

13 RAPTOR NEST MONITORING

13.1 Overview

The raptor (e.g., hawks, eagles, falcons and owls) nest monitoring program is designed to determine Project-related effects, and the success of mitigation strategies to prevent disturbance to nesting raptors. Within the Meadowbank LSA and AWAR LSA, peregrine falcons have previously nested in quarries along the AWAR, the Portage Pit, and Goose Pit. Monitoring of peregrine falcon nests in quarries along the AWAR has been conducted since 2009. The Portage, Goose, Vault, Whale Tail, and IVR Pits are inspected for peregrine falcon activity daily prior to and during the nesting season and managed under the Peregrine Falcon Management and Protection Plan (Appendix E, Agnico Eagle 2025a).

Monitoring in 2025 included surveys for nests associated with pits and quarries along the AWAR and WTHR. Raptor activity and potential nest locations were also noted on other surveys including road surveys, viewshed surveys, freshet monitoring, and on-site environmental monitoring. Structured surveys for Arctic raptors were not completed during 2025. The most recent Arctic raptor report included data from 2015 to 2024 and is available in Appendix G of the 2024 Wildlife Monitoring Summary Report (Agnico Eagle 2025).

13.2 Objectives

The objectives of the raptor nest survey monitoring program are to monitor disturbance to nesting raptors, and Project-related mortality of raptors. Nest management plans are developed for nests in proximity to the Project. One mortality, and one nest failure are thresholds for the Project.

13.3 Duration

Raptor nest monitoring will continue throughout operation and closure stages of the Mine to evaluate if mitigation measures to prevent disturbance to nesting raptors are successful.

13.4 Methods

13.4.1 Nest Monitoring

Raptor nests within 1.5 km of the active footprint and Project facilities require monitoring from 1 May to 15 September. Daily monitoring is required for nests within the active footprint, or within 500 m of Project facilities (i.e., the area of concern; Agnico Eagle 2025a), and weekly monitoring is required for nests outside the area of concern. Nest management plans are developed as required, in consultation with subject matter experts and the GN. This includes establishment of no-disturbance buffers in accordance with BC Guidelines for Raptor Conservation or TAG recommendations. If raptor nesting activity is detected in the Portage, Goose, Whale Tail, and IVR Pits, or other site infrastructure, the Environment Department is notified, and these pits are then inspected daily for nesting activity from 25 May to 1 July. Management and mitigation approaches for peregrine falcon nests in proximity to pits and facilities are outlined in the Peregrine Falcon Management and Protection Plan on the Meadowbank Gold Project Site (Appendix E, Agnico Eagle 2025). Raptor activity is also noted on other surveys including pit and Mine site inspections and road surveys.

Raptor nest monitoring in 2025 included monitoring of raptor nests in quarries along the AWAR and WTHR. Peregrine falcons have nested in quarries along the AWAR since 2009, and surveys of these quarries have been performed since 2010. Quarries along the WTHR were checked regularly for raptor nesting evidence between 28 May and 21 September in 2025 (Table 13-1). Quarries along the AWAR (Table 13-1) were visited on an approximately weekly basis between 16 May and 10 October in 2025. Raptor activity and potential nest locations were also noted on other surveys including road surveys, freshet monitoring, and on-site environmental monitoring. Surveys in pits or other areas were conducted when raptors were observed during Mine site inspections or incidental observations.

Nest sites are monitored using non-disruptive techniques, which include monitoring from vehicles within the quarry or from the road, to ensure that active nests are not approached by Mine personnel. Presence of aggressive adults, eggs, and chicks are used to identify active nests. To minimize direct disturbance to nesting birds and as per recommendations, intensive monitoring by approaching nests by foot is not conducted. During 2025, deterrents were applied to one quarry site with the potential to harbour raptors to discourage raptor nesting.

13.5 Results

13.5.1 Nest Monitoring

One peregrine falcon nest was documented at Quarry 30, along the WTHR in 2025 (Table 13-1; Figure 13-1). No raptor nesting evidence was observed along the AWAR in 2025 (Table 13-1). Nests have previously been identified in Quarries 2, 3, 5, 7, 8, 9, 16, 17, 18, 19, 21, and 22, as well as Portage Pit and Goose Pit (Table 13-1). In 2025, adult peregrine falcons were detected at Quarries 1, 2, 3, 7, 8, 9, 10.5, 11, 16, 18, 20, 21, and 22 and an adult gyrfalcon was detected at Goose Pit, however, no nesting evidence was observed at these sites. A pair of gyrfalcons were incidentally observed nesting on WTHR near KM 148 (Table 13-2; Figure 13-1). No other raptor nests were identified during pit checks, esker checks or incidentally during other surveys in 2025.

A summary of observations made at the peregrine falcon nest along the WTHR in 2025 is detailed in Table 13-2. Raptor nest management plans were not developed at the active nest sites, as Mine-related activity was already restricted within the quarries, with the only disturbance being traffic on the nearby WTHR. Intensive monitoring, which would include approaching nests by foot, was not conducted to prevent disturbance. Nest locations are not publicized to prevent inadvertent disturbance by curious Mine employees.

Table 13-1: Record of Peregrine Falcon Nesting from 2009 and 2025

Location	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Comments (2025)
Quarry 1	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	One falcon observed.
Quarry 2	No	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	No	Yes	Yes	Yes	No	Yes	No	One falcon observed.
Quarry 3	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	No	Three falcons observed.
Quarry 4	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No falcons observed.
Quarry 5	No	No	No	No	No	No	No	No	No	No	No	No	Yes	No	No	No	No	No falcons observed.
Quarry 6	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No falcons observed.
Quarry 7	No	No	No	No	No	No	No	Yes	Yes	No	No	Yes	Yes	No	No	Yes	No	Two falcons observed.
Quarry 8	No	No	No	No	No	No	No	No	Yes	No	No	No	No	Yes	Yes	No	No	Two falcons observed.
Quarry 9	No	No	No	No	No	No	No	No	No	No	Yes	Yes	Yes	No	No	Yes	No	One falcon observed.
Quarry 10	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No falcons observed.
Quarry 11	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Two falcons observed.
Quarry 12	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No falcons observed.
Quarry 13	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No falcons observed.
Quarry 14	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No falcons observed.
Quarry 15	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No falcons observed.
Quarry 16	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	Two falcons observed.
Quarry 17	No	No	No	No	No	No	No	No	Yes	No	No	No	No	No	No	No	No	No falcons observed.
Quarry 18	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	No	Two falcons observed.
Quarry 19	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	No	No	No	No falcons observed.
Quarry 20	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	One falcon observed.
Quarry 21	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No	One falcon observed.
Quarry 22	No	No	No	No	No	No	No	No	Yes	Yes	Yes	No	Yes	Yes	No	Yes	No	One falcon observed.
Quarry 10.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	No	No	No	No	No	One falcon observed.
Quarry 26	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	No	No	No	No	No	No falcons observed.
Quarry 30	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	No	No	No	No	Yes	Three adults, three eggs and two chicks observed.
Quarry 35	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	No	No	No	No	No	No falcons observed.
Quarry 50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	No	No	No	No	No	No falcons observed.
Quarry 52	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	No	No	No	No	No	No falcons observed.

Table 13-1: Record of Peregrine Falcon Nesting from 2009 and 2025

Location	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Comments (2025)
Esker 1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	No	No	No	No	No	No falcons observed.
Esker 2 ABC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	No	No	No	No	No	No falcons observed.
Esker 2D	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	No	No	No	No	No	No falcons observed.
Esker 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	No	No	No	No	No	No falcons observed.
Esker 4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	No	No	No	No	No	No falcons observed.
Esker 5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	No	No	No	No	No	No falcons observed.
Esker 7bc	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	No	No	No	No	No	No falcons observed.
Eskers 6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	No	No	No	No	No	No falcons observed.
Portage Pit	No	No	No	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No falcons observed.
Vault Pit	N/A	N/A	N/A	N/A	No	No	No	No	No	No	No	No	No	No	No	No	No	No falcons observed.
Goose Pit	N/A	N/A	No	No	No	No	No	Yes	No	No	No	No	No	No	No	No	No	One gyrfalcon observed
Whale Tail Pit	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	No	No	No	No	No	No	No falcons observed.
IVR Pit	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No	No	No	No	No	No	No falcons observed.

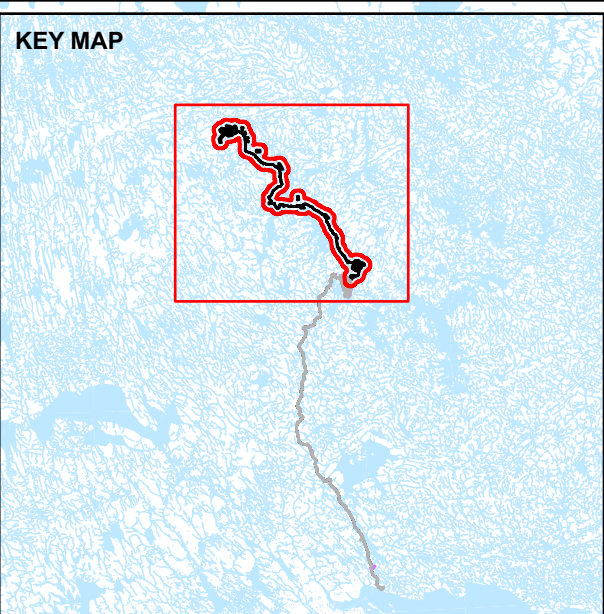
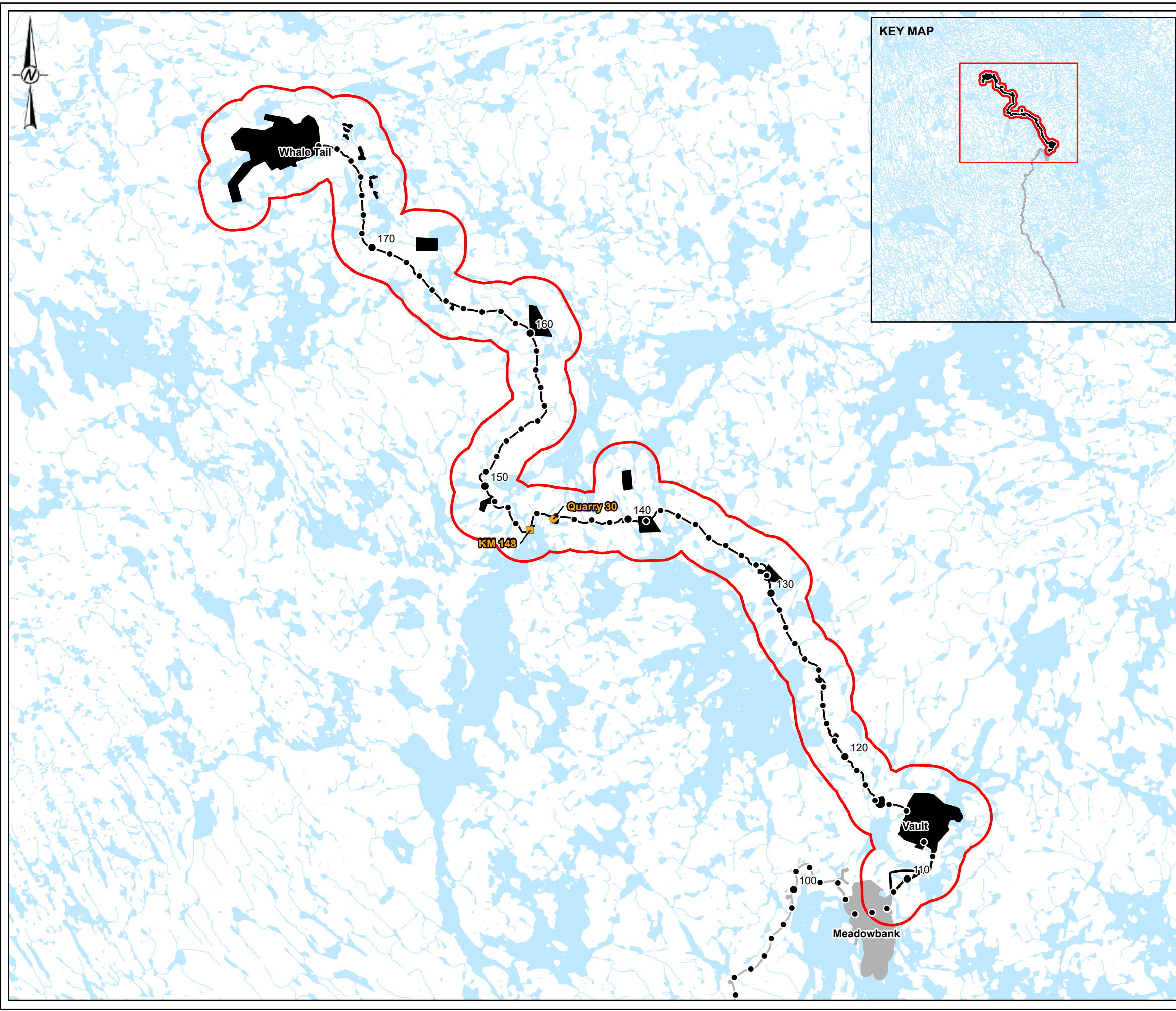
N/A = Not Applicable.

Table 13-2: Falcon Nest Monitoring Data, 2025

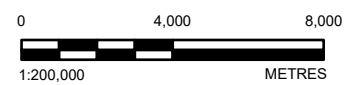
Date	Quarry 30 – Peregrine Falcon (-96.401, 65.225)	WTHR KM 148 - Gyrfalcon (-96.427439, 65.220477)
28-May-25	No falcons observed.	-
07-Jun-25	Two adults protecting nest.	-
17-Jun-25	No falcons observed.	-
21-Jun-25	One adult observed flying and alarming.	-
29-Jun-25	No falcons observed.	-
05-Jul-25	Two adults flying and alarming.	-
10-Jul-25	Two adults protecting nest with three eggs.	-
20-Jul-25	One adult flying and alarming.	-
26-Jul-25	Two adults protecting nest with two chicks.	-
02-Aug-25	One adult protecting nest with two chicks.	-
09-Aug-25	Three adults protecting nest with two chicks.	-
16-Aug-25	Three adults and two chicks. At least one adult protecting the nest.	-
24-Aug-25	One adult observed flying.	-
05-Sep-25	Two adults showing defensive behaviour.	-
13-Sep-25	No falcons observed.	Two gyrfalcons protecting nest located behind environmental sea can near bridge 148
21-Sep-25	No falcons observed.	-

"-" indicates no monitoring event on given day, WTHR = Whale Tail Haul Road, KM = kilometre.

PATH:\Client\Agnico_Eagle_Mines_L\Map\Tailings_Product\Map\Report\CA005537_7557_4003_13_01_FALCON_NEST_LOCATIONS_2025.mxd PRINTED ON: 2026-02-25 AT 9:22:15 AM



- LEGEND**
- OBSERVED GYRFALCON NEST
 - OBSERVED PEREGRINE FALCON NEST
 - KILOMETRE MARKER
 - WHALE TAIL LOCAL STUDY AREA (LSA)
 - WHALE TAIL MINE LEASE
 - MEADOWBANK MINE LEASE
 - WATERBODY
 - WATERCOURSE



REFERENCE(S)

1. INFRASTRUCTURE OBTAINED FROM AGNICO EAGLE MINES LIMITED.
2. WATERCOURSE AND WATERBODY DATA OBTAINED FROM NATURAL RESOURCES CANADA.

COORDINATE SYSTEM: NAD 1983 CSRS UTM ZONE 14N

CLIENT **AGNICO EAGLE** MINES LIMITED:
MEADOWBANK DIVISION

PROJECT
MEADOWBANK COMPLEX
2025 WILDLIFE MONITORING SUMMARY REPORT

TITLE
FALCON NEST LOCATIONS (2025)

	CONSULTANT	YYYY-MM-DD	2026-02-25
	DESIGNED	LV	
	PREPARED	CDB	
	REVIEWED	JF	
	APPROVED	DC	

PROJECT NO. CA0055337.7557	CONTROL 4003	REV. 0
-------------------------------	-----------------	-----------

FIGURE
13-1

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B

13.6 Accuracy of Impact Predictions

A summary of the impact predictions identified in the TEMP version 9 (Agnico Eagle 2025a) is provided in Table 13-3. Results of the nest occupancy analysis indicate that there has been a marginal decrease in peregrine falcon nest occupancy, but this cannot be strongly correlated to effects from the Project. Results may be related to inconsistent monitoring and lack of statistical power to determine large Project-related effects.

Table 13-3: Accuracy of Impact Predictions to Nesting Raptors and Raptor Mortality

Potential Effect	Threshold	Threshold Exceeded (2025)	Adaptive Management Implemented	Monitoring Methods
Disturbance to Nesting Raptors	Raptor nest failures will not be caused by Mine-related activities. Threshold is one nest failure per year.	NO	NO	Active raptor nest monitoring. Daily and weekly systematic pit and Mine site ground surveys.
Raptor Mortality	One individual.	NO	NO	AWAR and WTHR surveys. Daily and weekly systematic pit and Mine site ground surveys. Incident and vehicle encounter reports.

AWAR = All-Weather Access Road, WTHR = Whale Tail Haul Road.

13.7 Management Recommendations

Agnico Eagle will continue to monitor raptor nests in accordance with the TEMP version 9 (Agnico Eagle 2025a). This includes annual raptor nest surveys of quarries along the AWAR, WTHR, pits, and waste rock piles; development of nest management plans; and implementation of the Peregrine Falcon Management and Protection Plan, when required. Active nests will be monitored throughout the season to determine nest success or failure. Agnico Eagle will continue to document raptor observations during other programs (e.g., road surveys).

Mitigations for raptors that were implemented in 2025 include applying deterrents in the breeding season to one quarry from 30 May to 22 September 2025.

14 WATERBIRD NEST MONITORING

14.1 Overview

As part of the water management plan for the Whale Tail Mine, dewatering dikes were constructed to isolate the pit area in Whale Tail Lake. The associated flooding of the surrounding tundra was identified as having the potential to impact nesting of migratory birds. Through collaboration with Trent University and ECCC, research studies were initiated in 2018 to determine the effectiveness of a suite of planned mitigation measures for migratory birds during flooding of the Whale Tail South area. This study was conducted over three field seasons in 2018, 2019, and 2021 before, during and after flooding. The objectives of the study were to:

- 1) Determine the effectiveness of audio and visual deterrents for prevention of flood-zone nesting.
- 2) Estimate the number of nests and species composition lost due to flooding.
- 3) Examine the behavioural response of birds to:
 - a) deterrents (e.g., impacts to duration on the nest) and
 - b) flooding (determine whether birds re-nested nearby after the flooding events).

Results of this study and associated publications were provided in the 2024 Wildlife Monitoring Summary Report. Briefly, results indicated that: 1) deterrents did not impact territory density overall across the four species studied (objectives 1 and 3a); 2) the estimated number of impacted nests was fewer than the FEIS Addendum prediction (objective 2), and 3) the evidence available to draw conclusions regarding re-nesting in relation to flooding was limited and varied (objective 3b).

While additional manuscripts may continue to be submitted for peer-reviewed publication in the future by the research team, the study objectives have been met and reporting under the Migratory Bird Protection Plan (Appendix F in TEMP version 9; Agnico Eagle 2025a) is considered complete at this time.

15 BREEDING BIRD MONITORING

15.1 Overview

The breeding bird PRISM (Program for Regional and International Shorebird Monitoring) plot and breeding bird transect monitoring programs were designed to evaluate potential Project-related changes in breeding bird species abundance, richness, and diversity over time. The program is one component of the larger monitoring strategy to evaluate the success of mitigation measures implemented to minimize the amount of vegetation (i.e., bird habitat) removed or degraded (e.g., dustfall) by the Project, and whether certain Mine activities such as the Mine site or AWAR have resulted in reduced or compromised habitat function or effectiveness (i.e., zone of influence) for breeding birds.

For the breeding bird transects, data analysis in 2011 and 2015 indicated that no road-related effects had occurred to date, and thresholds had not been exceeded; therefore, annual transect surveys were permanently suspended after 2015. In 2022, Agnico Eagle reached an agreement with the ECCC to contribute to regional bird monitoring programs by conducting 48 PRISM plots from 2021 to 2031, and to complete Breeding Bird Surveys (BBS) along the AWAR and WTHR when possible and at a minimum of every three years.

15.1.1 Breeding Bird Surveys

Two BBS routes, consisting of 50 stations set every 800 m for a total of 40 km along the AWAR and 40 km along the WTHR. Each station was established by qualified personnel along AWAR and the WTHR in 2022 and were surveyed in 2023, 2024, and 2025. The three years of BBS surveys (i.e., 2023 to 2025) were scheduled between 15 and 30 June, the prime bird breeding season.

A total of 21 bird species were recorded on AWAR and 18 bird species were recorded on WTHR in 2025. Lapland longspur (*Calcarius lapponicus*) and Horned lark (*Eremophila alpestris*) were the most common species observed along AWAR, while Canada goose (*Branta canadensis*) and Lapland longspur were the most common species observed along WTHR. Overall, bird diversity and abundance and diversity was higher along the AWAR route than the WTHR route. Detailed descriptions of the routes, station locations, and species detections from 2023 to 2025 are provided in the Meadowbank Complex 2025 Breeding Bird Surveys and PRISM Plots Summary Report (Appendix H).

15.1.2 PRISM Plots

Fourteen PRISM plots were surveyed during June 2025. In total, 23 bird species and 3 mammal species were observed during PRISM plot surveys. Of those, 15 bird species and 2 mammal species were observed in the PRISM plots. Nests of Lapland longspur, American pipit (*Anthus rubescens*), and redpoll sp. (*Acanthis* sp.) were documented on PRISM plots in 2025. Nests of Lapland longspur, and American golden plover (*Pluvialis dominica*) were observed incidentally outside PRISM plots. Lapland longspur, horned lark and semipalmated sandpiper (*Calidris pusilla*) were the most common species observed during the survey. Full results of the 2025 surveys, as well as sampling methods and locations are available in Appendix H.

PRISM plots have been conducted in 16 separate years between 2003 and 2025. Over all years, the top three most abundant species were Lapland longspur, horned lark and unidentified redpoll species. Overall, the average number of birds detected per plot has been relatively consistent over the years.

15.2 Management Recommendations

Agnico Eagle has completed its commitment to ECCC of conducting 48 PRISM plots selected by CWS over 10 years (2021 to 2031). Agnico Eagle will continue to conduct BBS routes along AWAR and WTHR opportunistically, when qualified individuals are on site. At a minimum, the BBS routes will be conducted every three years during the operations, closure and post-closure phases of the Project. The next BBS survey is expected to be conducted in 2028.

16 NON-NATIVE PLANT SURVEYS

16.1 Overview

This section includes the methods, results, and mitigation measures to minimize the spread of non-native invasive plant species resulting from mining activities. The Government of Nunavut (GN) and Environment and Climate Change Canada (ECCC) defines a non-native species as ‘an organism that is not normally found in a region’ (CESCC 2022). Additionally, according to Section 91 of *The Wildlife Act*, S.NU. 2003, c 26, invasive species shall not be released into a habitat in which that species does not belong, or never naturally occurred. Any introductions of non-native plant species must be promptly reported to the GN Department of Environment. In 2019, Agnico Eagle initiated a non-native plant monitoring study to assess and monitor the potential introduction of non-native plant species, including weeds or invasive species (Golder 2020b). Subsequent monitoring events occurred in the month of July in each of the years between 2020 to 2025. Surveys will continue to be completed annually as per the Terrestrial Ecosystem Management Plan (TEMP) version 9 (Agnico Eagle 2025a). The following section summarizes the findings of the 2025 non-native plant survey.

16.2 Methods

The Canadian Endangered Species Conservation Council (CESCC) lists 17 species not normally found in Nunavut with a potential for becoming established, 14 of which are vascular (non-native) plants to the region (CESCC 2022). These species were included as targets for the non-native plant surveys. Additionally, any species known to be non-native to Nunavut were also included as targets for non-native plant surveys, to meet requirements of Section 91 of *The Wildlife Act*, S.NU. 2003, c 26.

Surveys at the Meadowbank Complex were conducted by a WSP vegetation ecologist who was accompanied by an Agnico Eagle site representative to access the survey locations between 17 to 23 July 2025. Surveys were completed at Meadowbank Mine, Whale Tail Mine, the All-Weather Access Road (AWAR), Whale Tail Haul Road (WTHR), and the Baker Lake tank farm.

Species were documented as they were encountered. Non-native plant surveys consisted of targeted surveys focused within high-priority or high-potential areas at the Meadowbank Complex. The high-potential areas were identified as the Project perimeter, highly trafficked areas (e.g., fuel station), areas surrounding buildings, shipping containers, along existing roads/trails or areas of disturbance within the Project area, as well as adjacent to the AWAR and WTHR road. High potential areas also included survey locations from where non-native plants were observed in previous monitoring years. In areas where non-native species were observed, meander surveys were conducted outside of the disturbance footprint to determine if these species had established in the native tundra. Given the length of the AWAR and WTHR, the roads were travelled via vehicle at slow speeds while observers looked for obvious signs of weed infestations along road margins. Periodic stops were undertaken to complete meanders in areas with high potential for weed occurrences (e.g., pull-outs, work areas, road-side quarries, and other areas with disturbed substrates). A global positioning system (GPS) unit was used to collect a track file of the meander route and point locations of surveys conducted.

When non-native or invasive plant species were encountered, the following information was recorded:

- Site ID
- surveyor name
- GPS coordinates
- photos of the occurrence / infestation

- species name
- estimated area of infestation
- estimated number of plants (e.g., <10, 10 to 100, 100 to 1,000, >1,000) of each species
- estimated cover of bare ground
- growth stage (i.e., seedling, in bud, seed set, expired)
- recommended action for each species
- record of any hand pulling completed

16.3 2025 Results

No non-native plants, as identified by the CESSC, were recorded along the AWAR, WTHR, Baker Lake tank farm, Meadowbank site, and Whale Tail sites during the 2025 field surveys.

A total of 208 individual locations were surveyed for non-native plants in 2025 (Table 16-1). New survey locations were established on the Meadowbank Mine site (4) and undisturbed tundra (3). In total 21 surveys were completed in the undisturbed tundra around the Meadowbank Mine site, WTHR, and AWAR to survey the presence/absence of non-native species. No non-native plants were found in the undisturbed areas of the tundra that were surveyed.

A summary of the locations where non-native plant surveys were completed is presented in Table 16-1 and Figure 16-1.

Table 16-1: Summary of 2025 Non-Native Plant Survey Effort

Location of Survey	Total Number of Survey Locations
AWAR	14
AWAR Quarry	24
Baker Lake tank farm	2
Meadowbank Mine site	92
Undisturbed tundra	21
Whale Tail Mine site	31
WTHR	10
WTHR Esker/Quarry	14
Total	208

16.3.1 Historical Results

From 2019 to 2021, many observations of what was then identified as flixweed (*Descurainia sophia*) were reported (Table 16-2); however, these observations were confirmed in 2022 to be a native species, northern tansy mustard (*Descurainia sophioides*) (WSP 2024). Both flixweed and northern tansy occupy similar habitats including gravel bars, roadsides, waste sites and disturbed soils (Oregon State University 2024), which likely contributed to the previous misidentification of the species. Similarly, previous annual TEMP reports have reported the non-native species, scentless chamomile (*Tripleurospermum inodorum*) (Table 16-2); however, these observations were confirmed in 2022 to be a native species sea mayweed (*Tripleurospermum maritima*). Scentless chamomile and sea mayweed are both found in similar habitats along roadsides and disturbed areas (SSIC 2021), which may have also contributed to their historical misidentification.

In 2020, two non-native species, lamb’s quarters (*Chenopodium album*) and alsike clover (*Trifolium hybridum*) were observed; however there have been no observations of these species since 2020 (Table 16-2).

In 2022, no non-native species were observed (Table 16-2).

In 2023, pea plant (*Pisum sativum*) was observed and removed during the survey by hand pulling at the Meadowbank Mine site (Table 16-2).

In 2024, no non-native species were observed (Table 16-2).

Table 16-2: Historical Non-Native Plant Survey Results

Year	Number of Survey Locations	Non-Native Plants Species Recorded ^(a)
2019	107	flixweed, scentless chamomile
2020	175	flixweed, scentless chamomile, lamb’s quarters, alsike clover
2021	202	flixweed, scentless chamomile
2022	193	none
2023	198	pea plant
2024	201	none

(a) Both flixweed and scentless chamomile observed in previous years have been confirmed in 2022 to be native species, northern tansy mustard and sea mayweed, respectively (WSP 2024).

16.4 Management Recommendations

The 2025 survey was the seventh consecutive year of non-native species monitoring at the Meadowbank Complex. No non-native species were identified.

Efforts for non-native plant management, including identified non-endemic species, should continue and added diligence should be undertaken with regards to areas of high traffic from equipment. Continued and thorough cleaning of equipment and materials prior to entering the site, per the TEMP version 9, will prevent seed of non-native species from being introduced. Based on the multi-year baseline established in previous surveys, future surveys for the 14 non-native plant species identified by CESCC as well as other species not native to Nunavut may be completed biennially. In addition, a review of survey locations should be conducted to determine if any survey locations may be discontinued. Suitable reasons for dropping survey locations can include, but are not limited to, decreased traffic or changes in use since the start of the monitoring program. Because no non-native species have been found at the Meadowbank Complex since the start of the monitoring program, surveys at undisturbed areas can be halted and only restarted if non-native species are found in disturbed areas.

Mechanical control such as mowing or hand pulling, as appropriate for the site setting, is recommended for any identified non-native plant species. Chemical herbicide treatments are not recommended to be used at this point as the tundra is a very sensitive ecosystem.

The CESCC (2022) poster of non-native species in Nunavut should continue to be displayed at the Meadowbank Complex to raise staff awareness.

A management plan for non-native plant species employing adaptive management may be implemented if non-native plant species are observed within the Meadowbank Complex area. A non-native plant management plan would describe the methods for the eradication, control and/or minimization of the encroachment of non-native plant species into new areas and outline additional measures such as on-boarding and training in the identification of non-native plant species for the area.

17 SPECIAL STUDIES

17.1 Snow Study

17.1.1 Overview

During the environmental review of the Whale Tail Expansion Project, the Government of Nunavut expressed concern that snow management activities on the Whale Tail Haul Road may result in conditions that may make passage by caribou difficult and more energetically expensive. To address this concern Agnico Eagle made Commitment 9 at the Technical Meeting held in Baker Lake June 2019, which included completing a three-year snow monitoring program as part of the Terrestrial Ecosystem Management Plan that measures snow conditions related to removal of snow from the Whale Tail Haul Road. The goal of the snow monitoring was to determine whether changes to snow resulting from snow removal along the Haul Road result in conditions that potentially inhibit caribou movements. Following the circulation of version 1 of the study design to members of the TAG on 02 October, 2019, the Kivalliq Inuit Association (KivIA) recommended monitoring of areas of caribou use and non-use along the Haul Road (KivIA 2019). Agnico Eagle modified the study design to follow the KivIA's recommendation. The variables measured include the height, width and slope of snowbanks, snow depth of deposited snow, snow hardness, and the depth of fresh caribou tracks.

Snow hardness and sinking depth are important for caribou energy expenditure of locomotion, where the combination of softer and deeper snow may inhibit caribou movements (Fancy and White 1987). The goal of the snow monitoring is to determine whether changes to snow resulting from snow removal along the WTHR result in conditions that potentially inhibit caribou movements. The key questions to be answered by the snow study monitoring were:

- 1) How do snow conditions within the managed snow area where caribou are crossing the WTHR differ from the snow conditions in adjacent portions of the berm where crossing did not occur?
- 2) How do snow conditions and caribou track characteristics differ between areas within the snow berm and areas beyond the berm where snow conditions have not been altered by snow removal activity?

Beyond the two main objectives of the study, an additional question was explored regarding how snow conditions differ on either side of the roads.

During the fall 2025 TAG workshop, additional questions were posed regarding weather patterns across study years (2020-2025) compared to a broader timescale (TAG #24; Agnico Eagle 2025b). As a result, weather data from 2013 – 2025 were analysed to explore two main questions:

Do the weather patterns observed during the study period reflect general weather patterns in the area?

- 1) Is there evidence of climate change affecting the local weather trends observed during the study period?

An annual sample goal of 36 survey locations was originally proposed over three years. Since 2020, a number of challenges have limited the program from achieving this goal including locating fresh caribou tracks. In 2022 a power analysis was conducted using data from 2020-2022 to determine the total number of sampling locations required to detect very small, small and moderate effect sizes for snow hardness (WSP 2023a). A recommendation was made to collect the full suite of snow data for a minimum of 65 sampling locations to detect a moderate effect size (e.g., 25%). Between 2020-2025, 70 complete sampling locations were collected, exceeding the minimum threshold from the power analysis.

The Snow Study Final Report presenting the final snow study results was completed in 2025, thus concluding the study. The final report is presented in Appendix I.

17.1.2 Management Recommendations

Agnico Eagle clears snow from roads for human safety reasons. Snow from roads is cleared to the downwind side to minimize the amount of time requirement snow management. Between 2020 to 2025, a total of 98 locations were surveyed for the snow study, but some locations did not have all snow condition parameters measured. Improvements for data collection implemented in 2023 and carried forward into 2024 and 2025 allowed for a full suite of snow data (snow depth, snow hardness, slope) and caribou track data (in used plots and non-managed control plots) to be collected for a total of 70 survey locations.

The results of this study indicate that snow depth and hardness associated with snow removal from the WTHR and AWAR are similar or show very small differences relative to snow conditions of unmanaged snow. Managed snow is not deep and is within the range that caribou may encounter on the tundra. Snow hardness was not substantially different than non-managed snow where caribou may become stuck or have difficulty while crossing roads during spring migration. The results of other snow metrics measured for snow berm height, width and slope do not support that they may impede movements by caribou. Slope was similar on upwind and downwind sides of the road. The results do not support that snow management areas along the WTHR or AWAR are likely to result in measurable energetic or ecological impacts to caribou. Temperatures during the migration season were slightly warmer during snow study years compared to previous years, and winter precipitation was lower during snow study years compared to previous years. While these may be ecologically relevant for caribou, it is unlikely to impact future snow mitigation recommendations.

The full description of snow study methods, results, and conclusions can be found in the Final Snow Study Report (Appendix I). Agnico Eagle will continue to manage snow berms for road safety and to support caribou movement across roads. Commitment #9 is complete and monitoring associated with the snow study will be discontinued.

17.2 Caribou Behaviour

The following is a summary of the Meadowbank Gold Mine Caribou Behaviour Study, 2025, completed by ERM Consultants Canada Ltd. (ERM 2025; Appendix J).

17.2.1 Overview

As part of the Nunavut Impact Review Board (NIRB) Project Certificates #004 and #008, Agnico Eagle is required to study and report on the effects of the Project on caribou. The TEMP (Agnico Eagle 2025a) includes behaviour monitoring for caribou in response to various disturbances, which have been conducted annually from 2020 to 2025.

During 2020, Agnico Eagle retained ERM to update the field protocols used for behaviour monitoring. ERM adapted standard methods for caribou behaviour monitoring developed by the Government of Northwest Territories Department of Environment and Natural Resources (GNWT-ENR 2017). Following the first two years of data collection (2020 and 2021) and comments from the TAG, GN, and KivIA, the protocols were since updated from 2019 to improve the quality of the data collected.

Based on guidance from the TEMP (Agnico Eagle 2025a), the overall objective of the caribou behaviour monitoring program is to determine if caribou activity budgets change with distance from the Mine, and to document caribou response to stressors. Agnico Eagle environmental technicians, contractors, and Nunavummiut seasonal workers completed caribou behaviour monitoring surveys during the spring and fall migration periods, summer calving periods, and winter period.

The detailed objectives of the 2025 were:

- 1) Estimate how mine infrastructure at the Mine, including the road that crosses through the Mine area, influence the proportion of caribou displaying response behaviours.
- 2) Identify the stressors that influence the proportion of caribou showing response behaviours near mine infrastructure at the Mine, including the road. To identify the stressors, the following characteristics in relation to caribou behaviour were examined:
 - Road crossings with group size and distance to infrastructure
 - Behaviour type with group size and distance to infrastructure
 - Behaviour type and environmental/temporal variables
 - Road closure status
 - Season and side of the road
 - Number of disturbances
 - Response to disturbances
 - Direction of caribou and travel
 - Convoy duration and size

17.2.2 Methods

17.2.2.1 Field Surveys

Survey methods followed protocols for monitoring caribou behaviour developed by the Government of Northwest Territories Department of Environment and Natural Resources (GNWT-ENR 2017). Field surveys were conducted during spring and fall migration, summer, and winter in all years (2020 to 2025) by the Agnico Eagle environmental technicians, with efforts to conduct roughly the same number of surveys in spring and fall migration seasons. In 2020, ERM refined these methods for Agnico Eagle's Nunavut mine operations to focus on scan samples, in lieu of both scan and focal samples due to time efficiency and higher quality data.

Behaviour surveys were completed by:

- 1) Identifying caribou groups visible from Mine infrastructure including the road.
- 2) Randomly selecting groups for observation.
- 3) Recording the behaviour of individuals in groups of different sizes, including their responses without any disturbance and in response to Mine-related activities and natural factors.

Initially, reconnaissance surveys were also conducted during 2020 to identify where caribou groups were located but it was determined that many caribou groups would move away from the road before the field crew returned to conduct the behaviour survey. Where multiple groups of caribou were observed, surveyors randomly chose which group to sample or specifically chose groups to fill sampling gaps specifically for the group size and distance from road variables. Filling gaps ensured that data is adequate for both variables.

Each survey had a time interval of 30 minutes, with scan samples conducted every three minutes. Information recorded during the surveys included location of the survey, weather conditions present at time, road structure, and location of the caribou group in relation to the road. Prior to 2021, distance values were estimated by the observer. This method was later updated to include a laser rangefinder for more accurate distances. The behaviour of caribou in the group were categorized at the start of the survey and every three minutes after. Behaviour categories were standardised following GNWT-ENR (2017) classifications, which included feeding, lying down, standing, alert, walking, and trotting or running. At each three-minute interval, surveyors recorded the number of individuals in the group exhibiting each behaviour at that time. If a group was large (>100), a subset of individuals was surveyed instead of the entire herd and was used to define the behaviour of the entire herd.

In the case that a disturbance event occurred during the survey, the time and type of disturbance was recorded. A disturbance is defined as any human-caused loud noise, low-flying aircraft, or vehicle travelling on the road. Blast disturbances were monitored under the Blast Monitoring Program which was developed in collaboration with the TAG (Agnico Eagle 2020b). In the analysis all disturbances are treated equally. In the previous five years, 95% of disturbance events recorded were from road-related disturbances (vehicles) and the remaining 5% were from either blasts or helicopters.

Alert behaviour and trotting or running were considered disturbance “response behaviours” and were grouped together in the subsequent data analysis. In this report, alert and running behaviours are referred to collectively as response behaviours, but it is important to note that this is irrespective of whether there were disturbances recorded. Caribou may exhibit these behaviours without a disturbance occurring. Walking was also assessed as a response behaviour in some analyses, which are specifically noted in the results.

Following recommendations from the TAG in 2021, an additional set of longer surveys was completed to specifically look at the behavioural response to convoys of vehicles. These surveys were 90 minutes each, consisting of a “before convoy”, “during convoy” and “after convoy” survey. Observers sought out caribou that were likely to remain within view for 90 minutes, such as caribou that were feeding or laying down, however caribou frequently walked out of sight prior to completion of the 90-minute survey period. Using this extended methodology, 9 surveys were completed in 2021, 2022 and 2025, 17 in 2023, and 10 in 2024.

17.2.2.2 Data Analysis

The objective of the data analysis was to quantify trends in the survey data and determine whether factors such as distance to Project infrastructure (road), group size, or the disturbances could be used to explain caribou behaviour. The primary hypothesis was that caribou closer to the road would demonstrate a stronger response to disturbances. An initial exploratory analysis was completed to visualize the data and determine the appropriate method for analyzing the data.

A regression analysis was conducted to test whether data from the surveys could be analyzed statistically. To increase the power to detect changes in caribou behaviour, the behaviour categories were grouped into response behaviours (alert and trotting or running) and non-response behaviours (feeding, lying down, standing, and walking).

Following the 2020 analysis, there was a suggestion from the TAG to explore whether the proportion of walking caribou changed as a response to disturbance. This was done to see if walking would be better categorized as a response behaviour or a non-response behaviour. To test this, a model that included walking, running, and alert behaviours was applied in addition to the original model with just running and alert behaviours.

Generalized linear mixed-effects models (GLMM) were used to assess the differences in the proportion of response behaviours in surveyed animals as a function of various controlling variables, including the occurrence of disturbances. Proportions were modelled using a binomial distribution due to the binary nature of the response variable. Because small groups naturally have greater variability in values (i.e., more likely that “all” or “none” of caribou are alarmed when there are only two caribou) an offset for the total number of caribou with tallied behaviour was included. This regression framework provides a means to control for habitat, environmental variables, repeated measurements, and spatial correlation.

Statistical analyses were conducted using R Statistical Software version 4.5.2 (R Core Team 2025) with the data from each three-minute time interval in each survey. Two dependent variables were tested:

- 1) Proportion of response behaviours in each time interval.
- 2) Proportion of walking plus response behaviour in each time interval.

The two dependent variables were modelled against a suite of potentially important variables to determine if there was any statistical relationship with response behaviour. The variables included in this analysis were group size, distance to road, temperature, wind speed, season and side of the road (upstream/downstream), the roads status (closed or open), and whether or not a disturbance occurred in the survey. Season and side of the road were included as an interaction term because direction of travel is seasonally dependent. In 2025, the convoy duration and number of vehicles in each convoy was collected, however, limited data precluded the inclusion of this data in models for 2025.

Full methods used for the caribou behaviour monitoring program are presented in Appendix J.

17.2.3 Results

Behaviour monitoring data from 2025 were combined with data from 2020, 2021, 2022, 2023, and 2024, and all results outlined in this report use all years, unless otherwise stated. The program and combined data resulted in several key findings:

- There were 57 surveys conducted in 2025, 70 surveys in 2024, 70 surveys in 2023, 104 surveys in 2022, 134 surveys in 2021, and 116 in 2020. Surveys during 2025 were primarily conducted during the spring and fall, though there were three surveys completed during winter. No surveys were completed in the summer.
- Caribou group sizes ranged from 1 to 2 individuals to >100. There is not a clear relationship between caribou group size and road crossing observations. Results from GLMMs and exploratory analyses indicated that group size and the distance of caribou to the road were not correlated with the number of road crossings observed.
- Larger groups of caribou tended to be recorded further from the road. To date, only 12 groups larger than 50 individuals were recorded within 100 m of the road at the start of the survey.
- In 2025, caribou predominantly exhibited non-response behaviours during surveys. Non-response behaviours included standing, laying, feeding, and walking. The “feeding” behaviour was the most observed behaviour in all group sizes.

- To determine if environmental factors such as heat or high winds were influencing caribou behaviour, the proportion of response behaviours, environmental variables, and temporal variables were assessed. No trend was evident in the relationship between wind speed and response behaviours. Statistical models showed that warmer temperatures (above 10°C) were associated with a higher likelihood that caribou would show response behaviours.
- Across all years there were 305 surveys conducted while the road was closed and 191 surveys were conducted when the road was open. Road closure status did not affect behaviour in the statistical analysis, however there was a higher proportion of individuals walking on average when the road was closed. This may be due to closures occurring more frequently during peak migration times.
- Across all 6 years of data, 49% of surveys contained a disturbance event. Following a disturbance event, the proportion of response behaviours in a group of caribou was significantly higher. Groups generally returned to baseline behaviours within 6 minutes after a disturbance.
- When considering the effect of group size for behaviour response models, the smallest group size (one to two individuals) had the largest proportion of response behaviour to disturbances, showing a higher likelihood of responding to a disturbance. Increasing group size had smaller estimated effects, indicating that the likelihood of responding generally decreased as group size increased.
- In response to comments from the KivIA, the behaviour of “walking” was investigated for whether it may be a response behaviour instead of a non-response behaviour. Models were examined with a response variable for response behaviours and a model for response behaviours with walking behaviours included. Odds ratios were used to evaluate the probability of a behavioural response increasing in response to disturbance, and the model without walking showed a much higher responses to disturbance. This indicates walking may be less associated with disturbance compared to other types of behavioural responses.
- Pairwise comparisons were completed for the proportion of caribou exhibiting response and walking behaviours on the west versus east sides of the road. Walk and response behaviours were higher on the west (upstream) side of the road during spring and were higher on the east side of the road during summer. There was no difference in the proportion of response behaviours on the west and east sides of the road during fall.
- Duration of response to disturbance was assessed using Cox’s proportional hazards modelling and all 5 years of data. Following a single disturbance event, 90% of caribou will return to normal behaviours within 6 minutes and 99% will return to normal behaviours within 15 minutes. The probability of returning to baseline behaviour within 6 minutes is lower for larger caribou groups (greater than 100 individuals) and lower in cases with multiple disturbances.
- The results of the statistical analysis provide support for the key hypothesis that caribou tend to respond to disturbances; however, they also indicate that distance to the road was not a significant predictor of response.
- In response to the TAG suggestion to incorporate convoy characteristics into behaviour analyses, data on convoy sizes were collected in 2025. Timing of each convoy proved difficult due to logistical constraints, so data could only be collected for nine convoys. Convoy data will be included in future analyses once a additional data points are available to allow for modelling.

Full results of the caribou behaviour monitoring program are presented in Appendix J.

17.2.4 Management Recommendations

The updates applied in 2024 and in previous years to the survey protocol and analysis and were helpful in improving the overall quality and accuracy of the data. Even with the changes to the protocol, the trends in the results were highly consistent between the six years of data. This increases the confidence that trends are repeatable year to year. Overall, the results of the statistical analysis did not provide support for the key hypothesis that caribou tend to respond to disturbances more strongly when closer to the road, though they do respond to disturbances.

17.3 Caribou Migration Studies

17.3.1 Overview of 2025 Migration Studies

In advance of the 2024 spring migration, Agnico Eagle and the TAG initiated a pilot program to implement road closures in protection of lead caribou groups migrating through the Mine (Agnico Eagle 2023). The primary objective of the lead caribou pilot program was to protect lead caribou and allow the “Qiviqait” to pass through the Mine area with minimized disturbance, which could consequently facilitate the migration of trailing caribou (i.e., subsequent herds) through the Mine area. During the 2024 and 2025 spring migration, lead caribou road closures were implemented for both the AWAR and WTHR. Following the first year of the pilot program, exploratory analyses of collared caribou data and road survey data were completed (WSP 2025b). The objectives of the analyses were to determine if the movement patterns differed during the lead caribou mitigation year compared to previous years, and to determine if speed and duration of migration through the AWAR and WTHR differed during lead caribou mitigation years compared to previous years.

Following the second year of the pilot program, analyses of collared caribou data and road survey data were updated to include 2025 spring migration data. Data from 2024 and 2025 monitoring do not support that the road closures applied during the lead caribou pilot program resulted in caribou moving faster during migration through the Mine area. The duration of 2024 spring migration was similar to prior years, and the duration of 2025 spring migration was longer than previous years. Spring migration in 2024 and 2025 may not have been faster than previous years if migration in previous years was also influenced by GST road closures. Because GST mitigation is designed to protect at least 75% of caribou encountering the Mine area, it is likely that most caribou encountering the AWAR and WTHR in 2024 and 2025 were already under the protection of the GST and the additional pilot program did not result in any discernable change in migration speed or duration. Irrespective of year, the first collared caribou interacting with Mine roads usually encountered closed roads. If this also occurred for lead caribou groups, then prior year road closures may have also facilitated road crossings. This possibility is emphasized by similar speeds through the study area during Mine operations and during baseline years. Instead, habitat features, physiological factors, immediate social cues, predator harassment, or climate factors may have stronger influences on movement patterns (Guttal and Couzin 2010; Alerstam and Bäckman 2018; Gurarie et al. 2019; Mallory et al. 2020). Full results of this assessment are presented in Appendix K.

17.3.2 Management Recommendations

The caribou herds that migrate through the Mine area are of cultural significance and conservation concern to local Indigenous communities. In addition, a swift and unimpeded migration benefits Mine operations by minimizing periods of reduced mining activity. The lead caribou pilot program (Agnico Eagle 2024) is a successful example of collaboration between development operators, communities, and government. Community-integrated science should be a continuous process (Israel et al. 1998; Lambert et al. 2024) and programs such as the pilot program should be managed adaptively and flexibly from the outset. Although the first two years of the lead caribou pilot program have relatively small sample sizes and, thus, some challenges in assessing how caribou respond to the lead caribou program, ongoing collaboration among local Inuit community organizations, government, and Agnico Eagle should continue.

18 SUMMARY

The 2025 Annual Report describes the data collected to date from the various monitoring programs associated with the TEMP version 9 (Agnico Eagle 2025a). The 2025 Annual Report describes natural and Project-related effects on wildlife populations and plant communities occurring near the Project.

In 2025, monitoring efforts focused on areas immediately around the Meadowbank Mine and Whale Tail Mine sites, along the AWAR and the WTHR. Surveying and monitoring efforts focused on evaluating current habitat losses, monitoring nesting success of raptors and monitoring and managing wildlife presence, particularly caribou, near the Project facilities and infrastructure. A summary of potential Project effects, threshold levels and the 2025 monitoring results is provided in Table 18-1.

18.1 Accuracy of Impact Predictions

Table 18-1: Potential Project Effects, Thresholds and Results of Monitoring in 2025

Potential Effect	Thresholds	Monitoring Methods	Frequency	Completed in 2025	Threshold Exceeded (2025)
Vegetation (Wildlife Habitat)					
Habitat Loss (Compared to Permitted Areas)	Meadowbank = 1,534 ha AWAR = 455 ha Whale Tail = 1,574 ha Threshold is >5% habitat loss of permitted area	Ground Surveys; Mapping and GIS analyses – ELC habitat mapping	Every three years	NO; Next assessment in 2027	Not Assessed
Habitat Reclamation following Mine Closure	N/A	Ground Surveys; Mapping and GIS analyses – ELC habitat mapping	At Year 2 post-closure and every 3 years until Year 12 post-closure	NO	N/A
Ungulates					
Habitat Loss and Degradation (Compared to Permitted Areas)	Meadowbank: Growing = 34 ha Winter = 664 ha AWAR Growing = 34 ha Winter = 107 ha Whale Tail + WTHR: Growing = 58 ha Winter = 1,116 ha	Ground Surveys; Mapping and GIS analyses – ELC habitat mapping	Every three years	NO; Next assessment will be completed in 2027	N/A
Sensory Disturbance	No threshold but Decisions Trees followed when caribou are seen near mine facilities	AWAR, Vault Haul Road, and WTHR surveys; Satellite-collaring data; Daily and weekly pit and Mine-site ground surveys; Incidental wildlife reporting	Daily / weekly	YES; Multiple road closures and notices, good engagement of Wildlife Log by site staff. Use of Decision Tree for Management and Monitoring.	N/A

Table 18-1: Potential Project Effects, Thresholds and Results of Monitoring in 2025

Potential Effect	Thresholds	Monitoring Methods	Frequency	Completed in 2025	Threshold Exceeded (2025)
Project-related Mortality - Vehicle Collisions	Two individuals (cumulative across Project)	AWAR and WTHR surveys; daily and weekly pit and Mine-site ground surveys; collision reporting system	Mine site – Daily AWAR, and WTHR – weekly, increasing up to every two days as per triggers (TEMP version 9)	YES	NO; There was one caribou mortality on the WTHR in 2025
Hunting by Baker Lake Residents	20% Change in Harvest Patterns in RSA from Historic	Hunter Harvest Study	Yearly	YES	NO
Other Project-related Mortality	Two individuals (cumulative across Project)	Daily and weekly pit and Mine-site ground surveys; collision reporting system	Daily	YES	NO
Predatory Mammals					
Disturbance to denning predators	One den failure.	Den site surveys	As required	YES	NO
Project-related Mortality	Two individuals (cumulative across Project)	AWAR and WTHR surveys; daily and weekly pit and Mine-site ground surveys; collision reporting system	Mine site – Daily AWAR, and WTHR – weekly, increasing up to every two days as per triggers (TEMP version 9)	YES	YES; 3 Arctic wolves were euthanized in 2025 due to habituation and health and safety concerns.
Raptors					
Disturbance of Nesting Raptors	One nest failure	Daily and weekly pit and Mine-site ground surveys; Incidental wildlife reporting; Dedicated raptor nest surveys; AWAR, Vault Haul Road, and WTHR surveys	Nests within 200 m - daily Nests from 200 to 1,000 m - weekly	YES	NO
Project-related Mortality	One individual (cumulative across Project)	AWAR, Vault Haul Road, and WTHR surveys; Daily and weekly pit and Mine-site ground surveys; Collision reporting system	Mine site – Daily AWAR, and WTHR – weekly, increasing up to every two days as per triggers (TEMP version 9)	YES	NO

Table 18-1: Potential Project Effects, Thresholds and Results of Monitoring in 2025

Potential Effect	Thresholds	Monitoring Methods	Frequency	Completed in 2025	Threshold Exceeded (2025)
Waterbirds					
Disturbance of Nesting Waterfowl	One nest failure	Daily and weekly pit and Mine-site ground surveys	Yearly - for active nests within 200 m	YES	NO
Project-related Mortality	One individual (cumulative across Project)	AWAR, Vault Haul Road, and WTHR surveys; Collision reporting system	Mine site – Daily AWAR, and WTHR – weekly, increasing up to every two days as per triggers (TEMP version 9)	YES	NO
Other Breeding Birds					
Changes in Breeding Bird Populations	N/A	PRISM Plots and Breeding Bird Surveys	PRISM – 48 PRISM sites over ten years (2021 to 2031) Breeding Bird Surveys – at minimum every three years	YES	N/A

AWAR = All-Weather Access Road, ELC = Ecological Land Classification, GIS = geographic information systems, ha = hectares, N/A = not applicable, RSA = Regional Study Area, WTHR = Whale Tail Haul Road.

19 CLOSURE

We trust the above meets your present requirements. If you have any questions or require additional information, please do not hesitate to contact the undersigned.

WSP Canada Inc.

ORIGINAL SIGNED

Jennifer Foca, M.Sc.
Senior Wildlife Biologist

ORIGINAL SIGNED

Dan Coulton, Ph.D., R.P.Bio.
Principal, Wildlife Biologist

JF/DC

20 REFERENCES

- Agnico Eagle. 2019. Terrestrial Ecosystem Management Plan, Meadowbank Division. Version 7, June 2019. 222 p.
- Agnico Eagle. 2020a. Meadowbank Mine 2019 Wildlife Monitoring Summary. April 2020. 147 p + Appendices.
- Agnico Eagle. 2020b. Terrestrial Ecosystem Management Plan, Meadowbank Division. Version 8, April 2020. 239 p.
- Agnico Eagle. 2023. Meadowbank Terrestrial Advisory Group Official Meeting No. 15 (Minutes). 47 p.
- Agnico Eagle. 2024. Meadowbank Terrestrial Advisory Group Official Meeting No. 21 (Minutes). 51 p.
- Agnico Eagle. 2025a. Terrestrial Ecosystem Management Plan, Meadowbank Division. Version 9, February 2025. 235 p.
- Agnico Eagle. 2025b. Meadowbank Terrestrial Advisory Group Official Meeting No. 22 (Minutes). 33 p.
- Agnico Eagle. 2025c. Meadowbank Terrestrial Advisory Group Official Meeting No. 23 (Minutes). 10 p.
- Agnico Eagle. 2025d. Meadowbank Terrestrial Advisory Group Official Meeting No. 24 (Minutes). 40 p.
- Agnico Eagle. 2025e. Meadowbank Terrestrial Advisory Group Official Meeting No. 25 (Minutes). 12 p.
- Alerstam T, Bäckman J. 2018. Ecology of animal migration. *Current Biology* 28(17): R968–R972. <https://doi.org/10.1016/j.cub.2018.04.043>
- ANZEC (Australian and New Zealand Environment Council). 1990. Technical Basis for Guidelines to Minimise Annoyance Due to Blasting Overpressure and Ground Vibration. 7 p.
- Campbell MW, Shaw JG, Blyth CA. 2012. Kivalliq Ecological Land Classification Map Atlas: a wildlife perspective. Government of Nunavut, Department of Environment. Technical Report Series #1-2012. 274 pp.
- CESCC (The Canadian Endangered Species Conservation Council). 2022. Non-Native & Invasive Species in Nunavut. [Accessed November 2023]. <https://www.gov.nu.ca/environment/documents/non-native-invasive-species-nunavut-brochure>.
- Cumberland (Cumberland Resources Ltd). 2005. Meadowbank Gold Project. Environmental Impact Assessment. October 2005.
- Cumberland. 2006. Meadowbank Gold Mine Project Terrestrial Ecosystem Management Plan (TEMP). Final Report, December 2006.
- Dougan & Associates. 2015. Whale Tail Pit & Whale Tail Haul Road Terrestrial Baseline Characterization Report. 173 p.
- Environment Canada. 2009. Environmental Code of Practice for Metal Mines. 108 p.
- ERM (ERM Consultants Canada Ltd). 2025. Meadowbank Gold Mine Caribou Behaviour Study, 2024. 144 pp + 5 App.
- Fancy SG, White RG. 1987. Energy expenditures for locomotion by barren-ground caribou. *Canadian Journal of Zoology*. 65(1): 122-128. <https://doi.org/10.1139/z87-018>.

- GN (Government of Nunavut Department of Environment). 2021. Method for Calculating Caribou Group Size Thresholds (GST). 5 p.
- GNWT ENR (Government of Northwest Territories Department of Environment and Natural Resources). 2017. Caribou Behaviour Monitoring Field Protocols. 10 p.
- Golder (Golder Associates Ltd). 2016. Whale Tail Pit Final Environmental Impact Statement Amendment.
- Golder. 2018. Whale Tail Pit – Expansion Project Final Environmental Impact Statement Addendum. 374 p.
- Golder. 2019. Remote Camera Protocol – Whale Tail Haul Road. Technical Memorandum prepared for Agnico Eagle Mines Ltd. 9 p.
- Golder. 2020a. Whale Tail Pit – blasting measurements from August, September, and December 2019. Unpublished Technical Memorandum prepared for Agnico Eagle Mines Ltd. 7 p.
- Golder. 2021. Meadowbank Mine 2020 Wildlife Monitoring Summary Report. April 2021. 108 p + Appendices.
- Golder. 2022. Meadowbank Mine 2021 Wildlife Monitoring Summary Report. 158 p + Appendices.
- Gurarie E, Hebblewhite M, Joly K, Kelly AP, Adamczewski J, Davidson SC, Davison T, Gunn A, Sutor MJ, Fagan WF, Boelman N. 2019. Tactical departures and strategic arrivals: Divergent effects of climate and weather on caribou spring migrations. *Ecosphere* 10(12). <https://doi.org/10.1002/ecs2.2971>
- Guttal V, Couzin ID. 2010. Social interactions, information use, and the evolution of collective migration. *Proceedings of the National Academy of Sciences*, 107(37): 16172–16177. <https://doi.org/10.1073/pnas.1006874107>
- Holmes G. 2022. Trent University MSc Thesis “*Assessing and Mitigating the Impacts of Mining-Induced Flooding on Arctic-Nesting Birds*”.
- Holmes, GI, Nol E, and Smith PA. 2024. Deterrents intended to mitigate mining effects mostly fail to change nesting behavior of Arctic breeding birds. *Avian Conservation and Ecology* 19(2):17. <https://doi.org/10.5751/ACE-02714-190217>
- Israel BA, Schulz AJ, Parker EA, Becker AB. 1998. “Review of community-based research: Assessing partnership approaches to improve public Health”. *Annual Review of Public Health* 19: 173-202. <https://doi.org/10.1146/annurev.publhealth.19.1.173>
- Joly K, Cameron MD, White RG. 2024. Behavioral adaptation to seasonal resource scarcity by Caribou (*Rangifer tarandus*) and its role in partial migration. *Journal of Mammalogy*, 106(1): 96–104. <https://doi.org/10.1093/jmammal/gyae100>
- KivIA (Kivalliq Inuit Association). 2019. Kivalliq Inuit Association review of Whale Tail Expansion Project Commitment 9: Proposed Haul Road Snow Study. 2 October 2019. Prepared for the Kivalliq Inuit Association by Aurora Wildlife Research. Nelson, BC.
- Lambert WM, Camacho-Rivera M, Boutin-Foster C, Salifu M, Riley WJ. 2024. “Ending “domestic helicopter research.”” *Cell* 187: 1823-1827. <https://doi.org/10.1016/j.cell.2024.02.027>
- Mallory CD, Williamson SN, Campbell MW, Boyce MS. 2020. Response of barren-ground caribou to advancing spring phenology. *Oecologia*, 192(3): 837–852. <https://doi.org/10.1007/s00442-020-04604-0>

- Nagy JA, Johnson DL, Campbell MW, Derocher AE, Dummond M, Allaire D, Croft B. 2011. Subpopulation structure of caribou (*Rangifer tarandus L.*) in Arctic and Subarctic Canada. *Ecological Applications* 21:2334–2348.
- NWMB, Nunavut Wildlife Management Board. 2004. The Nunavut Wildlife Harvest Study. Prepared by Priest, H., Harvest Study Coordinator, NWMB and Usher, P. J., P.J. Usher Consulting Services.
- Oregon State University. 2024. Flixweed/Tansy Mustard. [Accessed October 2024].
https://smallfarms.oregonstate.edu/sites/agscid7/files/pp_flixweed_tansy_mustard.pdf.
- Orndahl, KM, TW Bentzen, LT Berner, LPW Ehlers, M Hebblewhite, JD Herriges, K Joly, MJ Macander, EC Palm, MJ Suitor, and SJ Goetz. Shifting and Expanding Ranges of a Sub-Arctic Caribou Herd and Associated Changes in Vegetation. *Ecological Applications*35(4): e70038. <https://doi.org/10.1002/eap.70038>
- R Core Team. 2025. R: A Language and Environment for Statistical Computing. R Foundation for Statistical Computing, Vienna, Austria. <https://www.R-project.org/>.
- SSIC (Sea to Sky Invasive Species Council). 2021. Scentless Chamomile. [Accessed October 2024].
<https://ssisc.ca/wp-content/uploads/2021/06/Scentless-Chamomille-Factsheet-2021.pdf>.
- WSP (WSP Canada Inc). 2023a. Meadowbank Complex 2022 Wildlife Monitoring Summary Report. 158 p + Appendices.
- WSP. 2023b. Whale Tail Extension Noise and Vibration Modelling. 17, 23, 24 pp.
- WSP. 2024. Meadowbank Complex 2023 Wildlife Monitoring Summary Report. 186 p + Appendices.
- WSP. 2025a. Meadowbank Complex 2024 Wildlife Monitoring Summary Report. 192 p + Appendices.
- WSP. 2025b. Assessment of spring lead caribou closure pilot program. Prepared for Agnico Eagles Mines Limited by WSP. 17 pp.

Acts/Regulations

- Consolidation of *Wildlife Act*. 2003. SNU. 2003,c.26. Current to: February 13, 2020. Government of Nunavut. Territorial Printer for Nunavut.