

LAKE MANITOBA AND LAKE ST. MARTIN OUTLET CHANNELS PROJECT
RESPONSE TO IAAC TECHNICAL INFORMATION REQUESTS

Question IAAC-48

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Abbreviations and Acronyms

CEnvPP	construction environmental protection plan
ECCC	Environment and Climate Change Canada
EIS	environmental impact statement
IAAC	Impact Assessment Agency of Canada
LAA	local assessment area
LMOC	Lake Manitoba outlet channel
LSM	Lake St. Martin
LSMOC	Lake St. Martin outlet channel
PDA	project development area
PER	Project Environmental Requirement
PR	provincial road
RAA	regional assessment area

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EIS Guideline Reference: 7.1.9 Species at Risk; 7.4 Mitigation measures

EIS Reference: 8.3.6.2 Change in Habitat

Context and Rationale

The EIS Guidelines require that the proponent provide information to support the assessment of the potential effects of the Project on SAR and mitigations for these effects.

Subsection 79 of the SARA establishes a requirement to avoid or lessen all adverse effects of a Project on listed wildlife species and critical habitat and to monitor them, regardless of the significance of those effects. The methods are to be consistent with any applicable recovery strategy or recovery plans. It is necessary that appropriate baseline information is collected and that mitigation plans are clearly understood.

Hibernacula are critical habitat, and maternal roosts contribute to the survival and recovery of bat species, as per the Environment and Climate Change Canada Recovery Strategy (2018).

Reports referenced in the EIS (EEI 2017a, b) state that two bat SAR, little brown myotis and northern myotis, were detected in the baseline Project surveys completed in 2016, which also identified habitat features in the Project LAA which could potentially be used for overwintering (hibernacula) by bats. Mortality caused by winter construction and potential alterations to hibernacula, or potential measures to mitigate these effect were not described in sufficient detail.

The EIS identifies potential project effects to maternal roosting habitat for myotis (sp.) and includes mitigation measures, including tree habitat retention and removal strategies. Even when unoccupied, removal of trees suitable for maternal roosting habitat limits the capacity of habitat available for subsequent seasons and may hamper species recovery. An evaluation of suitable alternative maternity roosting habitat is necessary to fully assess effects and effectiveness of the mitigation strategy.

Information Requests

- a) Identify hibernacula and maternity roosts used by little brown myotis and northern myotis in the Project LAA and:
 - i. describe the elevation of hibernacula features, and
 - ii. assess the potential for Project effects to these key wildlife sensitive areas as a result of abiotic environmental changes (humidity, temperature, moisture) that may occur as a result of Project-related landscape changes in the area (such as potential ground water/surface water fluctuations).

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- b) Describe mitigation measures to avoid and lessen Project effects to little brown myotis and northern myotis during the life of the Project, including mortality effects and disturbances to or loss of hibernacula and maternal roosting habitat.
- c) Discuss the amount of possible maternity roosting habitat that is available for little brown myotis and northern myotis in the RAA and describe the potential indirect effects to critical habitat in the RAA. Discuss potential loss of possible maternity roosting within the Project area or LAA, relative to overall available maternity roosting habitat in the RAA.

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- a) (i.) and (ii.)

The elevation data of bat hibernacula features cannot be provided because there are no known hibernacula or critical habitats for bats within the Local Assessment Area (LAA; Bilecki 2003; ECCC 2018) (Volume 3, Section 8.3.4.1). The potential bat hibernacula features detected during baseline investigations were within the Local Study Area (LSA) for the Lake St. Martin (LSM) access road (EEI 2017a, b), which is not a component of this Project (Section 3.4 and Figure 1B-4) and not within the Project's 1 km LAA. Upon further investigation, these sites were not found to support bats. The LAA around the Lake Manitoba Outlet Channel (LMOC) is subject to a high degree of anthropogenic development (e.g., farming) and it is unlikely there would be undiscovered natural hibernacula (i.e., caves) with the potential to support overwintering bats. The Lake St. Martin Outlet Channel (LSMOC), while relatively undisturbed, is predominantly wetland habitat (i.e., fen, swamp; Figure 8.2B-4) and unlikely to provide conditions suitable for the existence of bat hibernacula. Site selection for Project components such as quarries and camps will follow procedures outlined in Project Environmental Requirements (PERs), which include steps to avoid sensitive wildlife habitats (Volume 1, Section 3.7 and Appendix 3F). As a result, Project-related effects on bat hibernacula are not expected, including effects from potential abiotic environmental changes (Volume 3, Section 8.3.6.2).

Maternity roosts have not been identified within the LAA but could occur where mature or large diameter trees exist (COSEWIC 2013). Based on land cover data and fire history, availability of mature forested habitats (40-80 years) in the Project Development Area (PDA) is limited, and average age of trees is 30 years (Volume 3, Section 8.2.2.2 and Figure 8.2B-5). Average age of trees within the provincial road (PR) 239 PDA is 55 years; however, tree clearing will be minimal as the route follows an existing municipal road alignment (Volume 1, Section 3.7 and Appendix 3F).

- b) The primary pathways for Project effects on bats are vegetation removal and noise disturbance during construction (Volume 3, Section 8.3.6.2). Construction adjacent to known bat maternal roost sites, will be subject to mitigation outlined in the Construction Environmental Protection Plan (CEnvPP) Mapping, and PERs (Volume 1, Section 3.7 and Appendix 3F), which will reduce potential

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disturbance (e.g., through compliance with activity restriction windows and buffers; see IAAC-49) and mortality risk (e.g., clearing prescriptions). Specific mitigation includes:

- If future investigations along the PDA, such as monitoring that occurs during clearing and/or construction works reveal the presence of maternity roosting bats, mitigation may include retaining large diameter trees where safe and technically feasible to do so, or maintaining buffers/setbacks as per PER 2.9.1 (Volume 1, Appendix 3F).
 - If removal is required, removal activities will be scheduled, to the extent practical, outside the core maternity roosting season for bats (May 1 to August 31; Fenton and Barclay 1980; Barclay 1982, 1984). If tree clearing is required during the maternity roosting period, a qualified biologist will review the trees to determine the likelihood of occupancy before removal (Volume 1, Appendix 3F, PER 2.9.1).
- c) The Project is not expected to directly or indirectly affect critical bat habitat, which for little brown myotis and northern myotis, is defined as any site where these species have been observed hibernating (e.g., caves; ECCC 2018). Known critical bat habitat does not exist within the LAA, nor is it expected to occur. The closest bat critical habitat is located outside of the LAA near Gypsumville, Manitoba.

The RAA contains 38,796 ha (11.5%) forested habitats that may have the potential to provide maternal roosting habitat for little brown myotis and northern myotis, excluding artificial habitats (i.e., anthropogenic structures). Less than 1% of available forest cover, or potential maternity roosting habitat, in the RAA will be lost as a result of the Project. Overall, maternal roosting habitat within the RAA is not limited and potential Project-related effects on maternal roosting habitat in the LAA are expected to be low as a result of construction activity requirements and mitigation listed in the PERs (see response in Part a).

References

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