

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

Question IAAC-49

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Abbreviations and Acronyms

EIS	environmental impact statement
EPP	environmental protection plan
IAAC	Impact Assessment Agency of Canada
MI	Manitoba Infrastructure
PDA	project development area
PER	Project Environmental Requirement
RAA	regional assessment area
SAR	species at risk
SOCC	species of conservation concern

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EIS Guideline Reference: 7.3.2. Migratory Birds; 7.3.5. Species at Risk; 7.4. Mitigation Measures

EIS Reference: 8.3 Wildlife; 11.6.5.3 Residual Cumulative Effects on Change in Wetland Functions

Context and Rationale

The EIS Guidelines require the proponent to describe mitigation measures in relation SAR that are consistent with any applicable recovery strategy and action plans.

Subsection 79(2) of SARA establishes a requirement to avoid or lessen all adverse effects of a Project on listed wildlife species and critical habitat, regardless of the significance of those effects.

Commitments to avoid direct Project effects to migratory birds and SAR by scheduling Project activities and using setback buffers are key mitigation measures noted throughout the Project EIS. Some commitments throughout the EIS appear to be contradictory or incomplete.

Clarification of these key mitigation measures is needed in order to understand whether there will be residual environmental effects associated with the Project.

Information Requests

- a) Describe the details of commitments associated with Project scheduling and setbacks:
- i. Provide a definition of “known sensitive wildlife habitat.”
 - ii. Describe critical lifecycle periods for each SAR and migratory bird species potentially affected by the Project.
 - iii. Define the intended avoidance periods for Project activities that coincide with bird breeding and nesting seasons.
 - iv. Define the intended avoidance periods for Project activities that coincide with reproduction of other wildlife, including SAR.
 - v. Describe the provincial terrestrial setback distances proposed for the Project.

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a) Responses are outlined below.

- i. Sensitive wildlife habitats are those known to support species at risk (SAR), species of conservation concern (SOCC), colonial waterbirds and/or other wildlife species having potential to occur in the Regional Assessment Area (RAA) (Volume 3, Table 8.3A-1 and 8.3A-2) during critical life stages. Sensitive wildlife habitats include but are not limited to those identified in recovery strategies, action plans, management plans, setback guidance documents, and/or those found during baseline studies. Sensitive wildlife habitats may contain key wildlife features, such as nests, dens, roosts, colonies, leks, and mineral licks.
- ii. The critical lifecycle period for migratory birds, including bird SAR, is the breeding season (April 27-August 14; Nesting Zone C5; ECCC 2019). Based on regional occurrence data, other SAR having potential to be affected by the Project are little brown myotis, northern myotis, and northern leopard frog. For bat SAR, the critical lifecycle period is the maternity roosting season (May 1-August 31; Fenton and Barclay 1980; Barclay 1982, 1984) and for northern leopard frog is the breeding period (mid-April to mid-May [MHA 2020]). Table IAAC 49-1 below provides a listing of activity restriction dates for all species, including for species unlikely to regularly occupy the RAA. Activity restrictions have been identified to reduce disturbance to wildlife during critical lifecycle periods (e.g., reproductive period) as committed to in the environmental impact statement (EIS) (Volume 3, Section 8.3.6).
- iii. Vegetation removal activities will be timed to avoid the primary nesting season for migratory birds in the Project Development Area (PDA; April 27 to August 14; Nesting Zone C5; ECCC 2019) and as indicated in the Project Environmental Requirements (PERs; EIS Volume 1, Appendix 3F). MI has committed to a more conservative period to avoid clearing (April 1 and August 31; Volume 1, Section 3.7.2 and Appendix 3F). All other construction activities have the potential to occur year-round, but are not anticipated to impact bird breeding or nesting.
- iv. Project construction will be year-round. However, vegetation clearing activities will be timed to avoid the core maternity roosting season for bats (May 1 to August 31; Fenton and Barclay 1980; Barclay 1982, 1984; Volume 1, Section 3.7.2 and Appendix 3F). Setbacks described in Table IAAC 49-1 and the Environmental Protection Plan (EPP) will be applied to sensitive wildlife features, such as raptor nests, bear dens, and furbearer dens (see response to a. i.) if encountered during construction (Volume 1, Section 3.7.2; Appendix 3F).
- v. The Province of Manitoba does not have a comprehensive list of terrestrial setbacks beyond what is provided for birds (MB CDC 2015) and some wildlife features (e.g., nests, dens, mineral licks, hibernacula; Government of Manitoba 2017). As part of MI's commitment to environmental protection, MI has drawn on other jurisdictions (Environment Canada 2009; SK MOE 2017) or best management practices (Manitoba Hydro 2019) to outline applicable setbacks for wildlife and wildlife features. The terrestrial setback distances proposed for the Project, including those

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defined by the Province of Manitoba, are identified in Table IAAC 49-1 and will be included in the Wildlife Monitoring Plan.

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Table IAAC-49-1 Recommended Setback Distances and Restricted Activity Periods for the Lake Manitoba and Lake St. Martin Outlet Channels Project

Species or Feature ¹		Key Wildlife Feature	Restricted Activity Period	Recommended Setback Distance by Disturbance Category (meters) ²		
Common Name	Scientific Name			Low	Medium	High
Mammals						
American badger ^a	<i>Taxidae taxus</i>	Active den	Year round	100	500	500
Black bear ^b	<i>Ursus americanus</i>	Active den	Year round	150	150	150
Little brown myotis ^{a,c}	<i>Myotis lucifugus</i>	Roost	May 1 – August 31	100	500	500
Northern myotis ^{a,c}	<i>Myotis septentrionalis</i>	Roost	May 1 – August 31	100	500	500
Bat cave ^d	-	Cave	Year round	200	200	200
Wolverine ^e	<i>Gulo gulo</i>	Den	Year round	100	250	500
Mineral lick ^b	-	Mineral lick	Year round	120	120	120
Denning species (e.g., red fox, coyote, gray wolf, American marten, fisher, least weasel) ^c	-	Active den	Year round	50	50	50
Birds						
American white pelican	<i>Pelecanus erythrorhynchos</i>	Nesting colony	April 1 - August 31	500	750	100
Bald eagle	<i>Haliaeetus leucocephalus</i>	Active or traditional nest site	March 15 - July 15	250	500	1000
Bank swallow	<i>Riparia riparia</i>	Nesting colony	May 15 - July 31	50	150	300
Barn swallow	<i>Hirundo rustica</i>	Nest site	May 15 - Sept. 30	50	100	100
Barred owl	<i>Strix varia</i>	Active or traditional nest site	March 15 - July 15	250	500	1000
Bobolink	<i>Dolichonyx oryzivorus</i>	Nest site	May 15 - August 15	100	250	400
Boreal Owl	<i>Aegolius funereus</i>	Nest Site	March 1 - July 15	250	500	1000
Canada warbler	<i>Cardellina canadensis</i>	Nest site	May 1 - July 31	200	300	450
Common nighthawk	<i>Chordeiles minor</i>	Nest site	May 1 - August 31	100	200	300

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Common Name	Scientific Name			Low	Medium	High
Double-crested cormorant	<i>Phalacrocorax auritus</i>	Nesting colony	April 1 - August 31	400	500	750
Eastern whip-poor-will	<i>Antrostomus vociferous</i>	Nest site	May 15 - July 16	100	200	300
Eastern wood-pewee	<i>Contopus virens</i>	Nest site	May 15 - August 15	50	150	300
Golden-winged warbler	<i>Vermivora chrysoptera</i>	Nest site	May 15 - August 6	200	300	450
Great gray owl	<i>Strix nebulosa</i>	Active or traditional nest site	Feb. 15 - July 15	250	500	1000
Grebes	-	Nesting colony	May 15 - July 15	100	200	400
Gulls/terns	-	Nesting colony	May 1 - July 15	400	500	750
Hérons	-	Nesting colony	April 1 - August 31	400	500	750
Horned grebe	<i>Podiceps auratus</i>	Nest site	May 1 - Sept. 15	100	200	400
Least bittern	<i>Ixobrychus exilis</i>	Nest site	May 1 - July 31	100	200	400
Northern hawk owl	<i>Surnia ulula</i>	Nest site	Feb. 15 - July 15	250	500	1000
Osprey	<i>Pandion haliaetus</i>	Nest site	August 1 to March 31	100	100	100
Olive-sided flycatcher	<i>Contopus cooperi</i>	Nest site	May 1 - August 31	50	150	300
Piping plover	<i>Charadrius melodus</i>	Active or traditional nest site	April 15 - August 15	200	400	600
Red-headed woodpecker	<i>Melanerpes erythrocephalus</i>	Nest site	April 15 - August 15	50	100	200
Rusty blackbird	<i>Euphagus carolinus</i>	Nest site	May 1 - July 31	50	150	300
Sharp-tailed grouse ³	<i>Tympanuchus phasianellus</i>	Lek	Mar 15 - May 15	200	500	100
Short-eared owl	<i>Asio flammeus</i>	Nest site	April 15 - Sept. 15	200	300	500
Trumpeter swan	<i>Cygnus buccinator</i>	Nest site	April 1 - July 31	500	750	1000
Yellow rail	<i>Coturnicops noveboracensis</i>	Nest site	May 1 - July 15	100	150	300

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Common Name	Scientific Name			Low	Medium	High
Amphibians and Reptiles						
Northern leopard frog ^a	<i>Lithobates pipiens</i>	Hibernaculum and breeding habitat	Year round	10	200	500
Red-sided garter snake ^b	<i>Thamnophis sirtalis</i>	Hibernaculum	Year round	200	200	200
Snapping turtle ^{3, a}	<i>Chelydra serpentine</i>	Nest site	March 15 - June 30	0	400	400
¹ - Recommended setback distances and restricted activity periods are derived from Manitoba Conservation Data Centre's Recommended Development Setback Distances from Birds document (MB CDC 2015) unless otherwise specified (see a-c below) ^a - Saskatchewan Ministry of Environment's Saskatchewan Activity Restriction Guidelines for Sensitive Species (SK MOE 2017) ^b - Manitoba Hydro's Manitoba-Minnesota Transmission Project Construction Environmental Protection Plan ^c - Core maternity roost period for bats as defined by Fenton and Barclay (1980) and Barclay (1982 and 1984) ^d - Manitoba's Forest Management Guidelines for Terrestrial Buffers (Government of Manitoba 2017) ^e - Environment Canada's Petroleum Industry Activity Guidelines for Wildlife Species at Risk in the Prairie and Northern Region (Environment Canada 2009) ² - Low: foot traffic, occasional/infrequent/short-term small vehicle (<1 ton) or ATV use; medium: trucks>1 ton, regular/frequent/long-term small vehicle (<1 ton) or ATV use; High: road, distribution line, or outlet channel construction, forest harvest, rock crushing, asphalt batching, quarry or gravel pit operation ³ - low disturbance category considered as foot traffic only, all other activities (i.e., occasional/infrequent/short-term small vehicle (<1 ton) or ATV use considered medium disturbance).						