

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

Question IAAC-45

Table of Contents

ABBREVIATIONS AND ACRONYMSII

QUESTION IAAC-45 1

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

Question IAAC-45

Abbreviations and Acronyms

EIS	environmental impact statement
km	kilometre
LAA	local assessment area
LMOC	Lake Manitoba outlet channel
LSMOC	Lake St. Martin outlet channel
PDA	project development area
ROW	right-of-way
SAR	species at risk

Question IAAC-45

QUESTION IAAC-45

EIS Guideline Reference: 3.2.3 Spatial and temporal boundaries

EIS Reference: 8.3.1.4 Boundaries; 8.3.6.2 Changes in Habitat; 8.3.6 Assessment of Residual Effects on Wildlife

Context and Rationale

The EIS Guidelines require the establishment of spatial and temporal boundaries to support the assessment of effects to wildlife, including migratory birds and SAR.

The EIS defines the spatial boundaries for the LAA as a one km buffer beyond the PDA. The referenced wildlife survey reports (EEI 2017a, b) consider a five km buffer from the PDA centerline.

The proponent defines temporal boundaries of the wildlife assessment as one to two years after construction. Some of the mitigations and evaluation of residual effects on wildlife (including SAR) are contingent on reclamation of disturbed sites, including corridors. The EIS states habitat loss would eventually soften through reclamation or natural revegetation. Within established temporal boundaries, reclaimed land is unlikely to be suitable habitat within established temporal boundaries and therefore residual effects will persist.

Appropriate spatial and temporal boundaries are necessary to support understanding of potential effects to wildlife, including migratory birds and SAR and proposed measures to mitigate those effects.

Information Requests

- a) Present the rationale for the discrepancy between wildlife LAA chosen for the EIS compared to that considered in the referenced wildlife reports. Describe the implications for the assessment of effects to wildlife of using one km buffer instead of the five km buffer.
- b) Discuss how the temporal boundaries considered the time required for reclamation to re-establish habitat as an effective mitigation for wildlife effects. Provide leading indicators for successful reclamation of suitable habitat for SAR, migratory birds, and species of cultural significance.

Response IAAC-45

- a) The delineation of study areas and assessment areas are often different because they serve different purposes (i.e., study areas defined for data collection and assessment areas defined for effects evaluation). The 5 km local study area (LSA) used in the 2017 wildlife survey reports (EEI 2017a, b) was established as a geographic area for the collection of wildlife and wildlife habitat survey data. At the time surveys were conducted, the preferred channel route was preliminary and the zone of influence had yet to be determined. The environmental impact statement (EIS) used a refined 1 km local assessment area (LAA) following establishment of the final preferred channel routes, which

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

Question IAAC-45

allowed for a more representative assessment of potential direct and indirect Project effects. There are no implications to the assessment of effects to wildlife as the wildlife LAA captures measurable effects on wildlife having potential to occur in the region. See Volume 3, Section 8.3.1.4 for the rationale supporting the selection of the 1 km LAA.

- b) The temporal boundaries for the wildlife assessment cover the duration of the construction and operation and maintenance phases of the Project. The construction duration is estimated to occur over 2.5 to 3 years with approximately 1 to 2 years for post construction-related works (Volume 1, Section 3.6). The operation and maintenance phase of the Project is expected to be indefinite because the Project will not be decommissioned (Volume 3, Section 8.3.1.4). Additionally, the duration of the potential Project-related environmental effects are characterized as either short-term (< 1 year), medium-term (>1 year to 10 years), or long-term (>10 years) (Volume 3, Section 8.3.1.5). Medium-term duration is considered appropriate for the reestablishment of vegetation (e.g., grasses, forbs) through reclamation (BLM 2000; Nature Conservancy 2017). The term “long-term” is appropriate for natural reestablishment of vegetation or the establishment of trees in reclaimed areas. As such, these timeframes are considered suitable for assessing reclamation and re-establishment of habitat as an effective mitigation for wildlife effects.

Leading indicators for successful reclamation of habitat along the right-of-way (ROW) will be described in the Lake Manitoba Outlet Channel (LMOC) and Lake St. Martin Outlet Channel (LSMOC) Revegetation Plan(s). Leading indicators for species at risk (SAR), migratory birds, and species of cultural significance may include but are not limited to the following:

- Wildlife use of the reclaimed areas, which will involve metrics and targets outlined in the Wildlife Monitoring Plan. Portions of the reclaimed Project development area (PDA) (e.g., channel berms) will support early seral SAR (e.g., bobolink), migratory birds, and species of cultural significance (e.g., furbearers, upland gamebirds) in the medium-term (>1-10 years) but will provide habitat for species dependent on mature land cover types in the long-term (>10 years), where appropriate.
- Artificial habitat feature use (e.g., nesting cavities for red-headed woodpecker, bat houses) that may potentially be used to provide additional or compensatory habitat for target SAR in portions of the reclaimed PDA, as would be outlined in the Wildlife Monitoring Plan.

References

- BLM. 2000. Record of Decision Environmental Impact Statement Continental Divide/ Wamsutter II Natural Gas Project, Sweetwater and Carbon Counties, Wyoming. Bureau of Land Management, Rawlins and Rock Springs Field Offices.
- EEI (EcoLogic Environmental Inc.). 2017a. Lake Manitoba outlet channels: wildlife technical report. Prepared for M. Forster Enterprises. Winnipeg, MB.
- EEI. 2017b. Lake Manitoba outlet channels: wildlife technical report. Prepared for M. Forster Enterprises. Winnipeg, MB.

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

Question IAAC-45

Nature Conservancy 2017. Restoring your crop field to conservation prairie. Available at:

<file:///C:/Users/lwyenberg/Downloads/Restoration-Guide-Crop-to-Conservation-Prairie.pdf>