projects in the Maritime Provinces). • If abandoned cavities are identified on trees proposed for removal, notify ECCC through the Abandoned Nest Registry. • Where cavities are present, maintain the nest intact, establish a vegetated buffer, and monitor cavity occupancy for up to 36 months prior to removal; if construction overlaps the breeding season, implement measures to prevent disturbance. <u>Sensory Disturbance caused by Noise and Vibration</u> ECCC recommends the following best management practices for noise disturbance issues: • Develop mitigations for programs that introduce very loud and random noise disturbance (e.g., blasting programs) during the migratory bird breeding season for their region. • Where possible, prioritize construction works in areas away from natural vegetation while working during the migratory bird breeding season. Conducting loud construction works adjacent to natural vegetation should be completed outside the migratory bird breeding season. • Keep all construction equipment and vehicles in good working order and loud machinery should be muffled if possible. <u>Sensory Disturbance caused by Lighting Attraction</u> The proponent should consider the following mitigation measures when designing the Project's Lighting Plan: • Use the minimum amount of aviation safety, warning and obstruction lighting needed on tall structures. Warning lights should flash and completely turn off between flashes; • Use the fewest number of site-illuminating lights possible in the project area. Only use strobe lights at night, at the lowest intensity and the	with rarity ranks assigned by the province and/or the Atlantic Canada Conservation Data Centre (ACCDC); • Areas of concentration of migratory birds, such as breeding areas, colonies, spring and fall staging areas, and wintering areas; • Breeding and nesting areas of species low in number and high in the food chain; • Species that are identified by priority ranking systems (e.g., Bird Conservation Region priority species). If requested, ECCC will be in a better position to comment on potential effects and mitigation for this project once adequate biophysical information is provided. ECCC can provide standard (not specific to the project) mitigation measures that are broadly applicable to migratory birds in its absence. The proponent's proposed mitigation measures for migratory birds are framed using ambiguous language (e.g., "where feasible", "as practical", etc.) and therefore do not constitute clear commitments. The proponent should revise their approach by: (1) clearly stating firm commitments to mitigation measures; (2) defining objective criteria for determining when measures are not feasible; and (3) identifying contingency measures applicable across all project phases and seasons.
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					smallest number of flashes per minute allowable by Transport Canada; • Reduce lighting levels during inclement weather events that may force migratory birds to land, or fly at lower altitudes, to prevent birds from landing in areas that would cause collisions; • Avoid or restrict the time of operation of exterior decorative lights such as spotlights and floodlights whose function is to highlight features of buildings or to illuminate an entire building. These lights, especially during periods of inclement weather, can draw birds from far away. Turn off these lights during migration season when the risk to birds is highest, and during periods when birds are dispersing from their nests or colonies; • Shield safety lighting so that illumination shines down. Only install safety lighting where it is needed, without compromising safety; • Shield street and parking lot lighting so that little escapes into the sky, and it falls where it is required. Consider using LED lighting fixtures as they are generally less prone to light trespass; • Limit construction activities to the day and avoid illuminating habitat adjacent to the worksite(s); • Develop a Bird Monitoring and Management Plan that describes what measures will take place to avoid incidental take. The Plan should include: ◦ Actions that will be used to prevent incidental take of migratory birds; ◦ A mortality monitoring plan that includes corrections for searcher efficiency, carcass persistence, and searchable area. For further guidance regarding lighting attraction, please see the “International Light Pollution Guidelines for Migratory Species”. <u>Accidental Releases of Hazardous Substances</u> The proponent must ensure that all precautions are taken by the contractors to prevent fuel leaks from equipment, and that a contingency plan in case of oil spill(s) is prepared. Furthermore, the proponent should ensure that contractors are aware that under the MBCA, <i>“no person shall deposit or permit to be deposited oil, oil wastes or any substance harmful to migratory birds in any waters or any area frequented by migratory birds”</i>. Biodegradable alternatives to petroleum-based chainsaw bar oil and hydraulic for heavy machinery are commonly available from major manufacturers. Such biodegradable fluids should be considered for use in place of petroleum products whenever possible, as a standard for best practices. Fueling and servicing of equipment should not take place within 30-metres of	The proponent should give priority to scheduling high-disturbance activities, including vegetation clearing, outside the core migratory bird breeding period (mid-April to late-August in this region). It should be noted that pre-clearing nest searches are not supported as effective mitigation for most habitat types. The proponent should also commit to follow-up monitoring to verify predicted effects and mitigation effectiveness, and to implementing adaptive management where adverse effects to migratory birds and their habitat occur.
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						environmentally sensitive areas, including shorelines and wetlands. ECCC recommends incorporating a Wildlife Emergency Response Plan into emergency response contingency plans for scenarios that may impact avifauna directly (injury or mortality, e.g., polluting incident) or indirectly (collisions causing mortality, stranding due to light attraction). For consideration in emergency response and contingency planning related to accidents and malfunctions, ECCC has prepared <i>Guidelines for Effective Wildlife Response Plans</i> (ECCC 2022) available online at: https://www.canada.ca/en/services/environment/wildlife-plants-species/national-wildlife-emergency-framework.html. Plans should include: • Measures to deter migratory birds from coming into contact with the oil or polluting substance; • Measures undertaken if individuals of migratory birds and/or sensitive habitat become contaminated; and • The type, extent of monitoring, and reporting in relation to various spill events. The proponent is responsible for ensuring that all precautions are taken by the contractors to prevent fuel leaks from equipment, and that a contingency plan is prepared in the case of spills. Furthermore, the proponent should ensure that contractors are aware of s.5.1 MBCA prohibitions.	
ECCC-02	Species at Risk, Species of Conservation Concern, and their habitat	The activities linked to the construction, operation, maintenance and decommissioning of the proposed Project could have adverse effects on terrestrial wildlife including species at risk listed on the <i>Species at Risk Act</i> (SARA), or Species of Conservation Concern (SOCC) assessed by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) (e.g., birds, terrestrial mammals, amphibians, reptiles, arthropods, lichen,	The nature of effects of the project on species at risk (including their residences and critical habitat defined under the SARA) can vary based on a number of factors, including: project location, duration, scale, and configuration; ancillary project activities (e.g., land clearing, operation, etc.); existing cumulative effects; the type of habitat that may be disturbed; and sensitivity of species found in the project area. The pathway through which potential effects are	<u>Habitat Loss/Alteration and Disturbance/Destruction caused by Project Activities</u> (example, land clearing and site preparation, mining activities, etc.) Clearing and other activities that cause habitat loss or alteration may lead to destruction, disturbance and fragmentation of habitat (foraging, nesting), habitat avoidance, sensory disturbance, and the inadvertent disturbance and destruction of individual migratory bird species at risk and their nests and eggs, or of individual non-migratory bird	The purpose of the <i>Species at Risk Act</i> (SARA) is to 1) prevent wildlife species from extirpation or extinction, and 2) provide for the recovery of wildlife species that are extirpated, endangered or threatened as a result of human activity. The list of species protected by the SARA can be found on the Species at Risk Public Registry. Under SARA s.79. (1), “Every person who is required by or under an Act of Parliament to ensure that an assessment of the environmental effects of a project is conducted, and every authority who makes a determination under paragraph 82(a) or (b) of the Impact Assessment Act in relation to a project, must, without delay, notify the competent minister or ministers in writing of the project if it is likely to affect a listed wildlife species or its critical habitat.” Under section 79(2) of SARA, “The person must also identify the adverse effects of the	ECCC provides the following recommendations to avoid and minimize potential adverse impacts on species at risk. <u>Habitat Loss and Alteration caused by Vegetation Clearing</u> ECCC recommends that proponents establish buffer zones or setback distances to minimize potential impacts from disturbance activities. A 30 m buffer is likely not sufficient to address impacts on SAR, ground-nesting species, or highly mobile chicks of certain species. Should the nests of a migratory bird species at risk or any unfledged chicks be discovered, proponents should establish an appropriate-sized buffer for the relevant species. In general, ECCC recommends the following buffers for landbird SAR during the breeding season: • Low disturbance activities (e.g., site monitoring) – 50 metres • Medium disturbance activities (e.g., sensory disturbance) – 150 metres • High disturbance activities (e.g., clearing, use of heavy equipment) – 300 metres	Further baseline information and survey data/results for species at risk (SAR) and species of conservation concern (SOCC) that are present (or have the potential to be present) in the Project Area should be provided to evaluate the potential effects of the project on those species. ECCC acknowledges that baseline surveys remain ongoing in 2025 and 2026. As a first step, ECCC recommends that information on species at risk potentially occurring in the project area, including downstream habitats potentially affected by the project, should be obtained from the Atlantic Canada Conservation Data

		mosses, and vascular plants), and their habitat (e.g., wetlands) and critical habitat. Based on the information provided to date in the Initial Project Description, SARA-listed and COSEWIC-assessed species that may occur in the project area include: Barn Swallow (Threatened), Canada Warbler (Threatened), Chimney Swift (Threatened), Red Crossbill, (Threatened), Common Nighthawk (Special Concern), Eastern Wood-pewee (Special Concern), Evening Grosbeak (Special Concern), Olive-sided Flycatcher (Special Concern), Rusty Blackbird (Special Concern), Little Brown Myotis (Endangered), Northern Myotis (Endangered), Tri-colored Bat (Endangered), Hoary Bat (COSEWIC-assessed Endangered), Silver-haired Bat (COSEWIC-assessed Endangered), Eastern Red Bat (COSEWIC-assessed Endangered), Wood Turtle (Threatened), Snapping Turtle (Special Concern), Boreal Felt Lichen (Atlantic population, Endangered), Blue Felt Lichen (Special Concern), and Frosted Glass-	conveyed will depend on the land, air, and water constituents associated with the site along with the behavioural adaptability, presence and interaction with the species limiting factor (e.g., habitat supporting staging, nesting, roosting, or foraging) and population resilience. Further information on SAR bird species is required to evaluate potential effects of the project.	species at risk, their residences and critical habitat. Project involving the construction of linear footprints can cause the loss, fragmentation and alteration of habitat and may result in direct adverse effects on species at risk during important life-stages. Linear disturbances may also cause connectivity issues and/or facilitate the movement of predators into an area and increase hunting access and efficiency. There is a higher risk that these effects would be more severe for migratory birds that are also SAR and species where habitat is sensitive to disturbance (e.g., wetlands) or where there is already a high degree of cumulative effects to habitat and individuals. Destruction and/or disturbance of habitat can have increased impacts on SAR individuals, residence(s), and their critical habitat, which can lead to changes in prey and predator dynamics, loss of food resources, loss of breeding areas, changes in migration or movement, and increased risk of mortality. For example, Certain species of migratory birds (e.g., Bank Swallow, Common Nighthawk) may nest in large piles of soil left unattended/unvegetated during the most critical period of breeding season.	<i>project on listed wildlife species and its critical habitat and, if the project is carried out, must ensure that measures are taken to avoid or lessen adverse effects and to monitor them</i>". Mitigation measures must be consistent with recovery strategies and action plans for the species. Indirect and direct effects should be considered. The proponent must manage activities to ensure compliance with the SARA and associated regulations. SARA Policy Guidelines (2016) are available at: Species at Risk Act: addressing considerations - Canada.ca Important Note: ECCC also recommends that the province be contacted for technical expertise on the effects and mitigation for species at risk under their jurisdiction (e.g. bats, reptiles, amphibians, land-mammals, insects, plants, lichen, and birds not protected by the MBCA, such as raptors). Notification and Identification of Effects (SARA s. 79(1)(2)) Subsection 79(2) of SARA establishes a requirement to avoid or lessen all (direct and indirect) adverse effects of a project on listed wildlife species and critical habitat, regardless of the significance of those effects. Thus, in developing mitigation measures for listed wildlife species, the approach should be systematic and rigorous. The following mitigation sequence should be followed: 1. Avoidance of the adverse effect. 2. Minimization of the adverse effect. 3. Offsetting for the adverse effects (e.g., offsetting/conservation allowances).	• Very high disturbance activities (e.g. blasting) – 1000 metres. In the event that a migratory bird SAR nest is discovered during activities, it is prudent for the proponent to consult ECCC and/or NSDNR (depending on the species), regarding appropriate buffers and other mitigation measures, and to prepare and implement a monitoring plan to verify their efficacy. <u>Sensory Disturbance caused by Noise</u> ECCC recommends the following best management practices for noise disturbance issues: • Develop mitigation for programs that introduce very loud and random noise disturbance (e.g., blasting programs) during the migratory bird breeding season for their region. • Where possible, prioritize construction works in areas away from natural vegetation while working during the migratory bird breeding season. Conducting loud construction works adjacent to natural vegetation should be completed outside the migratory bird breeding season. • Keep all construction equipment and vehicles in good working order and loud machinery should be muffled if possible. <u>Sensory Disturbance caused by Lighting Attraction</u> The proponent should consider the following mitigation measures when designing the Project's Lighting Plan: • Use the minimum amount of aviation safety, warning and obstruction lighting needed on tall structures. Warning lights should flash and completely turn off between flashes; • Use the fewest number of site-illuminating lights possible in the project area. Only use strobe lights at night, at the lowest intensity and the smallest number of flashes per minute allowable by Transport Canada. • Reduce lighting levels during inclement weather events that may force migratory birds to land, or fly at lower altitudes, to prevent birds from landing in areas that would cause collisions; • Avoid or restrict the time of operation of exterior decorative lights such as spotlights and floodlights whose function is to highlight features of buildings or to illuminate an entire building. These lights, especially during periods of inclement weather, can draw birds from far away. Turn off these lights during migration season when the risk to birds is highest, and during periods when birds are dispersing from their nests or colonies; • Shield safety lighting so that the illumination shines down. Only install safety lighting where it is needed, without compromising safety;	Centre (ACCDC http://accdc.com/index.html). If necessary, this information can be supplemented with field surveys by qualified individuals (with expertise in conducting the types of surveys required) at the appropriate time of year. Baseline information and any survey data can be used by the proponent to help develop mitigation measures to avoid adverse effects on species at risk. It should be noted that although a species may not be confirmed in an area, it does not necessarily mean that it does not occur there, <u>especially if habitat appropriate for the species is available.</u> If requested, ECCC will be in a better position to comment on potential effects and mitigation for this project once adequate biophysical information is provided. ECCC can provide standard (not specific to the project) mitigation measures that are broadly applicable to migratory birds in its absence. Many of the proponent's proposed mitigation measures for species at risk are framed using ambiguous language (e.g., "where feasible", "as practical", etc.) and therefore do not constitute clear commitments. The proponent should revise their approach by: (1) clearly stating firm commitments to mitigation measures; (2) defining objective criteria for determining when measures are not feasible; and (3) identifying contingency
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		whiskers (Special Concern).		<u>Sensory Disturbance</u> Noise and vibration from site preparation, the use of heavy equipment and blasting, artificial lighting, human presence, and disturbance from construction, operation, maintenance and decommissioning activities may result in injury, mortality, sensory disturbance and change in habitat use. The amount, duration, frequency, and timing of disturbance are important to understand potential effects. Sensory disturbance may make adjacent habitats unsuitable for use by migratory birds and cause avoidance effects in many species. <u>Lighting Attraction</u> Night-flying birds may be attracted to lights, resulting in possible injury or mortality: • Equipment and building strikes; • Disorientation and increased energy expenditure, which may lead to exhaustion and increased predation. <u>Accidental Releases of Hazardous Substances</u> (e.g., tailings, fuel, hydrocarbons, etc.) Adverse effects on migratory birds and their habitat could result from accidental release of hazardous substances. Depending on the nature of the release (e.g., toxicity, volume, exposure pathways),	• Shield street and parking lot lighting so that little escapes into the sky, and it falls where it is required. Consider using LED lighting fixtures as they are generally less prone to light trespass; • Limit construction activities to the day and avoid illuminating habitat adjacent to the worksite(s); • Develop a Bird Monitoring and Management Plan that describes what measures will take place to avoid incidental take. The Plan should include: ◦ Actions that will be used to prevent incidental take of migratory birds; ◦ A mortality monitoring plan that includes corrections for searcher efficiency, carcass persistence, and searchable area. For further guidance regarding lighting attraction, please see the “International Light Pollution Guidelines for Migratory Species”. <u>Accidental Releases of Hazardous Substances</u> The proponent must ensure that all precautions are taken by the contractors to prevent fuel leaks from equipment, and that a contingency plan in case of oil spills is prepared. Furthermore, the proponent should ensure that contractors are aware that under the MBCA, “no person shall deposit or permit to be deposited oil, oil wastes or any substance harmful to migratory birds in any waters or any area frequented by migratory birds”. Biodegradable alternatives to petroleum-based chainsaw bar oil and hydraulic for heavy machinery are commonly available from major manufacturers. Such biodegradable fluids should be considered for use in place of petroleum products whenever possible, as a standard for best practices. Fueling and servicing of equipment should not take place within 30-metres of environmentally sensitive areas, including shorelines and wetlands. ECCC recommends incorporating a Wildlife Emergency Response Plan into emergency response contingency plans for scenarios that may impact avifauna directly (injury or mortality, e.g., polluting incident) or indirectly (collisions causing mortality, stranding due to light attraction). For consideration in emergency response and contingency planning related to accidents and malfunctions, ECCC has prepared <i>Guidelines for Effective Wildlife Response Plans</i> (ECCC 2022) available online at: https://www.canada.ca/en/services/environment/wildlife-plants-species/national-wildlife-emergency-framework.html. Plans should include: • Measures to deter migratory birds from coming into contact with the oil or polluting substance;	measures applicable across all project phases and seasons. For migratory bird SAR, the proponent should place a priority on scheduling high-disturbance activities, including vegetation clearing, outside the core migratory bird breeding period (mid-April to late-August in this region. Also note that pre-clearing nest searches are not supported as effective mitigation for most habitat types. With regard to species at risk, the proponent should identify potential adverse effects on listed species and critical habitat and implement mitigation measures that are consistent with applicable Recovery Strategies, Action Plans, and Management Plans. The proponent should also commit to follow-up monitoring to verify predicted effects and mitigation effectiveness, and to implementing adaptive management where adverse effects to species at risk or their critical habitat occur.
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				and the location and duration of the release, effects on wildlife could be acute, chronic, or both. Contamination of the environment through accidental spills can result in the destruction or disturbance of nests and eggs, contamination of feathers, which can be detrimental to waterproofing capabilities, and change in food quantity/quality.		- Measures undertaken if individuals of migratory birds and/or sensitive habitat become contaminated; and - The type, extent of monitoring, and reporting in relation to various spill events. The proponent is responsible for ensuring that all precautions are taken by the contractors to prevent fuel leaks from equipment, and that a contingency plan is prepared in the case of spills. Furthermore, the proponent should ensure that contractors are aware of s.5.1 MBCA prohibitions.	
ECCC-03	Critical Habitat for SAR species	The project area and footprint of the various mining footprint(s) overlap and/or are in close proximity (~5-10 km) to critical habitat for Boreal Felt Lichen (SARA-listed, Endangered), Wrinkled Shingle Lichen (SARA-listed, Threatened), Vole Ears Lichen (SARA-listed, Endangered), Wood Turtle (SARA-listed, Threatened), Little Brown Myotis (SARA-listed, Endangered), Northern Myotis (SARA-listed, Endangered), and Tri-colored Bat (SARA-listed, Endangered). The activities linked to the construction, operation, maintenance, and decommissioning of the proposed project could have adverse effects on the critical habitat of the noted species. ECCC acknowledges that the Province of Nova Scotia's Department of Natural	The nature of the effects to wildlife species and habitat (including critical habitat defined under the SARA) can vary based on a number of factors, including: project location, duration, scale, and configuration; ancillary project activities (e.g., land clearing, grubbing); existing cumulative effects; the type of habitat that may be disturbed; and sensitivity of species found in the project area. The pathway through which potential effects are conveyed will depend on the land, air and water constituents associated with the site along with the behavioural adaptability, presence and interaction with the species limiting factor (e.g., habitat supporting staging, nesting, roosting, or foraging) and population resilience.	Activities linked to the construction, operation, maintenance and decommissioning of the proposed project may lead to the direct loss of CH through the removal or conversion of the biophysical attributes, and may be identified as "Activities Likely to Result in the Destruction of Critical Habitat" (ALTD) for the following SAR species. Boreal Felt Lichen (Section 7.3 and Table 5 of Recovery Strategy): - Activities that result in the removal of phorophytes, such as tree blazing, clear cutting, logging and tree harvesting. - Activities that result in the loss of trees within critical habitat such as clear cutting, logging, tree harvesting, road construction, and cottage development in adjacent areas. - Activities that alter the hydrology of the site and wetland such as road construction, infilling, clear cutting, tree harvesting, and	Under section 58 of the of the <i>Species at Risk Act</i>, "no person shall destroy any part of the critical habitat of any listed endangered species or of any listed extirpated species if a recovery strategy has recommended the reintroduction of the species into the wild in Canada– if: A) The critical habitat is on federal land, in the exclusive economic zone of Canada or on the continental shelf of Canada; B) The listed species is an aquatic species; or C) The listed species is a species of migratory birds protected by the <i>Migratory Birds Convention Act, 1994</i>." CH is defined as "the habitat that is necessary for the survival or recovery of a listed wildlife species and that is identified in a recovery document for the species". The proponent must manage activities to ensure compliance with the SARA and associated regulations. SARA Policy Guidelines (2016) are available at: Species at Risk Act: addressing considerations - Canada.ca Notification and Identification of Effects (SARA s. 79(1)(2)) Subsection 79(2) of SARA establishes a requirement to avoid or lessen all (direct and indirect) adverse effects of a project on listed wildlife species and critical habitat, regardless of the significance of those effects. Thus, in developing mitigation measures for listed wildlife species, the approach should be	There are a number of SAR (listed on Schedule 1 of the <i>Species at Risk Act</i> as Endangered or Threatened) that have CH within the project area and development footprint, and/or within close proximity (5-10 km); the proponent should avoid, minimize, and mitigate impacts (direct and indirect) to CH. Mitigation measures must be consistent with recovery strategies and action plans for the species as per SARA s.79(2). Indirect and direct effects should be considered. Boreal Felt Lichen is identified on Schedule 1 of SARA as Endangered. For more information on its CH designation, see Amended Recovery Strategy for the Boreal Felt Lichen (Erioderma pedicellatum), Atlantic population, in Canada. Vole Ears Lichen is identified on Schedule 1 of SARA as Endangered. For more information on its CH designation, see Recovery Strategy for the Vole Ears Lichen (Erioderma mollissimum) in Canada. Wrinkled Shingle Lichen is identified on Schedule 1 of SARA as Threatened. For more information on this species, see details on the species at risk public registry (Wrinkled Shingle Lichen (Pannaria lurida) - Species search - Species at risk registry) and the COSEWIC Assessment and Status Report on the Wrinkled Shingle Lichen (Pannaria lurida) in Canada. Wood Turtle is identified on Schedule 1 of SARA as Threatened. For more information on its CH designation, see Recovery Strategy for the Wood Turtle (Glyptemys insculpta) in Canada. Little Brown Myotis, Northern Myotis, and Tri-colored Bat are identified on Schedule 1 of SARA as Endangered. For more information on CH designation for SAR bats, see Recovery Strategy for the Little Brown Myotis (Myotis lucifugus), the Northern Myotis (Myotis	ECCC notes that the final Initial Project Description does not include comprehensive information regarding survey data/results, although ECCC acknowledges that baseline surveys remain ongoing in 2025. Based on the limited biophysical baseline information provided to date, it is not currently possible to adequately evaluate the potential effects on Boreal Felt Lichen, Vole Ears Lichen, Wrinkled Shingle Lichen, Wood Turtle, Little Brown Myotis, Northern Myotis, and Tri-colored Bat and their CH.

		Resources holds technical expertise, jurisdiction, and management authority for birds not protected by the MBCA (e.g., raptors), and terrestrial species at risk (SAR) including bats, reptiles, amphibians, land-mammals, insects, plants, and lichen. ECCC advice on these species is derived from federal recovery strategies produced as per the <i>Species at Risk Act</i> and are focused on species recovery.		cottage development. Vole Ears Lichen (Section 7.3 of Recovery Strategy): • Activities that remove of damage host trees...examples include tree blazing, clear cutting, logging, and tree harvesting. • Activities that result in loss or removal of trees from adjacent areas (including unoccupied trees) ...examples include clear cutting, logging, tree harvesting, road construction, and cottage development in adjacent areas. • Activities that alter the hydrology of the wetland adjacent to or hosting the lichen...examples include road construction, infilling, clear cutting, tree harvesting, and cottage development. Wood Turtle (Section 7.3 and Table 7 of Recovery Strategy): • Construction of road infrastructure. • Deforestation and forest alteration. • Complete or partial drainage or filling of wetlands. • Shoreline and streambed alteration. • Hydrological alteration. • Sediment loading. Little Brown Myotis, Northern Myotis, Tri-	systematic and rigorous. The following mitigation sequence should be followed: 1. Avoidance of the adverse effect. 2. Minimization of the adverse effect. 3. Offsetting for the adverse effects (e.g., offsetting/conservation allowances).	septentrionalis), and the Tri-colored Bat (<i>Perimyotis subflavus</i>) in Canada.	
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				colored Bat (Section 7.3 and Table 8 of Recovery Strategy): • Activities that cause excessive disturbance (e.g., light, noise, vibrations or visitation), such as mining exploration and development, quarrying, excavating, caving, forestry, research, and other practices. • Activities that alter the microclimate characteristics (e.g., airflow or hydrology), limits access (e.g., collapse, flood) or directly removes (e.g., excavation) the hibernaculum, such as quarrying, mining exploration and development, agriculture, forestry, dam construction, and other practices. Note that there is no Recovery Strategy or Action Plan specific to Wrinkled Shingle Lichen in Nova Scotia, so ALTD have not been identified, however, the following relevant threats in Nova Scotia have been identified within the COSEWIC Assessment and Status Report (2016): • Logging and wood harvesting. • Residential and commercial developments. • Transportation and service corridors.			
ECCC-04	Wetland alteration and destruction	Through field surveys and wetland functional assessments, the	Carrying out the project, particularly the activities related to construction, may alter	The destruction and alteration of wetlands is likely to have adverse effects on migratory	Wetlands provide important habitat and food sources for many species of migratory birds and SAR, the loss of which may contribute to adverse impacts to species	To promote wetland conservation, which is vital to many migratory birds and species at risk, ECCC recommends the following general beneficial management practices: • Developments on wetlands should be avoided.	ECCC recommends the development of a Wetland Compensation Plan that fully

		proponent has identified several wetlands within the project and focus areas, including a number of areas that may contain potential wetlands of special significance (WSS), per Nova Scotia's <i>Wetland Conservation Policy</i> based on presence of suitable habitat known to support species at risk. The activities linked to the construction, operation, maintenance, and decommissioning of the proposed project could have adverse effects on migratory birds and SAR.	the existing hydrological regimes essential for maintaining wetlands and thus affect the quality or availability of habitat for migratory birds and SAR.	birds and SAR that use these areas for breeding, foraging, resting and migration, notably Canada Warbler (SARA-listed, Threatened), and Olive-sided Flycatcher (SARA-listed, Special Concern).	that fall under federal jurisdiction under the <i>Migratory Birds Convention Act</i> and its associated regulations (<i>Migratory Bird Regulation, 2022</i>) and the <i>Species at Risk Act</i> (SARA).	- Where development does occur in the vicinity of wetlands, a minimum vegetation buffer zone of 30 metres should be maintained around existing wetland areas. - Hydrological function of the wetland should be maintained. - Runoff from development should be directed away from wetlands. - Implement a 30-metre buffer from the high-water mark of any water body (1:100 Flood Zone) to maintain movement corridors for migratory birds. The impact assessment should include information on how the proponent intends to avoid, minimize or mitigate the potential loss of wetlands. Where avoidance or minimization is not possible, the proponent may develop a Wetland Compensation Plan that outlines measures to offset the residual loss of wetland habitat and/or function as a result of the Project. More information can be found at Operational Framework for Use of Conservation Allowances (publications.gc.ca). ECCC advocates the goal of no net loss of biodiversity for all development projects that have the potential to adversely affect biodiversity under their mandate. The disturbance or loss of wetlands may have adverse effects on migratory birds and species at risk that use these areas for breeding, foraging, resting and migration.	describes the mitigation hierarchy, including: - Identification of wetlands potentially affected by the project; - A detailed description of potential effects, and the reasons why avoidance and minimization of impacts were determined to not be possible; and - Identification and justification of proposed offset ratio. As a mitigation measure to compensate for the lost wetland habitat function associated with migratory birds and species at risk or species of conservation concern, in instances where such habitat cannot be avoided, ECCC recommends the use of conservation allowances as the last step in the mitigation hierarchy of avoidance, minimization, on-site restoration and offsetting.
ECCC-05	Greenhouse Gas Emissions Assessment	The construction, operation, and decommissioning of the proposed project will result in GHG emissions and/or impacts to carbon sinks.	N/A	Although unlikely to be a key issue material to the decision-making for this project and not an effect within federal jurisdiction, the assessment of GHG emissions and carbon sinks from this project would be relevant in considering the extent to which the effects of the designated project hinder or contribute to the Government of Canada's ability to meet its environmental obligations and its commitments in respect of climate change (IAA	Whether a project is federally or provincially regulated, the IAA requires consideration of the project's GHG emissions, in terms of the projects' contribution to Canada's climate change objectives, to inform the federal Minister's decision-making. Application of SACC would generate the information to support this analysis and may be useful to the Minister's decision making for the project. The Proponent states that a post-2050 net-zero plan is not required. However, a credible net-zero plan is required for all project activities, including reclamation or post-closure monitoring, to align with the SACC	While the Proponent stated that a post-2050 net-zero plan is not required, a credible net-zero plan is required for all project activities to align with the SACC. ECCC recommends that the Proponent follow Section 3.5.1 of the draft Technical Guide to develop a credible net-zero plan for the anticipated emissions in 2050 and after.	ECCC notes the proponent's acknowledgment and use of the SACC and recommends consideration of post-2050 emissions.

				s.22(i) factor to be considered). The Proponent states that a net-zero plan is not required, although there are anticipated project activities post-2050.			
ECCC-06	Fish and Fish Habitat	The activities linked to the construction, operation, and decommissioning of infrastructure can have adverse effects on the quality of groundwater and surfacewater.	Once each mine site reaches recognized closed mine status under the MDMER, discharges from the mine are no longer subject to the MDMER discharge limits but rather to the more stringent provisions of section 36.3 of the Fisheries Act. Discharge.	Environment and Climate Change Canada (ECCC) is responsible for the administration of subsection 36(3) to (6) of the Fisheries Act which prohibits the deposit of a deleterious substance in waters frequented by fish unless authorized by regulations. The nature of potential impacts to water quality is common to this project type.	Any potential effect within federal jurisdiction would be related to the release of contaminants into watercourses and waterbodies that could lead to effects on fish or fish habitat or of migratory birds as well as For each of the 3 mine locations, a post-closure scenario is described involving the breaching of pit lake containment structures where discharge enters the natural environment once it meets discharge criteria.	The proponent should demonstrate how treatment of discharge water will not adversely affect waters frequented by fish for all stages of the mine life including post-closure.	Provide more detail on post-closure water treatment to demonstrate how discharges will be managed once the mine sites reach closed mine status.

Please insert additional rows as necessary.