

Appendix 39

Meadowbank and Whale Tail 2024 Wildlife Monitoring Summary Report



REPORT

Agnico Eagle Mines Limited - Meadowbank Complex

2024 Wildlife Monitoring Summary Report

Submitted to:

Agnico Eagle Mines Limited

Submitted by:

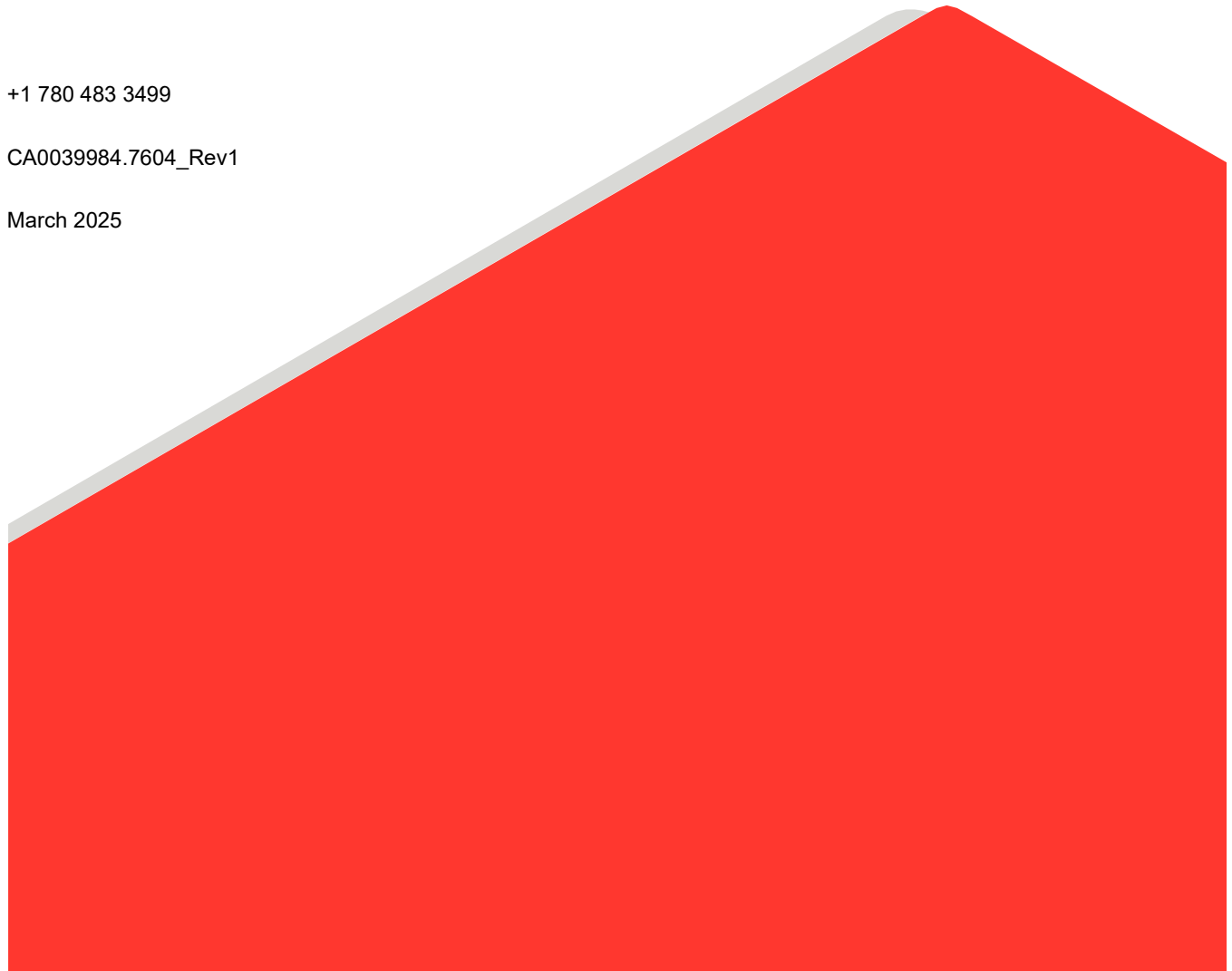
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CA0039984.7604_Rev1

March 2025



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Executive Summary

As a requirement of the NIRB Project Certificate, the 2024 Wildlife Monitoring Summary Report (2024 Annual Report) represents the 19th of a series of annual reports for the Agnico Eagle Mines Limited (Agnico Eagle) Meadowbank Complex (the Project). Baseline and monitoring programs were first initiated in 1999 and will continue through the life of the Project. Details of the wildlife monitoring program for the Project are provided in the Terrestrial Ecosystem Management Plan (Version 7, Agnico Eagle 2019). The 2024 Annual Report provides the monitoring objectives, methodology, historical and current year results, mitigation activities, and management recommendations for each monitoring program. The 2024 Annual Report builds on data presented in previous reports and incorporates monitoring recommendations from these reports, as well as recommendations and requests from intervenors on past reports made during the NIRB review process. Below is a summary of the results from each component of the 2024 Annual Report.

Caribou Management Decision Tree

- Decision trees were used throughout 2024 to reduce sensory disturbances to caribou approaching the Project. Wildlife observations should continue to be documented using approaches implemented in 2024.
- Data collection methods connected individual observations to mitigations using field tablets linked to a customizable EQUIS Collect database. Paper data forms were also carried as backup in case of field tablet issues. Most mitigations were based on data from road survey observations, with some derived from other survey types, including pit and mine site ground surveys.
- The objective is not linked to an impact prediction as the monitoring is to trigger mitigation rather than to test a prediction.

Road Surveys

- In 2024, 277 road surveys were conducted along the All-weather Access Road (AWAR) and 194 were conducted along the Whale Tail Haul Road (WTHR).
- A total of 40,161 caribou were detected along the AWAR during road surveys and 16,007 caribou were detected along the WTHR during road surveys.
- Road-related monitoring and mitigation for the AWAR and WTHR were implemented according to decision tree Figures 7 and 8 of the TEMP version 7 (Agnico Eagle 2019). The AWAR was fully closed (24-hour closure) on 63 days, closed for less than 24 hours on 81 occasions, including 38 closure days due to caribou, and had speed restrictions applied for 83 days. In total the AWAR was closed for 2,396 hours. The WTHR was fully closed (24-hour closure) on 24 days, partially closed (less than 24-hour closure) on 40 days and had speed restrictions applied for 77 days. The WTHR was closed for 888 hours in 2024. In addition to the GST related caribou closures, there was also a lead caribou 10-day closure for both the AWAR and WTHR.
- A total of 9,243 caribou were observed crossing the AWAR and 2,468 caribou were observed crossing the WTHR in 2024.
- There were 30 road-related mortalities recorded in 2024, including 7 Arctic fox, 5 Arctic hare, 11 Arctic ground squirrel and 5 Ptarmigan. There was one caribou road-related mortality that took place on the AWAR on 05 January 2024, and one wolverine road-related mortality that took place on WTHR on 16 November 2024.

There were no road-related grizzly bear, muskox, or wolf mortalities associated with the AWAR or WTHR in 2024.

- The 2024 AWAR and WTHR survey data were compared to the impact prediction thresholds, and none were exceeded in 2024.

Pit and Mine Site Ground Surveys

- In 2024, environment personnel conducted regular Mine site inspections focusing on waste management, spills, hazardous waste management, and wildlife monitoring. Formal Mine site inspections were carried out at least weekly as part of broader environmental on-site management.
- In 2024, Mine-site ground survey inspections were conducted on average once or twice per week. Meadowbank had a total of 86 formal Mine and Pit surveys conducted between 14 January and 30 December (approximately one survey every 4.24 days). Whale Tail had a total of 87 formal Mine and Pit surveys conducted between 6 January and 28 December (approximately one survey every 4.20 days).
- Wildlife deterrents were used on 25 occasions in 2024, with interactions from four species of mammals: caribou, grizzly bear, wolf, and wolverine. Of the 25 deterrence actions taken, 22 were classified as successful deterrence and 3 were classified as unsuccessful deterrence.
- There were six Project-related mortalities (long-tailed duck) in 2024 at Meadowbank, and one Project-related mortality (Arctic fox) at the Whale Tail Mine.
- Mitigation implemented in 2024, and previous years continues to be effective at minimizing Project-related injuries and mortalities.

Wildlife Habitat Monitoring

- A 9.0% change (69 ha) in footprint at the Whale Tail site and WTHR occurred between the 2021 assessment and the 2024 assessment. For the AWAR, an increase in size of 2% (4.52 ha) was observed between 2021 and 2024. The changes in footprint since the previous assessment were less than 25%. Therefore, a comprehensive habitat loss assessment was not required prior to the 2024 scheduled assessment.
- Habitat loss thresholds were not exceeded in 2024. The next comprehensive habitat analysis will be completed in 2027 as it will be 3 years following this report.

Caribou Satellite-Collaring Program

- Caribou collar data from 2024 were examined and maps prepared. Agnico Eagle intends to continue collaboration with the Government of Nunavut Department of Environment (GN DoE) caribou satellite-collaring program.
- In 2024, thirteen individuals from 3 different herds (Ahiak, Lorillard, and Wager Bay) had collar fixes within the Project (Regional Study Area (RSA)). Only 2 collared caribou interacted with the RSA during spring and summer.
- There are no specific impact predictions for caribou migration movements. Flexible and responsive mitigation measures such as the TEMP decision trees are likely to continue to be the most effective due to seasonal and yearly variability in movement patterns at the RSA scale.

Viewshed Surveys

- Thirteen viewshed locations were surveyed on 99 dates in 2024, though not all locations were surveyed everyday.
- A total of 1,467 viewshed surveys were conducted between 1 January and 31 December, with the highest survey effort occurring in the fall (34.5%). Of the viewshed surveys completed in 2024, 82 surveys (6%) had caribou sightings, and a total of 1,945 caribou were recorded.
- Based on discussion from the fall 2024 Terrestrial Advisory Group (TAG) meeting (meeting #21, Agnico Eagle 2024d), viewshed surveys will be discontinued going forward and will not be conducted in 2025.

Remote Camera Program

- Artificial intelligence was used to pre-sort wildlife images from remote cameras on the WTHR in 2024. Photographs flagged as containing wildlife by artificial intelligence were reviewed by a human observer.
- Caribou were detected in all seasons, and caribou crossing events were detected in spring, summer, and fall. Crossing events were recorded on six out of ten cameras.
- More crossing events were observed on days with an open road status ($n = 38$) compared to days with a road closure ($n = 28$). Too few crossing events were detected to statistically compare crossing rates between different road heights, backfill materials, and backfill slopes.

Blast Monitoring

- Surveys for caribou behaviour monitoring prior to and during blasting were performed in 2024. Caribou behavior was quantified before, during and after blasting and average response behaviours six minutes following blasting was assessed in relation to peak particle velocity (PPV) and peak pressure level (PPL) values. No blasts were cancelled due to caribou presence in the vicinity.
- In 2024, two blast measures exceeded the PPV annoyance threshold of 5 mm/s and no blast measures exceeded 12.5 mm/s threshold. No blasts resulted in PPL values above the 128 dBL damage threshold and 11 blasts resulted in PPL values below the 115 dBL annoyance threshold at 569 m from the blast site location.
- In 2024, caribou made no notable responses to blasting despite being within 1 km of the highest PPV and PPL values for any year of monitoring. There were 203 pre-blast surveys were performed over 176 days, however, only three viable behavioral assessments could be obtained.
- Due to the challenges in aligning blasting events, caribou availability and visible behaviour responses, data collection may need to continue. However, the lack of caribou near blast areas and their lack of response to blasting may already provide enough evidence of the low impact of blasting events on caribou.
- The results to date support that distance thresholds for suspending blasting can be reduced to less than current 3 km threshold as no strong adverse responses have been observed at distances less than 3 km.

Hunter Harvest Study

- The Hunter Harvest Study (HHS) included 77 participants in 2024. A total of 820 caribou were reported as being harvested by 64 participants in the Baker Lake HHS.
- The 2024 HHS data indicated that 48% of reported harvest occurred within 5 km of the AWAR, and 82% occurred within the Meadowbank RSA.
- In 2024, no caribou were harvested within 5 km of the WTHR. Given the low numbers of reported harvests close to the WTHR and the prohibition of the public from the WTHR, it is unlikely that the presence of the road has resulted in increased harvest.

Predatory Mammal Den Monitoring

- Monitoring of predatory mammal dens were conducted informally in 2024 through observations recorded during other monitoring programs. Potential effects due to Project-related activities were not identified to trigger monitoring of predatory mammal dens. No predatory mammal dens were observed or monitored in 2024.
- If an active den is identified in close proximity to Project facilities, a den management plan is developed that outlines a monitoring schedule and appropriate mitigation strategies. No impacts to denning predators were observed in 2024.

Raptor Nest Monitoring

- Eight peregrine falcon nests were documented in Quarries 2, 3, 7, 9, 16, 18, 21, and 22 in 2024, and nests had previously been identified in these quarries.
- No raptor nesting evidence was observed in quarries along the WTHR in 2024 (Quarries 10.5, 17, 26, 30, 35, 50, and 52). No other raptor nests were identified during pit checks or incidentally during other surveys in 2024.
- 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 AWAR.
- Results of the 2024 nest occupancy analysis did not indicate Project-related effects on rough-legged hawk and gyrfalcon occupancy. There has been a marginal decrease in peregrine falcon occupancy, but this cannot be strongly correlated to effects from the Project. These results may be biased by the number of nests in the quarry and better representation of nesting sites near or further away from the AWAR could provide more insight on Project effects.
- Agnico Eagle will continue to monitor raptor nests in accordance with the TEMP including 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 continue to be monitored to determine the success of the nest.

Waterbird Nest Monitoring

- The Whale Tail expansion required the construction of two dykes within Whale Tail Lake to divert water from the proposed pit to surrounding lakes and tributaries, resulting in flooding that had potential impacts to migratory birds and their nests.
- Trent University, in collaboration with Environment and Climate Change Canada (ECCC) and Agnico Eagle, conducted a research study to investigate mitigation options to minimize flooding-related impacts to birds in the Whale Tail South area. The complete analysis and report on behavioural responses were included in Holmes (2022) with some aspects published in a scientific journal in 2024 (Holmes et al. 2024).

Breeding Bird Monitoring

- Agnico Eagle will continue to survey 48 PRISM plots selected by the ECCC over 10 years (2021 to 2031), and completion of AWAR and WTHR Breeding Bird Survey (BBS) routes opportunistically when qualified individuals are on site. At a minimum, these BBS routes will be conducted every three years during the operations, closure, and post-closure phases of the project.
- A total of 23 bird species were recorded on AWAR and 25 bird species were recorded on WTHR in 2024.
- There were 13 PRISM plots surveyed in 2024, and two BBS routes. The routes established in 2022 along the AWAR and WTHR consist of 50 stations set every 800 m and were surveyed in 2023 and 2024.
- It is recommended that PRISM plots and BBS routes be surveyed in June 2025. The remaining 13 PRISM plots should be completed prior to the Project closure and BBS routes surveyed within the committed three-year cycle.

Non-Native Plant Surveys

- No non-native plants, as identified by the CESSC, were recorded along the AWAR, WTHR, Baker Lake tank farm, Meadowbank Mine Site and Whale Tail sites during the 2024 field surveys.
- A total of 201 individual locations, which includes three new added locations in the AWAR quarry were surveyed for non-native plants in 2024. Eighteen 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.
- 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, will prevent seed of non-native species from being introduced.

Special Studies

Snow Study

- A total of nine surveys were completed during the spring migration of 2024. Of the nine survey locations, four were along the WTHR and five were along the AWAR. Surveys during 2024 took place during six days, including one day in February, one day in March, and four days in April.

- Average snow depth in use plots and snow-managed control plots (i.e., plots within the berm but not used by caribou) were similar, but snow depth was greater in non-managed control plots. Average snow hardness was similar between use plots, snow-managed control plots, and non-managed control plots. Mean track depth was similar between use plots compared to non-managed control plots.
- Improvements for data collection implemented in 2023 and carried forward into 2024 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 45 survey locations.
- A minimum of 20 survey locations should be surveyed in 2025 to collect the remaining data required for the snow study. Final analysis of snow study data is anticipated to occur in 2025 if target sample sizes are achieved, and final results will be presented in the 2025 TEMP report. However, current results are not on a trajectory to suggest large differences are present.

Caribou Behaviour

- Agnico Eagle continued a caribou behaviour study that focussed on measuring different behaviour activities of caribou in relation to Mine-related activities (Appendix J).

Road and Viewshed Comparison

- Following discussion with the TAG in November 2022, more viewshed surveys were completed in 2023 to improve sample sizes and allow for comparison between survey types. The analysis reported herein expands the previous comparison with data from 2024. In addition, an attempt was made to compare detection probabilities between viewshed and road surveys. However, the sample size was insufficient for this analysis due to time differences between the survey types and the number of matching collared caribou fixes.
- In 2024, there were 94 days in which both survey types were completed on the same day across all seasons. On 31 of these days, caribou were detected during road and viewshed surveys. During these days, the observation distance was farther for viewshed surveys in 13 out of 31 occasions (42%) and the observation distance was farther for road surveys in 8 of 31 occasions (26%). For the remaining 10 of 31 occasions, the recorded distances were the same between survey types.
- The percentage of road surveys with caribou detections was higher than the percentage of viewshed surveys with caribou detections across all seasons.
- A significantly larger proportion of road surveys detected caribou compared to viewshed surveys, and road surveys detected significantly larger groups. Road surveys tended to observe groups that triggered GST more than viewshed surveys. Viewshed surveys detected caribou at significantly further distances.
- Road surveys were conducted more frequently, were more likely to detect caribou, and were more likely to result in road closure mitigation, despite the lower average detection distance compared to viewshed surveys.
- The results of the comparison presented indicates that if viewshed survey effort is discontinued, it would likely have little impact on the effectiveness of wildlife monitoring and triggering mitigation. In October 2024, the TAG agreed that viewshed surveys are less effective at detecting caribou and may be discontinued as future TEMP monitoring (Agnico Eagle 2024d).

Caribou Migration Studies

- Two caribou collar studies were conducted in 2024 based on TAG recommendations, including characterization of fall migration and an assessment of the spring 2024 lead caribou mitigation measures.
- The assessment for characterizing fall migration found that fall migration patterns are more variable than spring migration patterns. The high variability of fall migration poses additional challenges for implementation of a lead caribou approach for caribou protection measures and may be less effective in producing the intended mitigative results of a lead caribou migration closure in the fall compared to spring. Following the August 2024 TAG meeting (TAG #20; Agnico Eagle 2024c), the TAG recommended to pursue a different mitigation strategy for the fall migration focused on increasing gaps in traffic to facilitate caribou crossings.
- New spring mitigation measures for the protection of lead caribou were developed in collaboration with the TAG, and during spring 2024 the new mitigation measures were implemented. After implementing new measures, an exploratory analysis of collared caribou and road survey data for the 2024 spring migration was completed. The study found no increase in caribou speeds, or a shorter migration duration compared to previous years. This lack of detectable effect may be due to limited number of collared caribou interacting with the Mine and roads or minimal magnitude of effect for this mitigation strategy given the limited interaction time and number of caribou with roads. Potential benefits to migration identified by Inuit Qaujimajatuqangit (IQ) may differ from metrics such as speed or duration. Lead caribou closures allow for a collaborative approach through community input in the mitigation decision making process, while also remaining feasible for Mine operation.

Study Limitations

On behalf of Agnico Eagle Mines Limited (Agnico Eagle), WSP Canada Inc. (WSP) has prepared this Wildlife Monitoring Summary Report for the 2024 Monitoring Period at the Meadowbank Complex.

This report was prepared, based in part, on information obtained from Agnico Eagle and other external information sources. In preparing the report, WSP has relied in good faith on the information provided. We accept no responsibility for any deficiency or inaccuracy contained in this report because of our reliance on the aforementioned information.

The findings and conclusions documented in this report have been prepared for the specific application to this Project and have been developed in a manner consistent with that level of care normally exercised by environmental professionals currently practicing under similar conditions in the jurisdiction.

With respect to regulatory compliance issues, regulatory statutes are subject to interpretation. These interpretations may change over time and should be reviewed regularly.

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Waterbird Monitoring Publication

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Meadowbank Bird Surveys Report

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Fall Migration

Acronyms

| Acronym | Full Term |
|----------|---|
| AEAR | Amaruq Exploration Access Road |
| ANOVA | Analysis of Variance |
| ANZEC | Australian and New Zealand Environment Council |
| ARGOS | Advanced Research and Global Observation Satellite |
| AWAR | All-weather Access Road |
| BBS | Breeding Bird Survey |
| CESCC | Canadian Endangered Species Conservation Council |
| CIRNAC | Crown-Indigenous Relations and Northern Affairs Canada |
| COVID-19 | Coronavirus Disease |
| ECCC | Environment and Climate Change Canada |
| ELC | Ecological Land Classification |
| FEIS | Final Environmental Impact Statement |
| GIS | Geographic Information System |
| GN | Government of Nunavut |
| GN DoE | Government of Nunavut Department of Environment |
| GPS | Global Positioning System |
| GST | Group Size Threshold |
| HHS | Hunter Harvest Study |
| HOL | Height-of-Land |
| HT | Heath Tundra |
| HTO | Hunters and Trappers Organization |
| IIBA | Inuit Impact Benefit Agreement |
| IQ | Inuit Qaujimajatuqangit |
| KivIA | Kivalliq Inuit Association |
| KM | Kilometer Marker |
| LSA | Local Study Area |
| NIRB | Nunavut Impact Review Board |
| NPAG | Non-potentially Acid Generating |
| NPC | Noise Pollution Control |
| NWB | Nunavut Water Board |
| MOU | Memorandum of Understanding |
| PPL | Peak Pressure Level |
| PPV | Peak Particle Velocity |
| PRISM | Program for Regional and International Shorebird Monitoring |
| QA/QC | Quality Assurance/Quality Control |
| RSA | Regional Study Area |
| TAG | Terrestrial Advisory Group |
| TEMP | Terrestrial Ecosystem Management Plan |
| TOR | Terms of Reference |
| UTM | Universal Transverse Mercator |
| VEC | Valued Ecosystem Component |
| WTHR | Whale Tail Haul Road |

1.0 INTRODUCTION

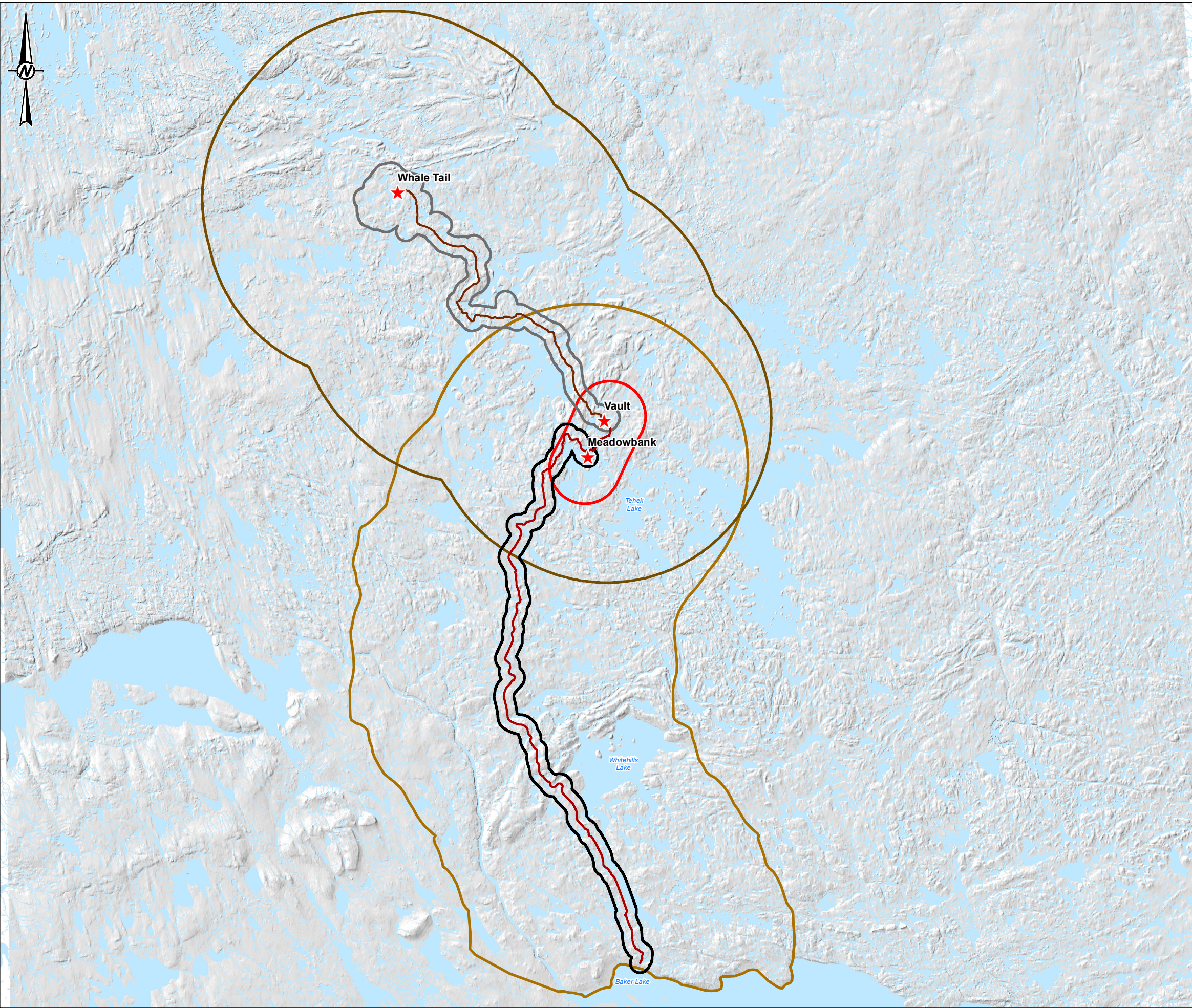
1.1 Background

The Agnico Eagle Mines Limited (Agnico Eagle) Meadowbank Complex (the Project) is located in the Kivalliq Region of Nunavut (Figure 1-1) and received a Project Certificate No. 004 from the Nunavut Impact Review Board (NIRB) in 2006. The subsequent Water Licence, Government of Nunavut (GN) and Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) Land Lease, and Kivalliq Inuit Association (KivIA) Land Use Production Lease, allowed for the construction of a gold mine and ancillary facilities including an All-weather Access Road (AWAR), barge unloading facilities, lay-down area, and a fuel tank farm near the Hamlet of Baker Lake. The Whale Tail Mine, an extension of the Meadowbank Mine, received a Project Certificate No. 008 from NIRB in 2018.

Up to 2017, annual reports were based on the Terrestrial Ecosystem Management Plan (TEMP) developed by Cumberland Resources (Cumberland 2006). The TEMP was a requirement of the Meadowbank Project Certificate No. 004, Condition 54 and Whale Tail Mine Certificate No. 008, Condition 28. Since 2018, the TEMP version 7 has incorporated the Whale Tail component of the Project and reflects changes in management and monitoring approaches since 2006 (Agnico Eagle 2019). The revised TEMP also benefitted from collaborative input from the GN, the KivIA, and the Hunters and Trappers Organization (HTO) of Baker Lake through annual report reviews, technical reviews, workshops, and discussions within the Terrestrial Advisory Group (TAG). A new version of the TEMP (TEMP version 9) was reviewed and approved by the TAG during March 2025, so TEMP v9 will be the version applied for the 2025 monitoring and reporting year. Version 7 of the TEMP was used as the basis for 2024 monitoring and mitigation presented in this report. The scope of the TEMP is to report on monitoring of the Mine during construction, operation, maintenance, reclamation, and closure.

This annual report includes data collected in 2024, the 15th year of Mine operation, and is the 19th of a series of annual Wildlife Monitoring Summary Reports for the Project. The purpose of this report is to summarize 2024 data collected from wildlife monitoring programs, and to describe natural variation and potential Mine-related changes in wildlife populations within and adjacent to the Meadowbank Complex. The 2024 Annual Report describes monitoring objectives and methods, historical and current year results, mitigation activities, and management recommendations based on 2024 monitoring results. Furthermore, comments received from various intervenors through the NIRB review of the 2023 annual report were incorporated, where possible, into analyses and reporting in this document.

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LEGEND

- ALL-WEATHER ACCESS ROAD (AWAR)
- WHALE TAIL HAUL ROAD (WTHR)
- AWAR LOCAL STUDY AREA (LSA)
- WTHR LOCAL STUDY AREA (LSA)
- WTHR REGIONAL STUDY AREA (RSA)
- MEADOWBANK LOCAL STUDY AREA (LSA)
- MEADOWBANK REGIONAL STUDY AREA (RSA)
- WATERCOURSE
- WATERBODY

KEY MAP

REFERENCE(S)

- INFRASTRUCTURE OBTAINED FROM AGNICO EAGLE MINES LIMITED.
- 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
2024 WILDLIFE MONITORING SUMMARY REPORT

TITLE

MEADOWBANK COMPLEX LOCATION AND MONITORING
STUDIES BOUNDARIES

| | | | |
|--|------------|------------|------------|
| | CONSULTANT | YYYY-MM-DD | 2025-03-19 |
| | DESIGNED | JF | |
| | PREPARED | CDB | |
| | REVIEWED | JF | |
| | APPROVED | CDLM | |

| | | | |
|----------------|-----------|------|--------|
| PROJECT NO. | CONTROL | REV. | FIGURE |
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1.2 Project Description

The Meadowbank Mine is located approximately 90 km north of the community of Baker Lake. The Whale Tail Mine, with an expected operating life of ten years (2019 to 2028), is located approximately 180 km north of Baker Lake. The Whale Tail mine is an open-pit mine and underground mine connected to Meadowbank Mine by a 64 km all season haul road. The local physiography is characterized by numerous lakes and low, rolling hills covered mainly by lichen/rock complexes, and heath tundra.

Environmental baseline studies were conducted prior to Meadowbank and Whale Tail Mine approvals and integrated into Project designs according to the Cumberland (2006) and Agnico Eagle (2019) TEMPs. Wildlife Valued Ecosystem Components (VECs) for the Meadowbank mine were identified in consultation with regulatory agencies and Baker Lake residents, and considered criteria such as conservation status, relative abundance within the Project study area, importance in subsistence lifestyle and economy, importance in predator-prey systems, habitat requirement size and sensitivity, and contribution to local area concerns. Based on these selection criteria, key terrestrial VECs determined for the Meadowbank mine were wildlife habitat, ungulates, predatory mammals, small mammals, raptors, waterbirds, and upland breeding birds. Because of limited evidence that small mammals were affected by the Project, this VEC was not included in the Whale Tail mine or revised TEMP. Further details can be found in the Final Environmental Impact Statements (FEIS) for the Meadowbank Mine (Cumberland 2005) and the Whale Tail Mine (Golder 2016; Golder 2018).

Construction of a 106.8 km AWAR between the community of Baker Lake and the Meadowbank Mine was completed in March 2008 and provides Mine site access and re-supply, while on-site Mine haul and access roads connect open-pit areas to ancillary facilities. Meadowbank Mine site facilities include a mill, power plant, maintenance facilities, tank farm for fuel storage, water treatment plant, sewage treatment plant, airstrip, and accommodations. Mine components include open pits, waste rock storage facilities, and a tailings storage facility.

In 2008, construction of numerous camp infrastructure facilities was completed. In 2009, the principal Mine site construction began, and Mine operation commenced in early 2010. Mining at Goose Pit was finished in 2015 while Agnico Eagle continued ongoing mining operations at Portage and Vault pits and investigated expansion of the Vault area into Phaser Lake. In 2018, an expansion was made in pit E (Portage) to extend mining and mill feed to bridge the gap between the end of mining activities in Meadowbank and the start of mining activities at Whale Tail Mine. As a result, 2024 mining activities at the Meadowbank Complex included mining ore at the Whale Tail Mine and processing ore at the mill at the Meadowbank site.

To extend Mine operations and milling at Meadowbank Mine, Agnico Eagle developed the Whale Tail Mine and Haul Road Project, approximately 55 km north of the Meadowbank Mine, on a satellite deposit located on the Amaruq property in the Kivalliq Region of Nunavut. The Amaruq Exploration Access Road (AEAR) was built in 2016 and 2017 to access the Amaruq exploration site from the Meadowbank Mine. The AEAR was modified into the Whale Tail Haul Road (WTHR) (enlargement) following regulatory approval and was completed in 2018. Construction of the Whale Tail Dike in 2018 allowed for Whale Tail Lake North Basin dewatering starting in Q1, 2019, the pre-stripping of future Whale Tail Mine, and the construction of major infrastructures including the permanent camp, with accommodation and kitchen facilities, sewage treatment plan, tank farm for fuel storage, and freshwater intake. Open-pit mining operation at the Whale Tail deposit began in Q3 (30 September), 2019. Commercial operations at the IVR pit commenced on 31 December 2021. Permitting to expand the Whale Tail operation and extend the Mine life to 2028 was approved in August 2024. Other Project updates include implementation of several measures to increase Project capacity and equipment inventory prior to caribou migration. These changes have included increasing the long-haul truck fleet size in 2022 through 2024 to stockpile additional ore at the Meadowbank Complex, ensuring the mill is able to sustain 20 days of road closures,

installation of a 3,000,000 L fuel tank at the Meadowbank site, and installation of four permanent 50,000 L fuel tanks in 2022 to increase autonomy of the Whale Tail site.

1.3 Study Area Boundaries

1.3.1 Meadowbank Mine, Vault Pit, and AWAR

The Meadowbank Mine Local Study Area (LSA) includes a 5 km radius area centred on the Mine Site and a 5 km radius around the Vault Site creating an elliptical shape with a total area of 154 km². The AWAR LSA consists of a 3 km wide corridor centred on the AWAR between Baker Lake and the Meadowbank Mine. The Regional Study Area (RSA) encompasses an area that includes a 25 km radius area around the Meadowbank Mine and Vault sites and a 50 km wide corridor along the AWAR for a total area of 5,077 km² (Figure 1-1).

1.3.2 Whale Tail Mine and Haul Road

The Whale Tail LSA is a 3 km corridor centered on the WTHR and borrow site access roads (i.e., 1.5 km on either side of the road and 1.5 km around borrow areas) and includes an approximate 1.5 km buffer around development areas at the Whale Tail Mine area, for a total area of 282 km². The Whale Tail RSA is a 50 km corridor centred on the WTHR alignment (i.e., 25 km on either side of the WTHR and borrow site access roads, and 25 km around borrow areas), with a total area of 5,017 km² (Figure 1-1).

1.4 Monitoring Approach

Wildlife monitoring is an essential tool in protecting and maintaining wildlife occurring near the Project. The TEMP (Agnico Eagle 2019) is designed to be a comprehensive monitoring strategy with quantitative monitoring indicators to evaluate the accuracy of impact predictions and to meet the objectives of managing environmental impacts by the Project. Version 7 of the TEMP (Agnico Eagle 2019) was the version implemented for 2024. Version 9 of the TEMP was approved by the TAG in March 2025 is in the process of being submitted to regulatory agencies (Agnico Eagle 2025). Monitoring programs are designed to assess Project-related impact predictions and the effectiveness of mitigation measures. Measures on the effectiveness of mitigation will inform on whether monitoring or mitigation require adaptive management. Adaptive management is an on-going process of learning by doing that evolves throughout the life of the Project. Outcomes of adaptive management include increasing or decreasing, or no change, to mitigation or monitoring. Further study intended to better understand Mine-related effects may also be an outcome of adaptive management based on input from individual stakeholders or the TAG. Ongoing review of the TEMP and annual Wildlife Monitoring Summary Reports (which provide results of TEMP monitoring programs) by regulatory agencies, technical reviewers, and stakeholders will further support that local and regional concerns have been adequately addressed.

Environmental staff monitor wildlife near Project facilities (i.e., Meadowbank Mine and Whale Tail Mine) and along the AWAR and WTHR on a regular basis (Section 3.6). Where unacceptable risks to wildlife are observed, mitigation measures are implemented to avert animals from site activities and hazards in accordance with the TEMP (Agnico Eagle 2019). The decision trees used as mitigation and monitoring framework for caribou (*Rangifer tarandus groenlandicus*) and muskox (*Ovibos moschatus*) are outlined in Section 2.0. Detailed reporting protocols (e.g., a dangerous animal occurrence, monthly wildlife reports submitted to the GN DoE, road closure notification to GN, KivIA, HTO) are established and implemented by on-site environmental staff. During these events, Agnico Eagle representatives communicate any issues directly with the GN Department of Environment (DoE) Conservation Officer, KivIA, and the local HTO.

1.5 Report Objectives

The primary objectives of the 2024 Wildlife Monitoring Summary Report are to:

- a) Report the results of the 2024 wildlife monitoring programs.
- b) Summarize the monitoring strategy implemented over the course of the year.
- c) Evaluate the function and validity of implemented monitoring and mitigation strategies.
- d) Summarize adaptive management strategies.
- e) Provide management recommendations for 2025.
- f) Allow regulators to contribute toward improvements of wildlife mitigation and monitoring.
- g) Include a summary of all caribou-related monitoring, mitigation, and Project management actions in one consolidated section.

1.6 Inuit Involvement

Since 1999, local Inuit from the community of Baker Lake have been involved in all wildlife-related baseline and monitoring surveys. The average number of Inuit involved in surveys varies annually. Programs with previous Inuit involvement include the LSA and RSA aerial survey, breeding bird plots and transects, waterfowl nest surveys, waterbird nest surveys for the Whale Tail Mine, raptor nest surveys, road surveys, viewshed surveys, habitat mapping, and phenology plots. Local harvesters participate in the Hunter Harvest Study (Section 10.0).

Four Inuit workers were under the employment of the environmental department and were involved in the monitoring programs during 2024. Additionally, two local contractors were used in 2024. Agnico Eagle environmental Inuit workers are involved in wildlife programs including caribou behavior monitoring, road surveys, viewshed surveys, and wildlife deterrence on site when required. In 2024, two Baker Lake Hunters and Trappers Organization (HTO) wildlife monitors completed road surveys regularly throughout the year.

As required by the Inuit Impact Benefit Agreement (IIBA), “Anything done by Agnico in order to implement the TEMP [...] shall incorporate Inuit Qaujimanituqauit”; therefore, Indigenous Traditional Knowledge or IQ has been incorporated in this annual report. See Table 1-1 for a summary of IQ incorporation.

Table 1-1: Incorporation of Indigenous Traditional Knowledge in Annual Report

| Indigenous Traditional Knowledge | Agnico Eagle Implemented Measures | Report Integration |
|--|---|---|
| IQ says caribou have good hearing abilities, and it was noted that the flags could be disturbing to caribou. | Agnico Eagle implemented measures to reduce noise from road marker flags. | Discussed in Section 1.7. Doesn't impact monitoring but reduces sensory disturbance to wildlife. |
| IQ says caribou are sensitive to aircraft disturbance, such as from helicopters. | Caribou are surveyed using ground surveys (i.e., Road Surveys and Viewshed Surveys) instead of aerial surveys for ungulate monitoring to prevent disturbance from aircrafts. Additionally, flight restrictions are in place to reduce potential disturbance to wildlife and fewer project related flights occur during sensitive seasons. | Information about the current caribou monitoring approaches are discussed in in Sections 3.0 and 7.0. Information about helicopter flights and flight guidelines to minimize disturbance to wildlife are discussed in Section 4.5.9. |
| IQ says that caribou feet are sensitive, and caribou may be able to feel ground vibrations associated with blasting at further distances than humans. | Implemented blast monitoring study to understand how ground vibration and overpressure propagate over distance. | The blast monitoring study is presented in Section 9.0 of the report. |
| IQ says that it is important to allow the lead caribou to pass so that other caribou will follow the same migration paths. IQ says to not hunt or disturb lead caribou groups. | Agnico Eagle in collaboration with the TAG developed a lead caribou mitigation approach, which was implemented in spring 2024. Road closures allow the lead caribou to pass through the RSA with minimal disturbance. | The lead caribou mitigation approach was implemented in spring 2024 and is described in Section 3.0 of this report. This mitigation approach has been integrated into the next version of the TEMP, including updated management decisions trees. |
| IQ says that caribou will benefit from reduced sensory disturbance during fall migration, such as by reduced traffic. | Agnico Eagle in collaboration with the TAG developed new fall mitigation measures to allow use of convoys while creating gaps in traffic to facilitate caribou crossings. Longer gaps in traffic allow caribou to pass through the RSA with minimal disturbance. | The new fall mitigation measures were developed in 2024 and will be implemented in fall 2025 and are described in Section 3.0 of this report. This mitigation approach has been integrated into the next version of the TEMP, including updated management decisions trees. |

1.7 Terrestrial Advisory Group

As per Project Certificate No.008, Condition 27 of the Whale Tail Pit FEIS Addendum (Golder 2016), Agnico Eagle has established a TAG consisting of representatives from Agnico Eagle, the Government of Nunavut Department of Environment (GN DoE), the KivIA, and the HTO.

A Memorandum of Understanding (MOU) and Terms of Reference (TOR) have been developed and signed by all parties in July 2019. Agnico Eagle provided a summary of TAG meeting outcomes to the NIRB since 2019.

The purpose of the TAG is to:

- Measure the relevant environmental effects of the Project on terrestrial wildlife.
- Confirm that the Project and mining activities are carried out within the terms and conditions of the Project Certificates No.004 and No.008 relating to the protection of terrestrial wildlife.
- Assess the accuracy of the predictions contained in the final environmental impact statement filed by Agnico Eagle with NIRB.
- Identify and select appropriate target species, indicators, and linkages for monitoring.

- Evaluate the effectiveness of mitigation measures and to support any required adaptive management of those measures.
- Identify any unforeseen Project-related effects.
- Provide an early warning mechanism to identify any Project-related effects.
- Determine and identify any cause-and-effect interactions between the Project and the environment.

TAG meetings were held on January 22 – 23, March 1, July 10, August 21, and October 31 – November 1 during 2024. The March, July, and August meetings were held online and in Baker Lake. The January and October/November meetings were in-person workshops held in Winnipeg; a conference call option was available for people who could not attend in person.

The January 22 - 23 workshop (TAG meeting #17, Agnico Eagle 2024a) focussed on discussions for the spring migration lead caribou protocols, including decisions trees. Mitigation measures were discussed for both the lead caribou closure period and the period following lead caribou closure.

The March 1 meeting (TAG meeting #18) was to sign the recommendation for spring migration mitigation protocols.

The July 10 meeting (TAG meeting #19, Agnico Eagle 2024b) included a review of the 2024 spring migration as well as discussion for fall migration planning.

The August 21 meeting (TAG meeting #20, Agnico Eagle 2024c) included presentations on fall migration caribou patterns followed by a discussion of whether lead caribou mitigation measures could be applied for fall. Due to the wide interval for fall migration and high variation in timing of migration, it was determined that a different mitigation protocol would be required for the fall season and a new protocol would not be implemented until fall 2025 (Agnico Eagle 2024d).

The TAG workshop held on October 31 – November 1, 2024 (TAG meeting #21, Agnico Eagle 2024d), included a presentation and discussion on the spring migration detailed analysis, as well as the decision to continue the lead caribou spring pilot program. Several presentations and discussions followed related to comments from the 2023 annual report review, including helicopter traffic monitoring and reporting and purpose of the remote camera program. Fall migration measure were discussed as well, with implementation planned for fall 2025. Many topics of this workshop were discussed in the context of TEMP version 9 updates, with a separate TEMP focused workshop planned for February 2025.

1.8 Mitigation Audit

A mitigation audit is an annual requirement outlined in the 2019 TEMP (Agnico Eagle 2019). Mitigation approaches applied at the Project stem from current practices at existing mines or were suggested during the environmental assessment review process. However, an auditing system supports evaluation on the use and effectiveness of the mitigation consistent with the principals of adaptive management and may identify or recommend changes to mitigation or monitoring. As an example, per Project Certificate No.008, Condition 32, Agnico Eagle engages with the Baker Lake HTO and other relevant parties to ensure that safety barriers, berms, and designed crossings associated with Project infrastructure, including the WTHR, are constructed and operated as necessary to allow for the safe passage of caribou and other terrestrial wildlife.

The audit is to be undertaken internally and annually and summarized in the annual report and will focus specifically on mitigation listed in Section 4.1 of the TEMP version 7 (Agnico Eagle 2019). The audit will evaluate:

- what mitigation was implemented
- which mitigation is perceived or shown to be effective
- whether new mitigation has been implemented in response to new issues; and whether some mitigation is redundant or unnecessary

Results of internal mitigation audits are included throughout this report under the subheadings titled “Accuracy of Impact Predictions”, including information on thresholds, exceedances, and mitigation measures applied if applicable.

2.0 CARIBOU MANAGEMENT DECISION TREE

2.1 Overview

The 2019 TEMP version 7 (Agnico Eagle 2019) describes the use of decision trees or charts that outline adaptive monitoring and mitigation for ungulates for each of five phases: 1) caribou and mining operations; 2) caribou and Whale Tail Haul Road; 3) caribou and the AWAR; 4) caribou and blasting; and 5) muskox and operations (see Agnico Eagle 2019). Adaptive management that was developed in collaboration with the TAG was also implemented in 2024.

2.2 Objectives

The monitoring objectives are to:

- 1) Detect if effect thresholds have been exceeded.
- 2) Test the efficacy of mitigation.
- 3) Understand Project-related effects to ungulates. For ungulates, the decision trees are also an objective to manage sensory disturbance to caribou approaching the Project. Monitoring to detect caribou intensifies as caribou approach the Project and mitigation intensifies to reduce sources of sensory disturbance.

2.3 Duration

Monitoring activities for ungulates were carried out prior to, during, construction and operations. The use of decision trees for managing disturbance to ungulates is an ongoing and continuous monitoring and mitigation strategy for the life of the Project. Monitoring and mitigation intensity is increased and decreased as ungulates approach the Project in accordance with the decision trees and the adaptive management protocols that are agreed upon by the TAG.

2.4 Methods

The approach involves monitoring the number of ungulates in close proximity to mining operations through various monitoring tools including caribou collaring data, Viewshed surveys, AWAR and Whale Tail Haul Road surveys, and pit and Mine site ground surveys. Depending on the number of ungulates observed (i.e., caribou GST), proximity to the road, and time of year, different mitigation and monitoring levels are triggered (i.e., Level 1, Level 2, Level 3). For example, triggers may result in pit and Mine site ground surveys and/or haul road surveys increased up to every two days, and caribou satellite data reviewed daily. Example of mitigations include daily site-wide notifications, road closures to non-essential vehicles, and speed restrictions.

For the purposes of monitoring, a “group of caribou” is defined as: “An aggregation of caribou that are sufficiently close together that they can see and react to another animal’s behaviour and have the potential of responding should one or more animal in the aggregation become startled.” Updated caribou GSTs by season used for Meadowbank Complex in 2024 were developed based on instructions provided by the GN (Table 2-1; GN 2021). A GST of 13 muskox is used year-round, and mitigation and monitoring related to muskox is performed according to Figure 10 of 2019 TEMP version 7 (Agnico Eagle 2019). For further details on the reasoning behind caribou GSTs and the decision chart approach, refer to the 2019 TEMP version 7 (Agnico Eagle 2019). The GST approach and monitoring/management outcomes is reviewed by the TAG on a regular basis to determine whether an acceptable balance has been achieved between mining operations and conserving caribou populations. As GSTs are the main trigger for mitigation and management, understanding their efficacy for overall herd protection is of high importance. Further information about the timing and implementation of caribou protection measures are found in Section 3.6.6.

Table 2-1: Seasonal Caribou Group Size Thresholds Applied During 2024.

| Season | Dates ^(a) | Group Size Threshold |
|--------|-----------------------------|----------------------|
| Spring | 1 April to 25 May | 38 |
| Summer | 26 May to 21 September | 25 |
| Fall | 22 September to 15 December | 88 |
| Winter | 16 December to 31 March | 25 |

(a) Date ranges are based on Government of Nunavut seasonal range guidelines.

2.5 Results

The decision trees were used throughout 2024. Data collection methods were implemented in 2024 to link individual observations to mitigations, through use of field tablets linked to a customizable EQUiS Collect database. Paper data forms are carried in case issues arise with field tablets. All wildlife observations, and associated mitigations are provided in Appendix A (Wildlife Observations). Summaries of wildlife survey results are discussed in their respective sections. A summary of AWAR and WTHR closure are discussed in Section 3.6.6. The majority of mitigations were implemented based on road survey observations (Section 3.0; Appendix A). Few mitigations were implemented based on other survey types, including pit and mine site ground surveys (Section 4.0; Appendix A).

2.6 Accuracy of Impact Predictions

An objective of the decision tree approach is to reduce sensory disturbance to caribou approaching the Project. The objective is not linked to an impact prediction as the monitoring is to trigger mitigation rather than to test a prediction.

2.7 Management Recommendations

Wildlife observations should continue to be documented using approaches implemented in 2024 that allow individual observations to be linked to mitigations, providing evidence of use of decision trees.

3.0 ROAD SURVEYS

3.1 Overview

A systematic road survey monitoring program for the AWAR, and WTHR has been designed to evaluate sensory disturbance for wildlife, particularly caribou, muskoxen, and predatory mammals utilizing habitats adjacent to the roads. The program also monitors incidental mortality of species as they are encountered within the Project infrastructure, but in particular near the roads. In 2017 and 2018, the Vault Road has been surveyed and reported separately from the WTHR, but since 2020 the Vault Road observations are considered part of the WTHR observations and results.

3.2 Objectives

The primary objectives of the road survey monitoring program are to:

- 1) Document wildlife utilization along the AWAR and WTHR corridors.
- 2) Evaluate wildlife trends along the road corridors, including identifying areas where higher densities of wildlife are observed.
- 3) Inform on the need for adaptive mitigation, such as temporary road closures during peak caribou migration periods.
- 4) Inform whether mortality thresholds for wildlife are exceeded.
- 5) Monitor road-related injuries or mortalities of caribou. The Project-wide threshold mortality level for ungulates is two individuals per year (as per TEMP version 7).
- 6) Monitor road-related injuries or mortalities of predatory mammals. The Project-wide threshold mortality level for predatory mammals is two individuals per year (as per TEMP version 7).

3.3 Duration

The AWAR and WTHR systematic road surveys are ongoing over the operational phase of the Project and are scheduled to be conducted a minimum of once per week throughout the year, every second day during sensitive seasons (i.e., contingent on weather and road access; see Figures 7 and 8 in TEMP v7). Survey frequency increases to daily if caribou GSTs are exceeded within 4 km (Figures 7 and 8 in TEMP v7). Muskox are also monitored during road surveys, and muskox observations can increase road survey frequency year-round if muskox GST is exceeded within 500 m of roads (Figure 10 in TEMP v7). Agnico Eagle is committed to conducting a minimum of 75 road surveys per year along the AWAR and WTHR. Monitoring of vehicle-related wildlife mortality is continual along all road segments.

3.4 Methods

Agnico Eagle has signed an MOU with the Baker Lake HTO to provide a wildlife monitor for road monitoring beginning in October 2018. An amended MOU was signed in February 2022, retroactive to 8 November 2021, to hire a second wildlife monitor that will work on the AWAR and WTHR. In 2021, the monitor was primarily on the AWAR due to COVID restrictions. From 2022 to 2024, two Baker Lake HTO wildlife monitors completed road surveys regularly throughout the year.

The survey team typically includes two observers (one is the driver) in a vehicle. The terrain on both sides of the road is surveyed as the vehicle progresses at a maximum speed of 30 km per hour in areas where wildlife is present. For each sighting, the vehicle is safely parked in a road pullout and UTM coordinates are recorded along

with the estimated distance of the animal(s) from the road, nearest road marker, species, number, direction of travel and a variety of other information (e.g., behavior of animals). All data are recorded electronically in tablet forms. Where animals are sighted close to roads and a risk of collision with vehicles is possible, the environmental monitor/observers report the number of animals, location, and direction of travel to the Mine radio dispatcher who informs all vehicle operators. In addition, all vehicle operators report ungulates and predatory mammals seen along roads to the dispatcher. Regular data provided to Mine site personnel from the caribou satellite-collaring program are also used to track caribou movement and potential interactions with roads and Project facilities.

3.5 Historical Results

Road surveys commenced shortly following the onset of AWAR construction in 2007. Sampling intensity was comparable along the entire length of the AWAR from 2009 to 2018. From 2019 to 2024, sampling intensity has been steadily increasing from a survey every 2.6 days to a survey every 1.3 days on average. Surveys along the Vault Haul Road have been irregular since its completion but were included as part of regular AWAR surveys in 2016 and conducted separately beginning in 2017. Since beginning road surveys in 2007, the annual survey frequency completed along the AWAR has ranged from one survey completed every 6.1 days to one survey completed every 1.6 days with an average annual survey frequency of one survey completed every 4.1 days (Table 3-1). Surveys along the WTHR began in 2017 and have been conducted every 1.5 to every 7.7 days with an average annual survey frequency of every 3.4 days (Table 3-4). Survey frequency changes throughout the year based on caribou migration patterns and ungulate observations (see caribou decision trees, Agnico Eagle 2019), with surveys occurring every two days during sensitive seasons.

3.6 2024 Results

3.6.1 AWAR Surveys

The number of AWAR surveys completed each season in 2024 is provided in Table 3-1. The number of systematic road surveys completed in 2024 ($n=277$) is higher than the number of surveys completed the previous year ($n=215$), and considerably higher than the annual goal of 75 surveys. In 2024, surveys were conducted on average every 1.3 days and were conducted between 01 January and 31 December. The number of surveys completed was highest in the summer ($n=82$) and lowest in spring ($n=41$). As was mentioned earlier in report, this was the pilot year for lead caribou 10-day closure. During the closure, there may be several migrating caribou, however daily monitoring is not completed during these closures to reduce the number of vehicles on the road. If the largest number of caribou interacted with the road during the lead caribou closure and fewer interacted during the remainder of the season, this would drastically reduce the number of surveys conducted (i.e., if the GST is not exceeded, daily surveys are not conducted). This could also explain the average number of caribou observed per survey being lower, as most caribou interactions could have occurred during the 10-day closure. By month, the highest numbers of surveys were conducted in September and November, with November corresponding with the highest numbers of caribou observed within the LSA. Two Baker Lake HTO wildlife monitors completed road surveys regularly throughout the year (Section 1.6).

A total of 40,161 caribou were detected across 277 AWAR road surveys, and caribou were recorded in all seasons. Caribou were recorded during road surveys in every month, although only 9 caribou were observed in July. Caribou detections per survey were calculated by season (Table 3-2) and by month (Table 3-3).

The highest caribou observed per survey across months in 2024 occurred in November and December (Table 3-3). The November 2024 average caribou per survey was the second highest caribou count in November on record (636.4 caribou/survey), behind November 2022 (820.3 caribou/survey; Table 3-3).

Table 3-1: Details of All-Weather Access Road Wildlife Surveys from 2007 to 2024

| Year | Annual range of surveys | Average Frequency ^(a) | Number of AWAR surveys | | | | Annual Total |
|------|-------------------------|----------------------------------|------------------------|-----------------------|---------------------|-----------------------|--------------|
| | | | Spring ^(b) | Summer ^(b) | Fall ^(b) | Winter ^(b) | |
| 2007 | Mar 01 – Dec 31 | 4.1 days | 13 | 24 | 8 | 33 | 78 |
| 2008 | Jan 02 – Dec 29 | 3.9 days | 15 | 7 | 15 | 57 | 94 |
| 2009 | Jan 09 – Dec 16 | 6.1 days | 15 | 10 | 8 | 25 | 58 |
| 2010 | Jan 21 – Dec 17 | 5.6 days | 9 | 9 | 12 | 36 | 66 |
| 2011 | Jan 10 – Dec 30 | 6.0 days | 10 | 9 | 11 | 33 | 63 |
| 2012 | Jan 04 – Dec 29 | 4.7 days | 14 | 13 | 12 | 38 | 77 |
| 2013 | Feb 02 – Dec 27 | 6.0 days | 9 | 13 | 10 | 31 | 63 |
| 2014 | Jan 12 – Dec 30 | 5.5 days | 11 | 7 | 11 | 38 | 67 |
| 2015 | Jan 03 – Dec 18 | 4.7 days | 17 | 16 | 11 | 32 | 76 |
| 2016 | Jan 02 – Dec 27 | 4.7 days | 10 | 14 | 16 | 38 | 78 |
| 2017 | Jan 03 – Dec 29 | 4.3 days | 19 | 16 | 14 | 36 | 85 |
| 2018 | Jan 03 – Dec 29 | 5.0 days | 9 | 12 | 16 | 35 | 72 |
| 2019 | Jan 04 – Dec 27 | 2.6 days | 37 | 39 | 39 | 22 | 137 |
| 2020 | Jan 17 – Dec 26 | 2.6 days | 26 | 54 | 41 | 11 | 132 |
| 2021 | Jan 01 – Dec 31 | 2.1 days | 43 | 42 | 69 | 23 | 177 |
| 2022 | Jan 02 – Dec 29 | 1.6 days | 47 | 78 | 72 | 38 | 235 |
| 2023 | Jan 07 – Dec 31 | 1.7 days | 49 | 50 | 69 | 47 | 215 |
| 2024 | Jan 01 – Dec 31 | 1.3 days | 41 | 82 | 78 | 76 | 277 |

AWAR = All-Weather Access Road.

(a) Frequency refers to the average number of days between surveys over the year.

(b) Spring = Apr 1 to May 25, Summer = May 26 to Sep 21, Fall = Sep 22 to Dec 15, Winter = Dec 16 to Mar 31.

Table 3-2: Seasonal Caribou Counts and Detections per Survey on the All-Weather Access Road, 2007 to 2024

| Year | Total Caribou Count | | | | | Caribou Detections per Survey | | | | |
|------|-----------------------|-----------------------|---------------------|-----------------------|--------|-------------------------------|-----------------------|---------------------|-----------------------|--------|
| | Spring ^(a) | Summer ^(a) | Fall ^(a) | Winter ^(a) | Annual | Spring ^(a) | Summer ^(a) | Fall ^(a) | Winter ^(a) | Annual |
| 2007 | - | - | - | - | - | - | - | - | - | - |
| 2008 | - | - | - | - | - | - | - | - | - | - |
| 2009 | 1,224 | 649 | 628 | 1,238 | 3,739 | 81.6 | 64.9 | 78.5 | 49.5 | 64.5 |
| 2010 | 756 | 283 | 13,850 | 114 | 15,003 | 84 | 31.4 | 1,154.2 | 3.2 | 227.3 |
| 2011 | 1,586 | 1,808 | 2,538 | 76 | 6,008 | 158.6 | 200.9 | 230.7 | 2.3 | 95.4 |
| 2012 | 655 | 256 | 3,545 | 1,093 | 5,549 | 46.8 | 19.7 | 295.4 | 28.8 | 72.1 |
| 2013 | 230 | 335 | 2,509 | 930 | 4,004 | 25.6 | 25.8 | 250.9 | 30 | 63.6 |
| 2014 | 690 | 36 | 8,897 | 635 | 10,258 | 62.7 | 5.1 | 808.8 | 16.7 | 153.1 |
| 2015 | 1,676 | 611 | 8,485 | 148 | 10,920 | 98.6 | 38.2 | 771.4 | 4.6 | 143.7 |
| 2016 | 580 | 190 | 659 | 134 | 1,563 | 58 | 13.6 | 41.2 | 3.5 | 20 |
| 2017 | 21 | 90 | 741 | 45 | 897 | 1.1 | 5.6 | 52.9 | 1.2 | 10.6 |
| 2018 | 4,688 | 1,821 | 1,939 | 195 | 8,643 | 520.9 | 151.8 | 121.2 | 5.6 | 120 |
| 2019 | 19,706 | 445 | 21,078 | 10 | 41,239 | 532.6 | 11.4 | 540.5 | 0.5 | 301 |
| 2020 | 7,510 | 18,539 | 16,334 | 861 | 43,244 | 288.8 | 343.3 | 398.4 | 78.3 | 327.6 |
| 2021 | 14,661 | 2,670 | 16,062 | 4,432 | 37,825 | 341 | 63.6 | 232.8 | 192.7 | 213.7 |
| 2022 | 803 | 1,466 | 46,708 | 1,116 | 50,093 | 17.1 | 18.8 | 648.7 | 29.4 | 213.2 |
| 2023 | 31,314 | 1,061 | 19,048 | 3,517 | 54,940 | 639.1 | 21.2 | 276.1 | 74.8 | 255.5 |
| 2024 | 2,510 | 3,975 | 27,995 | 5681 | 40,161 | 61.2 | 48.5 | 358.9 | 74.8 | 145.0 |

AWAR = All-Weather Access Road; "-" = data unavailable.

(a) Frequency refers to the average number of days between surveys over the year.

(b) Spring = Apr 1 to May 25, Summer = May 26 to Sep 21, Fall = Sep 22 to Dec 15, Winter = Dec 16 to Mar 31.

Table 3-3: Monthly Counts of Caribou Observed per Survey Trip Along the All-Weather Access Road from 2007 to 2024

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|----------------|------|------|-------|-------|-------|------|------|-------|-------|-------|-------|-------|
| 2007 | 0 | 0 | 11.4 | 14 | 15.4 | 7.1 | 1.5 | 1.1 | 10.8 | 18.4 | 72.4 | 18.4 |
| 2008 | 14.3 | 11.5 | 11.4 | 12.7 | 12.1 | 3.5 | 13.3 | 5.4 | 12.5 | 44.3 | 90.7 | 10.3 |
| 2009 | 12 | 10.7 | 16.7 | 11.4 | 13 | 8.2 | 0 | 3.6 | 8.5 | 25.4 | 13 | 11 |
| 2010 | 5.3 | 4.1 | 6.7 | 10.8 | 18 | 9 | 1.1 | 5.6 | 4.8 | 197.2 | 106 | 7.9 |
| 2011 | 3 | 1 | 6 | 34 | 25.3 | 12.5 | 1 | 63 | 10.3 | 71.6 | 2.3 | 7.8 |
| 2012 | 5.1 | 5.3 | 6 | 15.2 | 14.2 | 3.1 | 0 | 1 | 1 | 60 | 116.5 | 169.7 |
| 2013 | 0 | 68.1 | 39.8 | 0 | 11 | 5.3 | 0 | 1 | 6.5 | 6 | 455.2 | 16.8 |
| 2014 | 3.2 | 10.5 | 10.5 | 27.2 | 8.4 | 1.5 | 0 | 1 | 33.1 | 101.8 | 48.4 | 17.6 |
| 2015 | 5.8 | 7 | 14.4 | 22.4 | 14.1 | 6.3 | 2 | 3 | 12.3 | 41.5 | 148.9 | 275 |
| 2016 | 3.7 | 2.3 | 6 | 23.8 | 13.2 | 6.9 | 0 | 2.7 | 3.3 | 73 | 2 | 15.7 |
| 2017 | 8 | 0 | 3.5 | 4 | 0 | 1 | 0 | 3.4 | 5.3 | 63.3 | 12.6 | 5.4 |
| 2018 | 6.4 | 12.3 | 14.4 | 51.4 | 27.7 | 12.3 | 1 | 23.4 | 23.7 | 38.8 | 40.6 | 1 |
| 2019 | 0 | 0 | 6 | 77.6 | 22.8 | 5.7 | 1 | 1.3 | 1 | 145.8 | 79 | 4 |
| 2020 | 0 | 0 | 107.6 | 263.2 | 430 | 52 | 0 | 185.2 | 483.9 | 485.7 | 556 | 2.3 |
| 2021 | 0 | 3 | 34.6 | 414.7 | 226.6 | 26.4 | 0.3 | 161.3 | 30.7 | 64.5 | 35.6 | 553.5 |
| 2022 | 44.8 | 48.8 | 7.5 | 23.8 | 8 | 8.6 | 32.6 | 9.2 | 32.1 | 756.9 | 820.3 | 0.3 |
| 2023 | 0 | 0 | 17.8 | 850.7 | 221.6 | 23.2 | 0 | 0.1 | 0.7 | 331.9 | 379.8 | 150 |
| 2024 | 57.4 | 44 | 117.8 | 51.8 | 65.2 | 11.9 | 0.7 | 30.1 | 91.7 | 163.9 | 636.4 | 226.9 |
| Average | 9.4 | 12.7 | 24.3 | 106.0 | 63.7 | 11.4 | 3.0 | 27.9 | 42.9 | 149.4 | 200.9 | 83.0 |

Note: Data show the average number of caribou observed for a month of the year, including data from all road surveys completed that month. Data are based on the observed number, which might be more inaccurate for larger groups or groups that are further away.

3.6.2 WTHR Surveys

Survey routes were separated into the Vault and Whale Tail segments of the WTHR until 2019 but were analyzed as a single unit (WTHR) starting in 2020. In 2024 there were 194 surveys conducted between 01 January and 31 December with a survey being conducted every 1.9 days on average (Table 3-4). The number of surveys conducted in 2024 was lower than the number conducted in 2023, but higher than the number conducted in any other previous years. In 2024, the fewest number surveys were conducted in winter and the greatest number of surveys occurred during spring (Table 3-4).

A total of 16,007 caribou were detected across 194 WTHR surveys in 2024, which was the third highest total since 2017 (Table 3-5; Figure 3-1). Caribou detections per survey were calculated by season (Table 3-5) and by month (Table 3-6).

The majority of caribou sightings along the WTHR were observed in April corresponding with spring migration, with a total of 9,554 caribou observed and an average of 398.1 caribou sightings per survey (Table 3-6). November had the second highest caribou sighting per survey that was observed in 2024 with 219.7 caribou sightings per survey. Caribou were detected along the WTHR during every month in 2024. Only April, May, July, and November detected more than 10 average caribou per survey in 2024 (Table 3-6). When comparing the same month across years, November and July of 2024 had the highest average caribou counts on record, and April had the second highest average caribou counts on record behind April 2023 (Table 3-6).

Table 3-4: Details of Whale Tail Haul Road Surveys from 2017 to 2024

| Year | Annual range of surveys | Average Frequency ^(a) | Number of WTHR surveys | | | | Annual Total |
|------|-------------------------|----------------------------------|------------------------|-----------------------|---------------------|-----------------------|--------------|
| | | | Spring ^(b) | Summer ^(b) | Fall ^(b) | Winter ^(b) | |
| 2017 | Jan 03 – Dec 29 | 7.7 days | 9 | 7 | 7 | 24 | 47 |
| 2018 | Jan 30 – Dec 30 | 5.7 days | 4 | 1 | 7 | 47 | 59 |
| 2019 | Jan 08 – Dec 23 | 2.0 days | 62 | 39 | 45 | 27 | 173 |
| 2020 | Jan 07 – Dec 26 | 2.2 days | 47 | 50 | 32 | 32 | 161 |
| 2021 | Jan 10 – Dec 31 | 2.5 days | 48 | 26 | 49 | 21 | 144 |
| 2022 | Jan 02 – Dec 28 | 1.9 days | 59 | 66 | 44 | 24 | 193 |
| 2023 | Jan 05 – Dec 30 | 1.5 days | 73 | 64 | 69 | 36 | 242 |
| 2024 | Jan 01 – Dec 31 | 1.9 days | 53 | 52 | 49 | 40 | 194 |

WTHR = Whale Tail Haul Road.

(a) Frequency refers to the average number of days between surveys over the year.

(b) Spring = Apr 1 to May 25, Summer = May 26 to Sep 21, Fall = Sep 22 to Dec 15, Winter = Dec 16 to Mar 31.

Table 3-5: Seasonal Caribou Counts and Detections per Survey on the Whale Tail Haul Road, 2017 to 2024

| Year | Total Caribou Count | | | | | Caribou Detections per Survey | | | | |
|------|-----------------------|-----------------------|---------------------|-----------------------|--------|-------------------------------|-----------------------|---------------------|-----------------------|--------|
| | Spring ^(a) | Summer ^(a) | Fall ^(a) | Winter ^(a) | Annual | Spring ^(a) | Summer ^(a) | Fall ^(a) | Winter ^(a) | Annual |
| 2017 | 5 | 5 | 10 | 5 | 25 | 0.6 | 0.7 | 1.4 | 0.2 | 0.5 |
| 2018 | 787 | 193 | 2,549 | 7 | 3,536 | 196.8 | 193.0 | 364.1 | 0.1 | 59.9 |
| 2019 | 53,201 | 7,391 | 6,819 | 45 | 67,456 | 858.1 | 189.5 | 151.5 | 1.7 | 389.9 |
| 2020 | 9,153 | 298 | 94 | 560 | 10,105 | 194.7 | 6.0 | 2.9 | 17.5 | 62.8 |
| 2021 | 10,549 | 1,047 | 304 | 28 | 11,928 | 219.8 | 40.3 | 6.2 | 1.3 | 82.8 |
| 2022 | 4,521 | 1,487 | 259 | 88 | 6,355 | 76.6 | 22.5 | 5.9 | 3.7 | 32.9 |
| 2023 | 30,789 | 3,050 | 1,923 | 101 | 35,863 | 421.8 | 47.7 | 27.9 | 2.8 | 148.2 |
| 2024 | 11,403 | 538 | 3,956 | 110 | 16,007 | 215.2 | 10.3 | 80.7 | 2.8 | 82.5 |

WTHR = Whale Tail Haul Road.

(a) Spring = Apr 1 to May 25, Summer = May 26 to Sep 21, Fall = Sep 22 to Dec 15, Winter = Dec 16 to Mar 31.

Table 3-6: Average Monthly Counts of Caribou Observed per Survey Trip Along the Whale Tail Haul Road from 2017 to 2024

| Year | Location | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---------------------|------------|-----|-----|------|-------|-------|------|------|------|------|-------|-------|------|
| 2017 ^(a) | Vault | 0 | 5 | 9 | 5 | 0 | 0 | 0 | 0 | 3 | 0 | 6 | 0 |
| 2018 | Whale Tail | 0 | 0 | 0 | 120.4 | 0 | 0 | 8.4 | 0 | 15.2 | 104.7 | 18.3 | 13.5 |
| 2018 | Vault | 0 | 2 | 5 | 46.3 | 0 | 0 | 0 | 0 | 77 | 10 | 0 | 0 |
| 2019 | Whale Tail | 4 | 0 | 4 | 80 | 119.2 | 7.5 | 1.5 | 45 | 3 | 75.9 | 3.7 | 8.3 |
| 2019 | Vault | 0 | 0 | 89.2 | 27.9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2020 | WTHR | 1.3 | 2.8 | 64.3 | 235.1 | 523.8 | 5.8 | 0.3 | 7.4 | 6.2 | 0.3 | 8.6 | 2.4 |
| 2021 | WTHR | 0.3 | 0 | 0 | 164.7 | 304.2 | 59.5 | 0.5 | 49.7 | 25.1 | 4.1 | 6.3 | 2 |
| 2022 | WTHR | 4.1 | 7.1 | 1.3 | 115.7 | 14.6 | 6.7 | 0.2 | 36.3 | 9 | 6.7 | 7.1 | 0.3 |
| 2023 | WTHR | 0.7 | 0.1 | 6.4 | 635.6 | 181.2 | 26.5 | 0 | 85.3 | 19 | 64.8 | 4.4 | 2 |
| 2024 | WTHR | 4.9 | 1.8 | 2.9 | 398.1 | 56.9 | 5.8 | 25.4 | 4.1 | 0.9 | 3.8 | 219.7 | 8.1 |
| Average | | 1.5 | 1.9 | 18.2 | 182.9 | 120.0 | 11.2 | 3.6 | 22.8 | 15.8 | 27.0 | 27.4 | 3.7 |

Note: Data show the average number of caribou observed for a month of the year, including data from all surveys completed that month. Data are based on the observed number, which might be more inaccurate for larger groups or groups that are further away.

(a) Values provided for 2017 are raw counts and are not adjusted for survey effort. The number of surveys per month is not available to make this adjustment.

3.6.3 Caribou Counts along AWAR and WTHR

The total number of caribou observed in 2024 along the AWAR during road surveys were within the range observed between 2019 and 2024 (Figure 3-1). The total number of caribou observed along the WTHR in 2024 during road surveys was lower than the majority of observations from 2017 to 2023, with the exceptions of 2021 and 2022 (Figure 3-1). Note, total counts across years are not corrected for differences in sampling effort (i.e., the number of surveys), meaning that increases in caribou total counts may be a direct result of a higher number of surveys conducted annually.

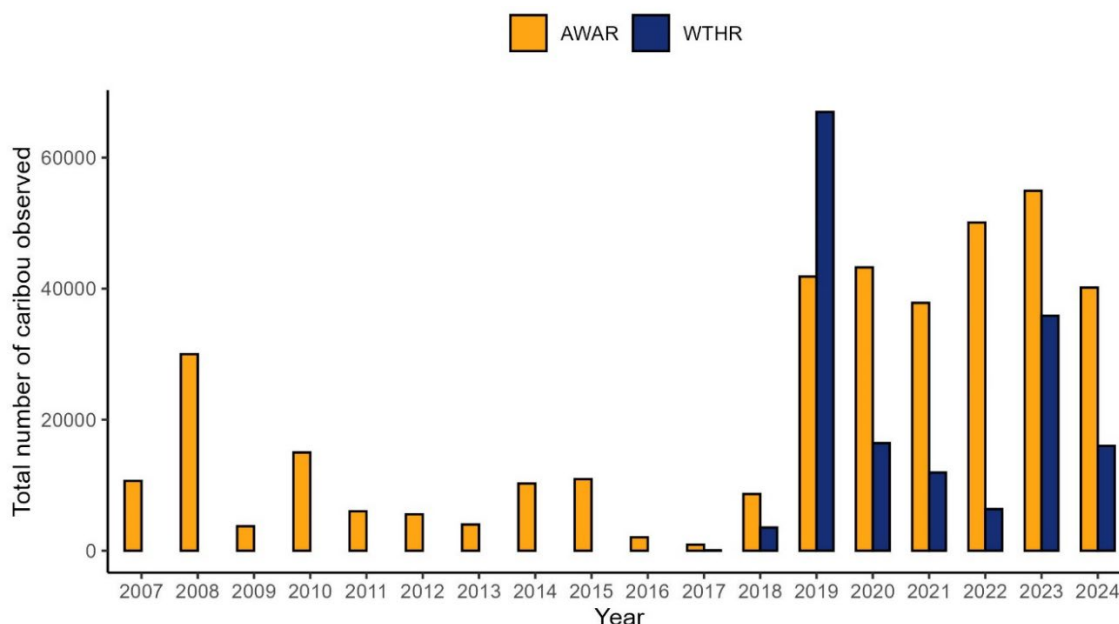


Figure 3-1: Total Number of Caribou Observed Each Year During All-Weather Access Road and Whale Tail Haul Road Surveys.

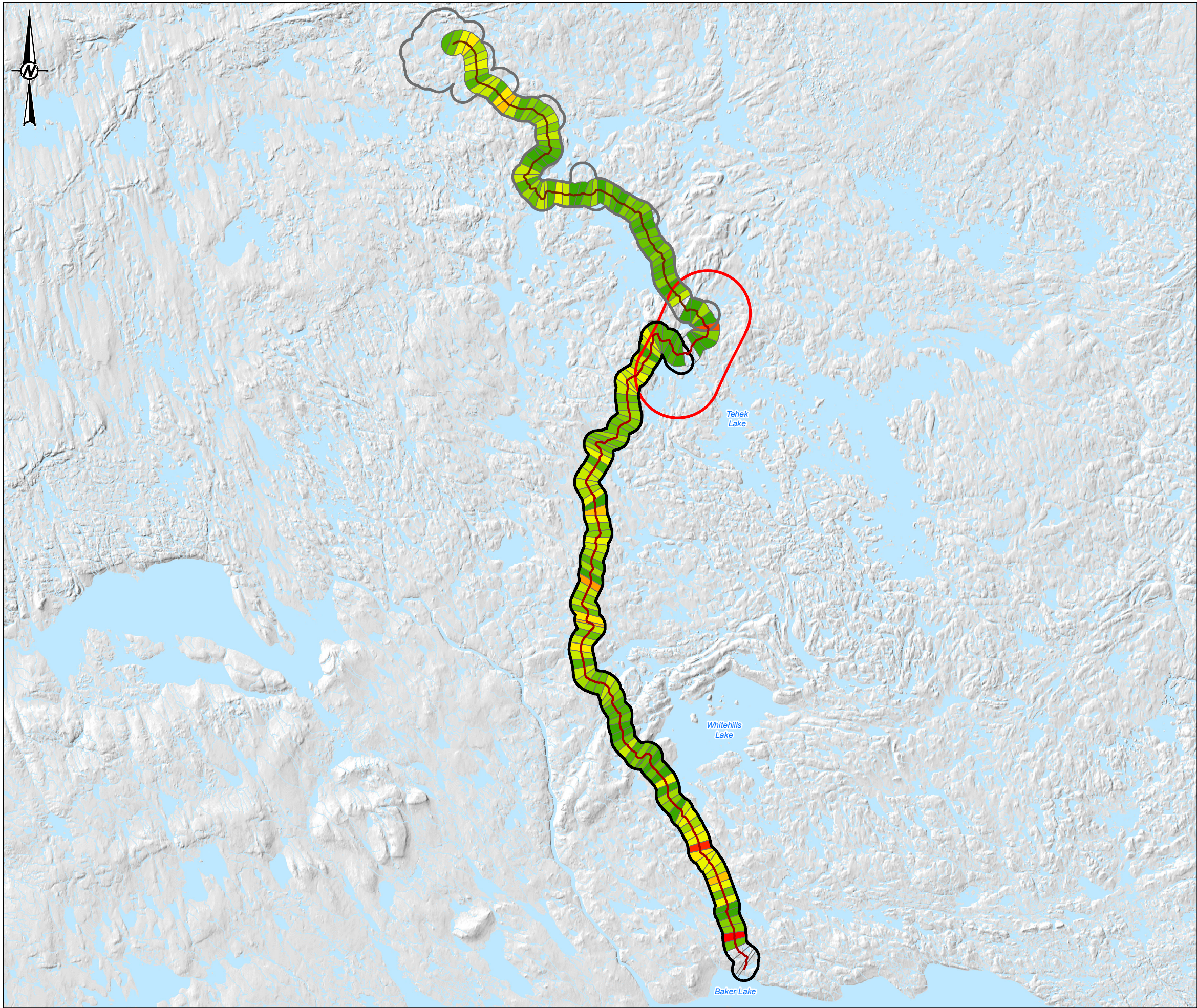
Maps were produced to depict the spatial variation of caribou counts along the AWAR and WTHR, summarized as the total number of caribou for each KM segment of road. Note, survey effort was not equal between the AWAR and WTHR in 2024 (277 AWAR surveys and 194 WTHR surveys), so caution should be taken when making comparisons between the two roads. Caribou observations determine the location and influence the frequency of road surveys. Caribou counts are shown for each segment of the AWAR and WTHR for 2024 for five different time intervals including year-round counts (Figure 3-2), spring and summer counts (Figure 3-3), and fall and winter counts (Figure 3-4). Considering both the AWAR and WTHR, caribou migration paths appear different across seasons with spring migration observed on both roads (primarily on the WTHR) and near the Meadowbank Complex and fall migration occurring primarily further south on the AWAR.

Year-round caribou counts along the AWAR varied substantially with totals ranging between 1 to 5,810 caribou for each 1-km section of road, though most kilometre sections had caribou counts fewer than 500 caribou (Figure 3-2). Along the AWAR, caribou counts were lowest near Whitehills Lake with caribou count annual median of 94 caribou from KMs 25 to 40. The highest counts were observed between KMs 6 to 23 between Baker Lake and Whitehills Lake where an average of 971 caribou were observed. In the spring there were few observations along AWAR, with an average of around 20 caribou per AWAR KM. The most caribou observations occurred between KMs 91 and 96 west of Tehek Lake and northwest of Whitehills Lake. There were between 24 to 187 caribou observed in the spring throughout these sections (Figure 3-3). During the summer months, caribou counts were relatively low along the AWAR, but caribou were still observed in most 1-km segments north of KM 19 (Figure 3-3). During the fall, caribou counts were more numerous in the southern portion of the AWAR, with a high-density pocket between KMs 6 to 19 (Figure 3-4). Low caribou counts persisted near the Meadowbank LSA and west of Whitehills Lake during the fall. Caribou counts were very low along the AWAR during the winter, but a small pocket of higher observations occurred northwest of Whitehills Lake between KM 52 to 57 (Figure 3-4).

Caribou distributions along the AWAR have changed across years. The 2019 analysis caribou counts revealed that from 2008 to 2019 the highest cumulative caribou counts along the AWAR occur in areas closest to the community of Baker Lake and south and north of Whitehills Lake (Agnico Eagle 2020). Road survey results from 2020 found a similar pattern of year-round distribution along the AWAR and identified the stretch of road from KMs 14 to 18 along the AWAR as a high-density congregation area for caribou, particularly in the summer and fall. The 2021 road survey data shows the opposite pattern with the lowest cumulative caribou counts occurring near Baker Lake across all seasons. The 2023 observations show similar patterns to the cumulative caribou counts prior to 2020, where the highest density of caribou were observed north of Baker Lake, west of Tehek and northwest of Whitehills Lake, which were repeated again in 2024 (Figure 3-2).

Annual caribou counts ranged between 0 and 1,961 along the WTHR with caribou detections in almost every 1-km segment of road (Figure 3-2). Caribou counts were generally higher at the northern and southern ends of the WTHR, especially at KM 113, which aligns with a high-density pocket near the south end of the WTHR pocket observed during 2020, 2021, and 2023 road surveys within the Meadowbank Complex. Caribou counts along the WTHR were highest in the spring (Figure 3-3). Conversely, caribou detections were very low in summer, fall, and winter along the WTHR and only occurred at a few spots along the road (Figure 3-3, Figure 3-4).

PATH: W:\Client\Agnico_Eagle_Mines_Ltd\White_Hills\PROJECTS\CA0039984_7604_4000\4004_03_02_CARIBOU_DENSITY_2024.mxd PRINTED ON: 2025-03-19 AT: 11:44:04 AM



LEGEND

- ALL-WEATHER ACCESS ROAD (AWAR)
- WHALE TAIL HAUL ROAD (WTHR)
- AWAR LOCAL STUDY AREA (LSA)
- WTHR LOCAL STUDY AREA (LSA)
- MEADOWBANK LOCAL STUDY AREA (LSA)
- WATERCOURSE
- WATERBODY


CARIBOU COUNT

| |
|-------------|
| 1 - 50 |
| 50 - 100 |
| 100 - 150 |
| 150 - 200 |
| 200 - 250 |
| 250 - 500 |
| 500 - 750 |
| 750 - 1000 |
| 1000 - 1250 |
| 1250 - 1500 |
| 1500 - 1750 |
| 1750 - 4000 |
| 4000 - 5000 |
| 5000 - 6000 |

*EMPTY SECTIONS REFLECT CARIBOU COUNT = 0

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
2024 WILDLIFE MONITORING SUMMARY REPORT

TITLE

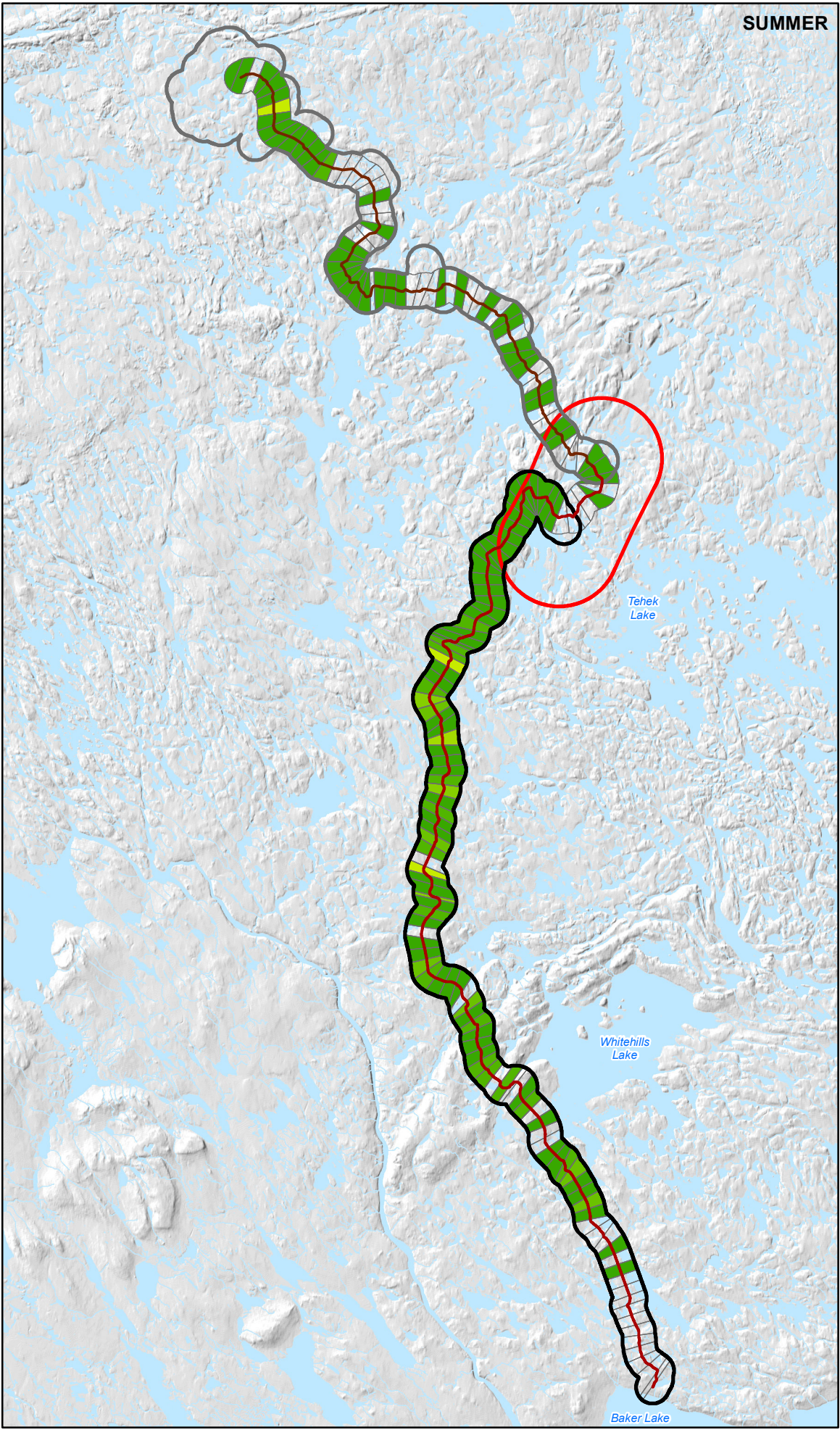
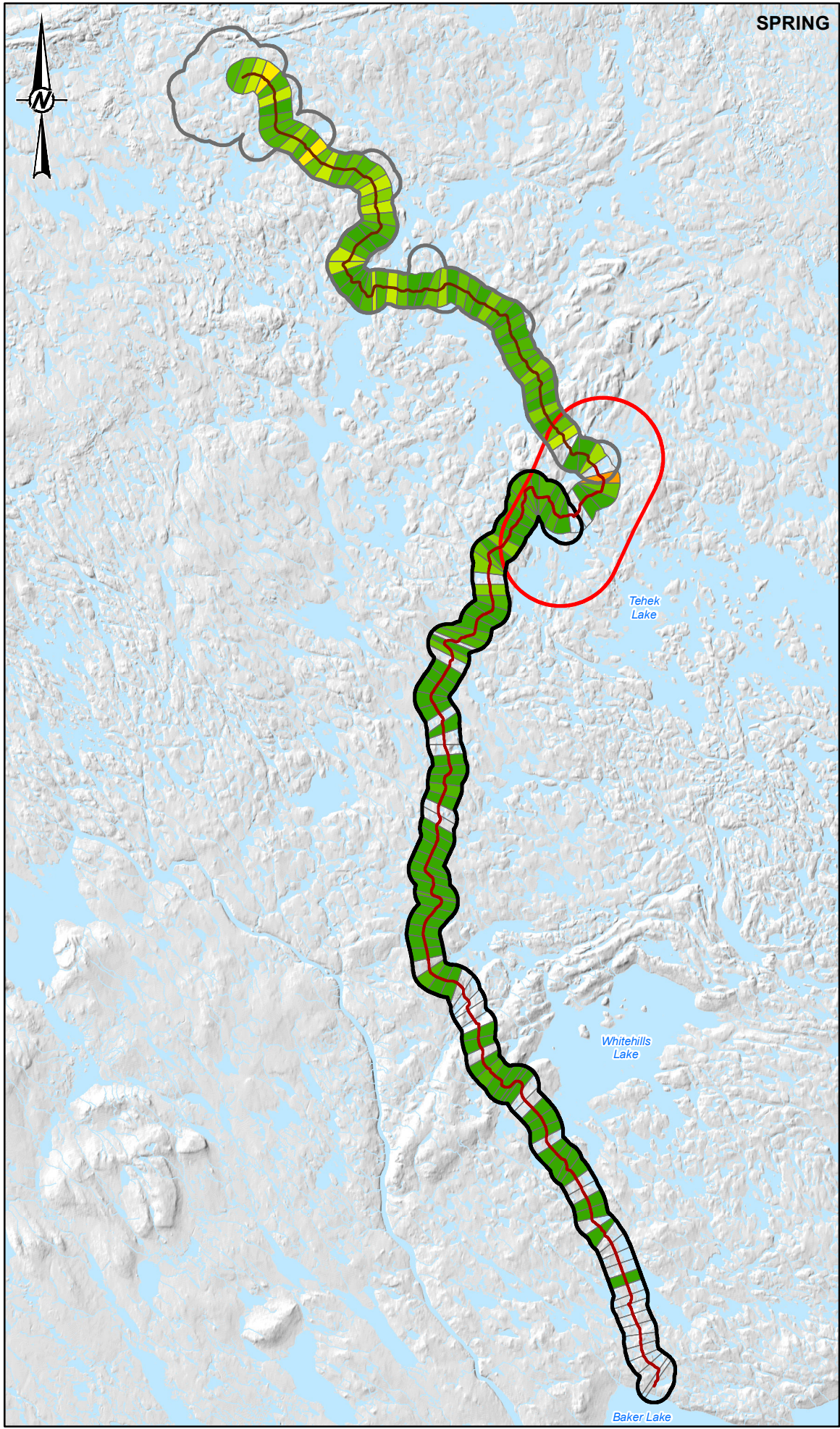
CARIBOU COUNTS ALONG THE ALL-WEATHER ACCESS ROAD
AND WHALE TAIL HAUL ROAD, YEAR-ROUND (2024)

| | | | |
|---|------------|------------|------------|
|  | CONSULTANT | YYYY-MM-DD | 2025-03-19 |
| | DESIGNED | JF | |
| | PREPARED | CDB | |
| | REVIEWED | JF | |
| | APPROVED | CDLM | |

| | | | |
|----------------|-----------|------|--------|
| PROJECT NO. | CONTROL | REV. | FIGURE |
| CA0039984.7604 | 4000/4004 | 0 | 3-2 |

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B
25mm

PATH: W:\Client\Agnico_Eagle_Mines_Ltd\White_Hills\99_PROJECTS\CA0039984_7604_4000_4004_03_CARIBOU_DENSITY_SPRING_SUMMER_2024.mxd PRINTED ON: 2025-03-19 AT: 11:47:22 AM



LEGEND

- ALL-WEATHER ACCESS ROAD (AWAR)
- WHALE TAIL HAUL ROAD (WTHR)
- AWAR LOCAL STUDY AREA (LSA)
- WTHR LOCAL STUDY AREA (LSA)
- MEADOWBANK LOCAL STUDY AREA (LSA)
- WATERCOURSE
- WATERBODY

CARIBOU COUNT

- 1 - 50
- 50 - 100
- 100 - 150
- 150 - 200
- 200 - 250
- 250 - 500
- 500 - 750
- 750 - 1000
- 1000 - 1250
- 1250 - 1500
- 1500 - 1750
- 1750 - 4000
- 4000 - 5000
- 5000 - 6000


*EMPTY SECTIONS REFLECT CARIBOU COUNT = 0

0 10 20
1:500,000 KILOMETRES

REFERENCE(S)


- INFRASTRUCTURE OBTAINED FROM AGNICO EAGLE MINES LIMITED.
- 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
2024 WILDLIFE MONITORING SUMMARY REPORT

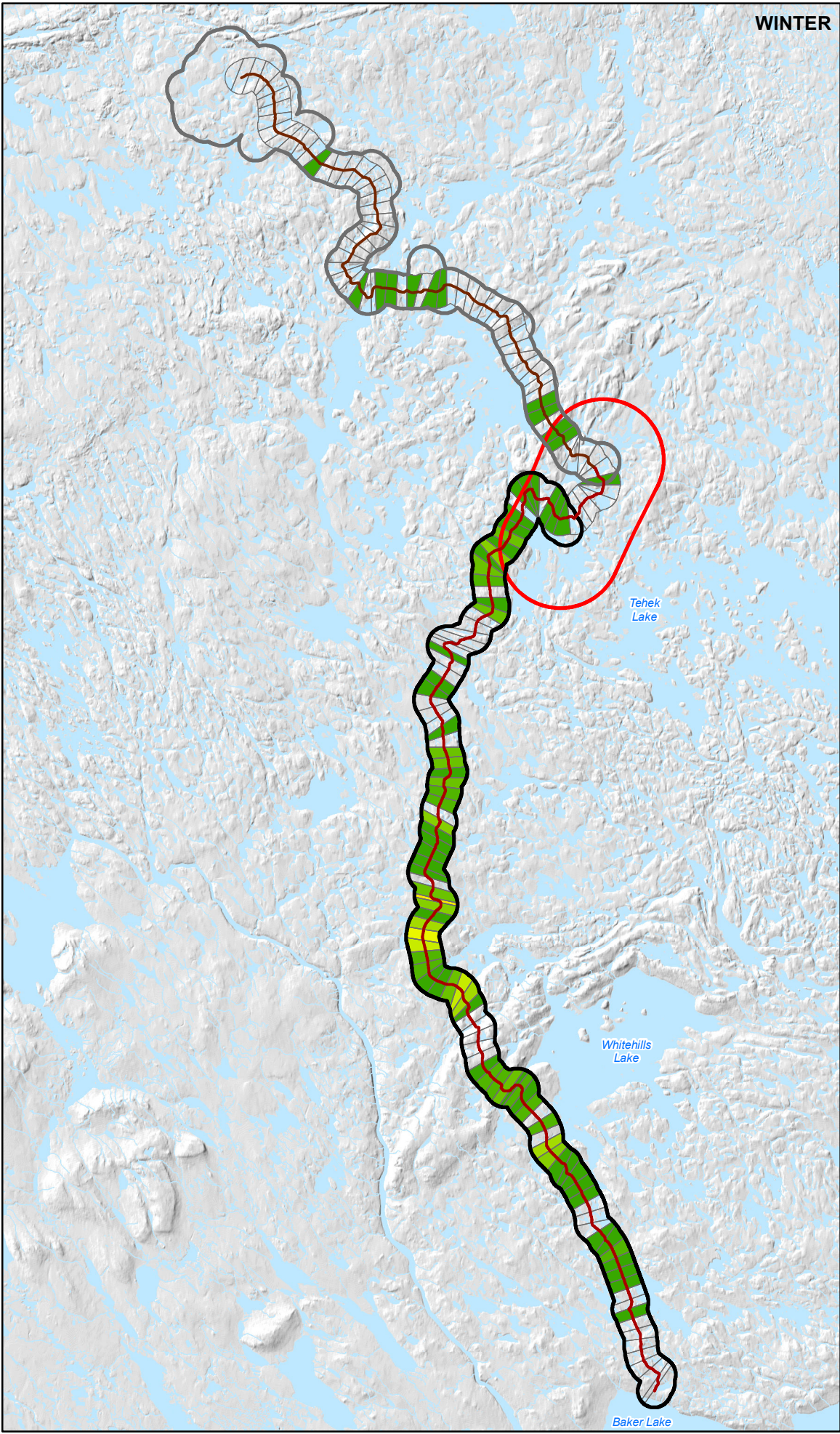
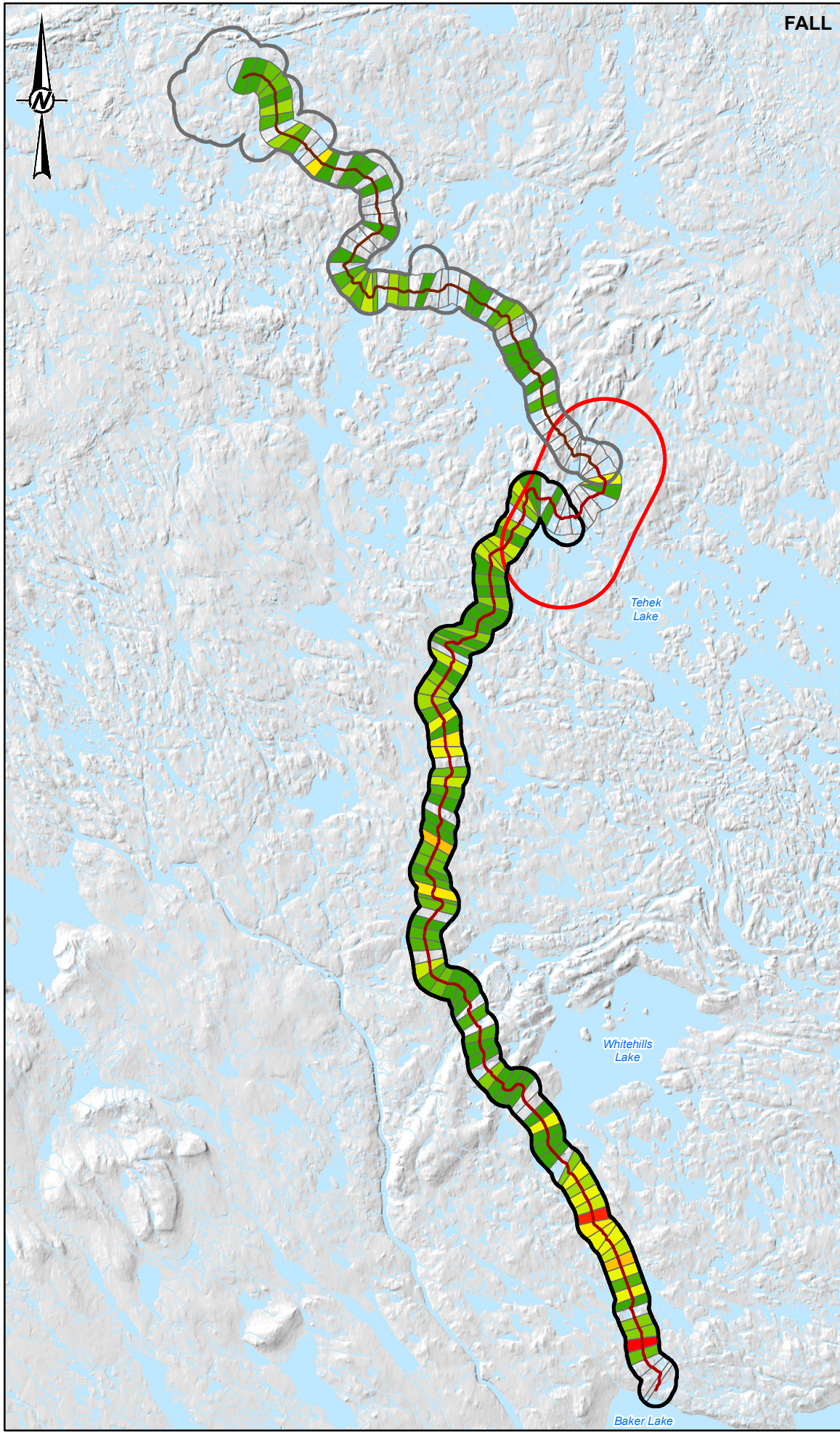
TITLE
**CARIBOU COUNTS ALONG THE ALL-WEATHER ACCESS ROAD
AND WHALE TAIL HAUL ROAD, SPRING-SUMMER (2024)**

| | | |
|---|------------|------------|
| CONSULTANT | YYYY-MM-DD | 2025-03-19 |
|  | DESIGNED | JF |
| | PREPARED | CDB |
| | REVIEWED | JF |
| | APPROVED | CDLM |

| | | | |
|----------------|-----------|------|------------|
| PROJECT NO. | CONTROL | REV. | FIGURE |
| CA0039984.7604 | 4000/4004 | 0 | 3-3 |

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B 28mm

PATH: W:\Client\Agnico_Eagle_Mines_Ltd\White_Hills\99_PROJECTS\CA0039984_7604_4000_4004_03_04_CARIBOU_DENSITY_FALL_WINTER_2024.mxd PRINTED ON: 2025-03-19 AT: 11:46:19 AM



LEGEND

- ALL-WEATHER ACCESS ROAD (AWAR)
- WHALE TAIL HAUL ROAD (WTHR)
- AWAR LOCAL STUDY AREA (LSA)
- WTHR LOCAL STUDY AREA (LSA)
- MEADOWBANK LOCAL STUDY AREA (LSA)
- WATERCOURSE
- WATERBODY

CARIBOU COUNT

- 1 - 50
- 50 - 100
- 100 - 150
- 150 - 200
- 200 - 250
- 250 - 500
- 500 - 750
- 750 - 1000
- 1000 - 1250
- 1250 - 1500
- 1500 - 1750
- 1750 - 4000
- 4000 - 5000
- 5000 - 6000

*EMPTY SECTIONS REFLECT CARIBOU COUNT = 0

REFERENCE(S)

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

COORDINATE SYSTEM: NAD 1983 CSRS UTM ZONE 14N

CLIENT

AGNICO EAGLE

**AGNICO EAGLE MINES LIMITED:
MEADOWBANK DIVISION**

PROJECT

**MEADOWBANK COMPLEX
2024 WILDLIFE MONITORING SUMMARY REPORT**

TITLE

**CARIBOU COUNTS ALONG THE ALL-WEATHER ACCESS ROAD
AND WHALE TAIL HAUL ROAD, FALL-WINTER (2024)**

CONSULTANT

wsp

| | |
|------------|------------|
| YYYY-MM-DD | 2025-03-19 |
| DESIGNED | JF |
| PREPARED | CDB |
| REVIEWED | JF |
| APPROVED | CDLM |

PROJECT NO. CA0039984.7604 **CONTROL** 4000/4004 **REV.** 0 **FIGURE** 3-4

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

3.6.3.1 Group Size Threshold Calculation

Spring and fall GST for 2025 were calculated using 2024 caribou road survey data as well as historical data (Table 3-8). A GST is defined as the group size at, or above which, 75% of caribou observed interacting with Project infrastructure are expected to occur (Agnico Eagle 2019). Observations of caribou within 250 m of the road or greater than 1,000 m away from the road were excluded, based on methodology provided by GN (GN 2021). Spring and fall 2024 caribou road survey observations were grouped by season and observations were pooled between the AWAR and WTHR. The number of groups (i.e., number of observations), average group size, group size range, and 75th percentiles were summarized per season in Table 3-7. Spring and fall GSTs for 2025 were calculated by averaging GSTs for the corresponding season across all years with at least 100 caribou groups observed for that season. Variation due to low samples sizes may result in biased GSTs, and GST estimates were considered accurate (unbiased) if there were at least 100 groups observed for a season. There were seven years of spring data with at least 100 caribou group observations (2008, 2018, 2019, 2020, 2021, 2023, and 2024; Table 3-7), and spring GSTs were averaged across those seven years to calculate a spring 2025 GST of 35 caribou (Table 3-8). There were five years of fall data with at least 100 caribou group observations (2008, 2019, 2022, 2023, and 2024; Table 3-7), and fall GSTs were averaged across those five years to calculate a fall 2025 GST of 86 caribou (Table 3-8). For the purpose of calculating thresholds, GSTs were rounded down to the nearest whole number.

Table 3-7: Caribou group observation sample sizes for spring and fall road surveys, 2007-2024

| Year | Sample Size ^(a) | | Location ^(b) | Group Size 75 th Percentile Spring | Group Size 75 th Percentile Fall |
|------|----------------------------|------|-------------------------|--|--|
| | Spring | Fall | | | |
| 2007 | 9 | 57 | AWAR | N/A | N/A |
| 2008 | 163 | 143 | AWAR | 12 | 100 |
| 2009 | 21 | 14 | AWAR | N/A | N/A |
| 2010 | 28 | 34 | AWAR | N/A | N/A |
| 2011 | 38 | 23 | AWAR | N/A | N/A |
| 2012 | 24 | 21 | AWAR | N/A | N/A |
| 2013 | 27 | 9 | AWAR | N/A | N/A |
| 2014 | 33 | 60 | AWAR | N/A | N/A |
| 2015 | 65 | 43 | AWAR | N/A | N/A |
| 2016 | 31 | 10 | AWAR | N/A | N/A |
| 2017 | 4 | 16 | AWAR | N/A | N/A |
| 2018 | 114 | 41 | AWAR and WTHR | 30 | N/A |
| 2019 | 437 | 127 | AWAR and WTHR | 60 | 125 |
| 2020 | 251 | 55 | AWAR and WTHR | 34 | N/A |
| 2021 | 373 | 63 | AWAR and WTHR | 31 | N/A |
| 2022 | 81 | 108 | AWAR and WTHR | N/A | 54 |
| 2023 | 577 | 156 | AWAR and WTHR | 55 | 75 |
| 2024 | 255 | 132 | AWAR and WTHR | 26 | 80 |

(a) Sample size refers to the number of caribou groups observed during road surveys for a given year and season. A minimum of 100 observations is required for the season and year to be included in group size threshold (GST) calculations.

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

N/A = not applicable.

Table 3-8: Caribou GST summaries for spring and fall based on 2024 data

| Season ^(a) | Number of Observations ^(b) | Average group size | Group size range | Group size 75 th percentile | Calculated GSTs for 2025 ^(c) |
|-----------------------|---------------------------------------|--------------------|------------------|--|---|
| Spring | 255 | 27.4 | 1-400 | 26 | 35 |
| Fall | 132 | 88.3 | 1-950 | 80 | 86 |

(a) 2024 caribou observations were summarized for the two sensitive seasons, spring and fall.

(b) GSTs are considered unbiased when calculated using observations of at least 100 caribou groups.

(c) GSTs for 2025 were calculated by taking the average of all group size thresholds across years for a given season that meet the minimum sample size requirement (n=100).

GST = group size threshold.

3.6.4 Wildlife Observations Along the AWAR and WTHR

Eight mammalian species and fifteen avian species (five species could not be identified to an individual species) were detected and identified during road surveys in 2024 (Table 3-9). Six mammal species were observed at both AWAR and WTHR, including Arctic fox (*Vulpes lagopus*), Arctic ground squirrel (*Urocitellus parryii*), Arctic hare (*Lepus arcticus*), caribou, muskox, and wolf (*Canis lupus*). Wolverine (*Gulo gulo*) was only observed at AWAR and northern red-backed vole (*Clethrionomys rutilus*) was only observed at WTHR. Caribou and muskox were the most frequently observed mammals. Eleven avian species were observed at both sites including Canada goose (*Branta canadensis*), common raven (*Corvus corvax*), greater white-fronted goose (*Anser albifrons*), gull sp. (*Larinae* sp.), gyrfalcon (*Falco rusticolus*), peregrine falcon (*Falco peregrinus*), ptarmigan sp. (*Lagopus* sp.), rough-legged hawk (*Buteo lagopus*), sandhill crane (*Antigone canadensis*) and snow goose (*Chen caerulescens*). Bald eagle (*Haliaeetus leucocephalus*) and swan (*Cygnus* sp.) were only observed at AWAR. An unidentified duck, Ross's goose (*Anser rossii*) and an unidentified bird species were only observed at WTHR. At both AWAR and WTHR Snow geese were the most frequently observed species.

Seven mammalian species and twelve avian species were detected and identified incidentally on the AWAR and WTHR in 2024 (Table 3-10). Arctic ground squirrel was only observed on the AWAR. The remainder of the mammalian species observed were recorded on both roads, including Arctic fox, Arctic hare, caribou, muskox, wolf and wolverine. On both roads, caribou and muskox were the most frequently observed species. Snow goose was the most common avian species observed on the AWAR and Canada goose was the most common avian species observed at WTHR. Snowy owl (*Bubo scandiacus*) was the only species observed incidentally that was not observed during road surveys.

Table 3-9: Species Detected During Road Surveys at All-Weather Access Road and Whale Tail Haul Road in 2024 by Month

| Species Group | Species | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total |
|---------------|------------------------|-------|-----|-------|-----|-------|-----|-----|-----|-------|-------|--------|-------|--------|
| AWAR | | | | | | | | | | | | | | |
| Mammal | Arctic fox | 0 | 2 | 1 | 5 | 7 | 21 | 19 | 12 | 6 | 7 | 6 | 3 | 89 |
| | Arctic ground squirrel | 0 | 0 | 0 | 0 | 9 | 4 | 14 | 4 | 6 | 0 | 0 | 0 | 37 |
| | Arctic hare | 0 | 1 | 1 | 7 | 10 | 4 | 5 | 5 | 18 | 0 | 0 | 1 | 52 |
| | Caribou | 1,434 | 748 | 2,474 | 984 | 1,761 | 297 | 9 | 422 | 3,025 | 4,425 | 18,457 | 6,125 | 40,161 |
| | Muskox | 99 | 56 | 322 | 80 | 48 | 194 | 168 | 136 | 171 | 313 | 486 | 559 | 2,632 |
| | Wolf | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 7 | 5 | 19 |
| | Wolverine | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |

Table 3-9: Species Detected During Road Surveys at All-Weather Access Road and Whale Tail Haul Road in 2024 by Month

| Species Group | Species | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total |
|---------------|-----------------------------|-----|-----|-----|-------|-------|-----|-----|-----|-------|-----|-------|-----|--------|
| Bird | Bald eagle | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 3 | 0 | 0 | 0 | 0 | 7 |
| | Canada goose | 0 | 0 | 0 | 0 | 0 | 74 | 0 | 86 | 29 | 0 | 0 | 0 | 189 |
| | Common raven | 1 | 0 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 10 |
| | Greater white-fronted goose | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| | Gull sp. | 0 | 0 | 0 | 0 | 45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 45 |
| | Gyr Falcon | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| | Peregrine falcon | 0 | 0 | 0 | 0 | 13 | 4 | 1 | 8 | 2 | 0 | 0 | 0 | 28 |
| | Ptarmigan sp. | 1 | 11 | 6 | 24 | 404 | 8 | 0 | 22 | 11 | 83 | 41 | 0 | 611 |
| | Rough-legged hawk | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| | Sandhill crane | 0 | 0 | 0 | 0 | 210 | 3 | 8 | 13 | 0 | 0 | 0 | 0 | 234 |
| | Snow goose | 0 | 0 | 0 | 0 | 679 | 56 | 0 | 51 | 2,004 | 0 | 0 | 0 | 2,790 |
| | Swan sp. | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| WTHR | | | | | | | | | | | | | | |
| Mammal | Arctic fox | 1 | 0 | 1 | 1 | 2 | 0 | 1 | 1 | 0 | 0 | 1 | 2 | 10 |
| | Arctic ground squirrel | 0 | 0 | 0 | 0 | 5 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 9 |
| | Arctic hare | 2 | 0 | 0 | 1 | 5 | 2 | 2 | 4 | 0 | 0 | 0 | 0 | 16 |
| | Caribou | 69 | 18 | 23 | 9,554 | 1,933 | 70 | 305 | 70 | 9 | 60 | 3,735 | 161 | 16,007 |
| | Muskox | 136 | 162 | 69 | 115 | 83 | 290 | 133 | 167 | 43 | 136 | 141 | 108 | 1,583 |
| | Red-backed vole | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| | Wolf | 6 | 3 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 8 | 0 | 0 | 19 |
| Bird | Canada goose | 0 | 0 | 0 | 0 | 26 | 35 | 0 | 73 | 7 | 0 | 0 | 0 | 141 |
| | Common raven | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 11 |
| | Unidentified duck | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| | Greater white-fronted goose | 0 | 0 | 0 | 0 | 45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 45 |
| | Gull sp. | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| | Gyr Falcon | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 5 |
| | Peregrine falcon | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 4 |
| | Ptarmigan sp. | 0 | 0 | 0 | 7 | 5 | 0 | 0 | 0 | 0 | 4 | 0 | 12 | 28 |
| | Ross's goose | 0 | 0 | 0 | 0 | 95 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 95 |
| | Rough-legged hawk | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 5 |
| | Sandhill crane | 0 | 0 | 0 | 0 | 9 | 1 | 2 | 9 | 0 | 0 | 0 | 0 | 21 |
| | Snow goose | 0 | 0 | 0 | 0 | 253 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 253 |
| | Unidentified bird | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 |

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

Table 3-10: Species Detected Incidentally at All-Weather Access Road and Whale Tail Haul Road in 2024 by Month

| Species Group | Species | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total |
|---------------|------------------------|-----|-----|-------|-------|-------|-----|-----|-----|-----|-------|-------|-------|--------|
| AWAR | | | | | | | | | | | | | | |
| Mammal | Arctic fox | 2 | 0 | 2 | 5 | 4 | 5 | 8 | 5 | 0 | 3 | 0 | 1 | 35 |
| | Arctic ground squirrel | 0 | 0 | 0 | 0 | 18 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 22 |
| | Arctic hare | 0 | 2 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| | Caribou | 455 | 420 | 1,003 | 2,012 | 1,569 | 101 | 3 | 235 | 961 | 6,763 | 5,755 | 1,731 | 21,008 |
| | Muskox | 8 | 85 | 228 | 214 | 47 | 134 | 69 | 73 | 118 | 238 | 119 | 141 | 1,474 |
| | Wolf | 0 | 3 | 3 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 11 |
| | Wolverine | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 |
| Bird | Falcon sp. | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| | Gyrfalcon | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | Peregrine falcon | 0 | 0 | 0 | 0 | 8 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| | Ptarmigan sp. | 0 | 3 | 0 | 17 | 2 | 1 | 0 | 11 | 0 | 0 | 0 | 0 | 34 |
| | Rough-legged hawk | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| | Sandhill crane | 0 | 0 | 0 | 0 | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 |
| | Snow goose | 0 | 0 | 0 | 0 | 114 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 114 |
| | Snowy owl | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 3 |
| | Swan | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 17 |
| WTHR | | | | | | | | | | | | | | |
| Mammal | Arctic fox | 2 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 7 |
| | Arctic hare | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 |
| | Caribou | 34 | 15 | 13 | 4,732 | 350 | 75 | 793 | 160 | 19 | 179 | 1,274 | 86 | 7,730 |
| | Muskox | 96 | 112 | 138 | 44 | 29 | 168 | 124 | 77 | 84 | 66 | 0 | 17 | 955 |
| | Wolf | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 1 | 6 | 0 | 12 |
| | Wolverine | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| Bird | Canada goose | 0 | 0 | 0 | 0 | 0 | 0 | 39 | 0 | 0 | 0 | 0 | 0 | 39 |
| | Common raven | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| | Falcon sp. | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| | Peregrine falcon | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| | Sandhill crane | 0 | 0 | 0 | 0 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| | Snow goose | 0 | 0 | 0 | 0 | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| | Unidentified duck | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |

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

3.6.5 Road-related Mitigation

Road-related monitoring and mitigation were implemented according to decision tree Figures 7 and 8 of the TEMP version 7 (Agnico Eagle 2019). Collar location maps were useful in assessing the need for increased road monitoring. Road-related mitigation related to caribou presence in 2024 resulted in road closures and a corresponding reduction in total vehicle movements (Section 3.6.7). Outside of the fall migration period, road closures were implemented, or vehicle movements were restricted (e.g., light vehicles only, speed limit enforced) in response to high caribou numbers.

Regular wildlife warnings were dispatched based on observation and monitoring data. The road supervisors and operators also ensured protection of wildlife by assisting in surveillance and closing roads as needed. Radio notices reminding operators of the appropriate speed limit were made frequently by dispatchers. During caribou peak migration, notices were sent to all road occupants, regulatory agencies, local groups, and wildlife consultants were notified, and road survey efforts were increased.

3.6.6 AWAR and WTHR Closures

Significant movements of caribou and muskox occurred along the AWAR throughout November and December 2024, resulting in multiple closures to Project-related traffic. The AWAR was closed (i.e., 24-hour closure) on 63 days in 2024, with 40 days due to caribou, 11 days due to weather, 2 days for maintenance, and 1 day for both caribou and maintenance (Table 3-11). The AWAR had closure days with less than 24 hours of closure on 81 occasions, including 38 closure days due to caribou (including day days of partial closure for caribou as well as other reasons; Table 3-11). In addition to the GST related caribou closures, there was also a lead caribou 10-day closure, therefore road closures occurred due to caribou for 50 days in total (Table 3-11). In total, the AWAR was closed for a total of 2,396 hours in 2024, with the highest number of closure hours reported in April, November, and December due to caribou migration (Table 3-12). Speed restrictions were applied on 83 days on the AWAR and were applied in response to caribou or muskox presence (Table 3-11). In total, there were 200 days in 2024 (i.e. 54.6% of the year) with road closures and restrictions applied on the AWAR in response to caribou or muskox (Table 3-11). Full summaries of AWAR road closures, restrictions, and reason for reopening are available in Appendix B in Table B-1.

The WTHR was fully closed (i.e., 24-hour closure) on 24 days, with 22 closure days due to caribou (including the lead caribou 10-day closure) and 2 closure days due to weather (Table 3-11). On 40 days, the WTHR experience closures occurring for less than 24 hours, with 11 closure days related to wildlife (Table 3-11). In total, the WTHR was closed for a total of 888 hours in 2024, with the highest number of closure hours reported in April and November due to caribou migration and January due to weather (Table 3-12). Speed restrictions were applied on 77 days on the WTHR, all of which were applied in response to caribou and/or muskox presence (Table 3-11). Traffic restrictions were applied on the WTHR on 33 days, most of which occurred in September and October (Table 3-11). In total, there were 57 days in 2024 with road closures and restrictions applied on the WTHR in response to caribou and/or muskox (Table 3-11). Full summaries of WTHR road closures, restrictions, and reasons for reopening are available in Appendix B in Table B-2.

Table 3-11: Number of Road Closures and Restrictions Implemented Along the All-Weather Access Road and Whale Tail Haul Road, 2024

| Closure Status | Cause | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total |
|------------------------------------|------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| AWAR | | | | | | | | | | | | | | |
| Closure 24 hours | 10 Days Closure | - | - | 1 | 8 | - | - | - | - | - | - | - | - | 9 |
| | Caribou | - | - | - | 5 | 1 | - | - | - | 3 | 5 | 14 | 12 | 40 |
| | Maintenance | - | - | - | 1 | 1 | - | - | - | - | - | - | - | 2 |
| | Maintenance/Caribou ^(b) | - | - | - | - | 1 | - | - | - | - | - | - | - | 1 |
| | Weather | 3 | 1 | 5 | 1 | - | - | - | - | - | - | - | 1 | 11 |
| Closure < 24 hours | 10 Days Closure | - | - | 1 | - | - | - | - | - | - | - | - | - | 1 |
| | Caribou | 1 | - | - | 5 | 11 | - | - | 2 | 4 | 5 | 2 | 5 | 35 |
| | Cyanide Convoy | - | - | - | - | - | - | 3 | - | - | - | - | - | 3 |
| | Maintenance | - | - | - | - | 1 | - | - | - | - | - | - | - | 1 |
| | Maintenance/Caribou ^(a) | - | - | - | - | 1 | - | - | - | - | - | - | - | 1 |
| | Other | - | - | - | - | - | - | - | - | 2 | 2 | - | 1 | 5 |
| | Weather | 7 | 10 | 6 | 3 | - | - | - | - | 2 | 4 | - | 2 | 34 |
| Speed Restriction | Caribou | 12 | 5 | 3 | 4 | 10 | 9 | - | 2 | 5 | 2 | 1 | 1 | 54 |
| | Muskox | - | 2 | 1 | - | - | 10 | 6 | - | - | 4 | 4 | 2 | 29 |
| Traffic Restriction ^(a) | Caribou | 6 | 6 | 12 | - | 1 | - | - | - | 3 | - | - | 1 | 29 |
| | Maintenance | - | - | - | - | - | - | - | - | - | 1 | - | - | 1 |
| | Weather | - | - | - | 2 | - | - | - | - | 4 | 2 | 5 | 1 | 14 |
| WTHR | | | | | | | | | | | | | | |
| Closure 24 hours | 10 Days Closure | - | - | - | 10 | - | - | - | - | - | - | - | - | 10 |
| | Caribou | - | - | - | 8 | 1 | - | - | - | - | - | 3 | - | 12 |
| | Weather | 1 | - | 1 | - | - | - | - | - | - | - | - | - | 2 |
| Closure < 24 hours | Caribou | - | - | - | 4 | 3 | - | 2 | - | - | - | 1 | 1 | 11 |
| | Weather | 7 | 5 | 2 | 2 | - | - | - | - | 2 | 6 | 1 | 4 | 29 |
| Speed Restriction | Caribou | 1 | 1 | 1 | 2 | 7 | 1 | - | 9 | - | 1 | 2 | 1 | 26 |
| | Muskox | 6 | 10 | 4 | 1 | - | 16 | 6 | - | - | 3 | 2 | 3 | 51 |
| Traffic Restriction ^(a) | Caribou | - | - | - | - | - | - | - | 2 | - | - | - | - | 2 |
| | Weather | 1 | - | - | - | 2 | - | - | - | 13 | 10 | 4 | 1 | 31 |

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

(a) Traffic restricted to light vehicles only.

(b) Road closures occurred for different reasons throughout the day.

Table 3-12: Number of Road Closure Hours Due to Ungulate Activity, Weather, or Maintenance Along the All-Weather Access Road and Whale Tail Haul Road, 2024.

| Closure Status | Cause | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total |
|-----------------------|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| AWAR | | | | | | | | | | | | | | |
| | 10 Days Closure | - | - | 33 | 192 | - | - | - | - | - | - | - | - | 225 |
| Closure 24 hours | Caribou | - | - | - | 120 | 24 | - | - | - | 72 | 120 | 336 | 288 | 960 |
| | Maintenance | - | - | - | 24 | 24 | - | - | - | - | - | - | - | 48 |
| | Maintenance/ Caribou ^(a) | - | - | - | - | 24 | - | - | - | - | - | - | - | 24 |
| | Weather | 72 | 24 | 120 | 24 | - | - | - | - | - | - | - | 24 | 264 |
| Closure < 24 hours | Caribou | 2 | - | - | 56 | 130 | - | - | 23 | 53 | 60 | 29 | 75 | 428 |
| | Cyanide Convoy | - | - | - | - | - | - | 12 | - | - | - | - | - | 12 |
| | Maintenance | - | - | - | - | 12 | - | - | - | - | - | - | - | 12 |
| | Maintenance/ Caribou ^(a) | - | - | - | - | 6 | - | - | - | - | - | - | - | 6 |
| | Other | - | - | - | - | - | - | - | - | 12 | 22 | - | 1 | 35 |
| | Weather | 71 | 121 | 55 | 32 | - | - | - | - | 23 | 46 | - | 25 | 373 |
| | Weather/ Caribou ^(a) | - | - | - | - | 10 | - | - | - | - | - | - | - | 10 |
| WTHR | | | | | | | | | | | | | | |
| Closure 24 hours | 10 Days Closure | - | - | - | 216 | - | - | - | - | - | - | - | - | 216 |
| | Caribou | - | - | - | 216 | 24 | - | - | - | - | - | 72 | - | 312 |
| | Weather | 24 | - | 24 | - | - | - | - | - | - | - | - | - | 48 |
| Closure < 24 hours | Caribou | - | - | - | - | 23 | - | 22 | - | - | - | 12 | 16 | 72 |
| | Weather | 65 | 46 | 28 | 25 | - | - | - | - | 1 | 52 | 1 | 22 | 240 |

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

(a) Road closures occurred for different reasons throughout the day.

The percentage of observed caribou that encountered the AWAR when closed was 80% during spring (4,710 of 5,902 caribou observed in spring) and 98% in fall (41,133 of 41,897 caribou observed in fall; Table 3-13). The percentage of observed caribou that encountered the WTHR when closed was 95% during the spring (15,598 out of 16,480 caribou observed in spring) and 87% during the fall (4,796 of 5,488 caribou observed in fall; Table 3-13). Percentages were calculated based on the sum of caribou counts on each road based on closure status for the day of observation (i.e., open versus closure), with both 24-hour closures and less than 24-hour closures considered together for the purpose of this calculation. For both roads and in both seasons, the GST target of 75% was exceeded.

Table 3-13: Percentage of Caribou Encountering Closed Roads

| Road | Season | Number of Caribou Encountering Closed Roads | Total Caribou Observations | Percentage of Caribou Encountering Closed Road |
|------|--------|---|----------------------------|--|
| AWAR | Spring | 4,710 | 5,902 | 79.8 |
| | Summer | 4,086 | 5,294 | 77.18 |
| | Fall | 41,133 | 41,897 | 98.18 |
| | Winter | 3,092 | 8,076 | 38.29 |
| | Annual | 53,021 | 61,169 | 86.7 |
| WTHR | Spring | 15,598 | 16,480 | 94.65 |
| | Summer | 1,093 | 1,590 | 68.74 |
| | Fall | 4,796 | 5,488 | 87.39 |
| | Winter | 47 | 179 | 26.26 |
| | Annual | 21,534 | 23,737 | 90.7 |

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

3.6.7 Traffic Data

Total one-way traffic along the AWAR in 2024 included 114 heavy equipment, 14,146 medium equipment, and 6,873 light equipment vehicles for a total of 21,133 vehicles (Table 3-14). Heavy equipment refers to haul trucks, long haul trucks, medium equipment refers to tankers, graders, snowplows, cement trucks, fuel trucks, tractor-trailers, and other similar sized vehicles, and light equipment refers to pick-up trucks, bus, water trucks, cube trucks, and other similar sized vehicles. Total traffic along the WTHR included 63,718 heavy equipment, 5,786 medium equipment, and 2,278 light equipment vehicles, for a total of 71,782 vehicles (Table 3-15). Total traffic along the AWAR was about 13% lower in 2023 (n= 24,288) than the 2024 total of vehicles, and traffic along the WTHR was 9% higher in 2023 (n=65,973) compared to the vehicles in 2024 (WSP 2024). Monthly vehicle traffic for the AWAR and WTHR fluctuated throughout the year (Figure 3-5). Lowest traffic rates on the AWAR occurred in November, and highest traffic rates occurred in June through August (Table 3-14; Figure 3-5). On the WTHR, lowest traffic rates were recorded in April, and highest traffic rates were recorded in June (Table 3-15; Figure 3-5). Caribou counts for the month of April were high along the WTHR and for the month of November along the AWAR (Table 3-9), which coincided with spring and fall migration and the lowest traffic rates.

During periods of road closures or Level 3 status, a daily meeting is held with all departments to validate the essential needs requiring access to the roads. From this meeting, departure time, departure location, and the list of vehicles authorized to travel on the road will be determined. Only essential vehicles (vehicles operated for the purpose of maintaining the safety of personnel, Emergency Response Team (ERT), security and wildlife monitoring) are permitted in convoys per the TEMP (Agnico Eagle 2019). Environment personnel will meet the vehicles at agreed upon time and departure location and validate the list of authorized vehicles to escort them along the road. Vehicles in a convoy are instructed to stay a minimum of 1 km behind the pilot vehicle unless otherwise instructed by the pilot vehicle. KivIA and HTO representative regularly participated in leading the essential vehicles.

There were 41 convoys between 2 April and 12 December along the AWAR, and 40 convoys between 8 April and 29 November along the WTHR in 2024 (Table 3-16). Note that convoys were included as one-way trips, meaning a round trip on a single day would be considered two separate convoys. Convoys occurred during road closures, but convoys did not occur on all days where roads were closed. Light vehicles were the most common vehicle type (n=251), followed by medium vehicles (n=172; Table 3-16).

Table 3-14: Monthly Traffic Data for the Meadowbank All-Weather Access Road in 2024

| Month | Heavy Equipment | Medium Equipment | Light Equipment | Total |
|--------------|-----------------|------------------|-----------------|---------------|
| January | 0 | 895 | 482 | 1,377 |
| February | 0 | 984 | 543 | 1,527 |
| March | 66 | 1,006 | 514 | 1,586 |
| April | 0 | 636 | 509 | 1,145 |
| May | 0 | 1,142 | 768 | 1,910 |
| June | 1 | 1,948 | 612 | 2,561 |
| July | 0 | 1,927 | 737 | 2,664 |
| August | 0 | 1,961 | 670 | 2,631 |
| September | 46 | 1,123 | 761 | 1,930 |
| October | 1 | 1,070 | 434 | 1,505 |
| November | 0 | 695 | 415 | 1,110 |
| December | 0 | 759 | 428 | 1,187 |
| Total | 114 | 14,146 | 6,873 | 21,133 |

Note: Heavy equipment = haul trucks, long haul trucks; Medium equipment = tankers, graders, snowplows, cement trucks, fuel trucks, tractor-trailers, and other similar sized vehicles; Light equipment = pick-up trucks, bus, water trucks, cube trucks, and other similar sized vehicles.

Table 3-15: Monthly Traffic Data for the Meadowbank Whale Tail Haul Road in 2024

| Month | Heavy Equipment | Medium Equipment | Light Equipment | Total |
|--------------|-----------------|------------------|-----------------|---------------|
| January | 5,328 | 339 | 119 | 5,786 |
| February | 5,890 | 488 | 167 | 6,545 |
| March | 6,098 | 417 | 142 | 6,657 |
| April | 1,634 | 229 | 215 | 2,078 |
| May | 6,478 | 457 | 330 | 7,265 |
| June | 6,768 | 668 | 227 | 7,663 |
| July | 6,524 | 471 | 144 | 7,139 |
| August | 6,128 | 674 | 141 | 6,943 |
| September | 3,922 | 797 | 273 | 4,992 |
| October | 4,088 | 533 | 89 | 4,710 |
| November | 5,096 | 411 | 228 | 5,735 |
| December | 5,764 | 302 | 203 | 6,269 |
| Total | 63,718 | 5,786 | 2,278 | 71,782 |

Note: Heavy equipment = haul trucks, long haul trucks; Medium equipment = tankers, graders, snowplows, cement trucks, fuel trucks, tractor-trailers, and other similar sized vehicles; Light equipment = pick-up trucks, bus, water trucks, cube trucks, and other similar sized vehicles.

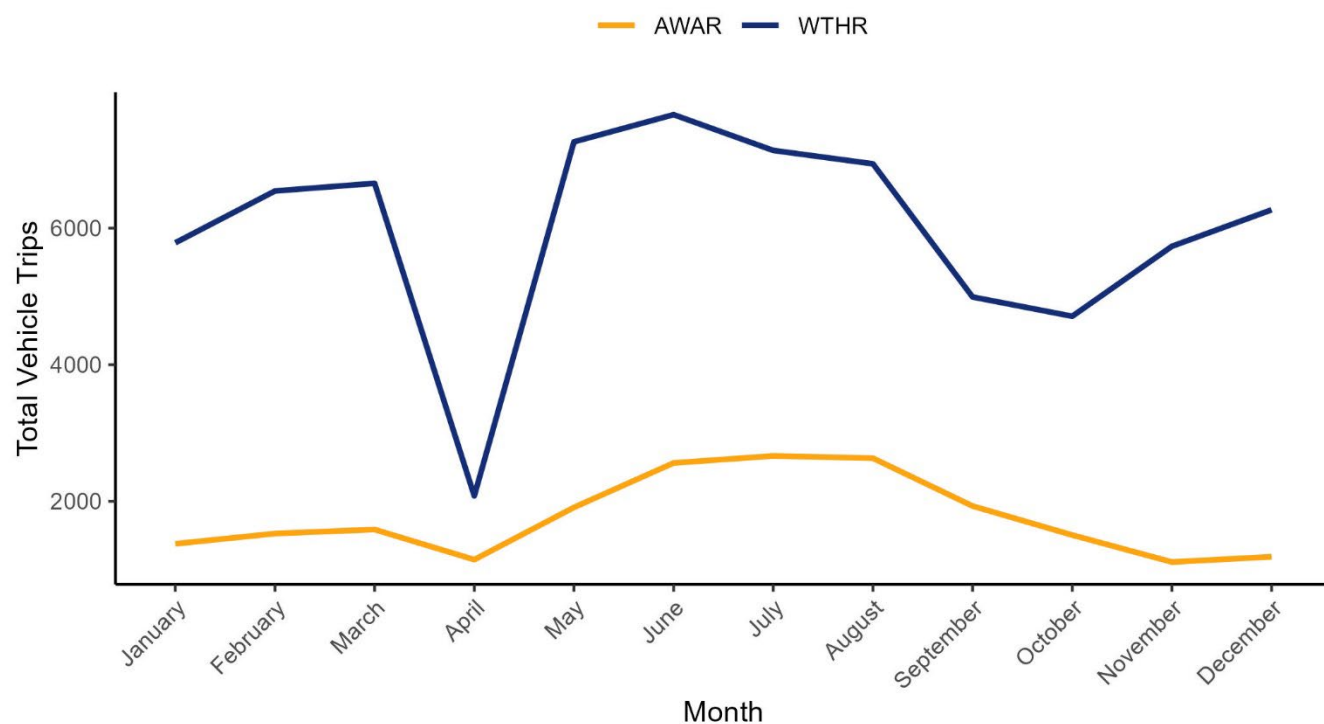


Figure 3-5: Total Vehicle Traffic (One-way Trips) Along All-Weather Access Road and Whale Tail Haul Road per Month in 2024

Table 3-16: Convoy Tracker for the AWAR and WTHR in 2024

| Date | Direction of Travel | Convoy Type | Light | Medium | Heavy | Total ^(a) |
|-------------|---------------------|--|-------|--------|-------|----------------------|
| AWAR | | | | | | |
| 2024-04-02 | North | HTO pickup escorted the Crew changed consisted of 2 passenger vans | 3 | 0 | 0 | 3 |
| 2024-04-02 | South | HTO pickup escorted the Crew changed consisted of 2 passenger vans | 3 | 0 | 0 | 3 |
| 2024-04-05 | North | Escorted by KivIA pickup, with a scouting group led by an HTO pickup and accompanied by a road maintenance equipment | 4 | 1 | 0 | 5 |
| 2024-04-05 | South | Escorted by KivIA pickup, with a scouting group led by an HTO pickup and accompanied by a road maintenance equipment | 4 | 1 | 0 | 5 |
| 2024-04-09 | North | HTO escorted the convoy consisted of a passenger bus, accompanied by a road maintenance equipment | 2 | 1 | 0 | 3 |
| 2024-04-09 | South | HTO escorted the convoy consisted of a passenger bus, accompanied by a road maintenance equipment | 2 | 1 | 0 | 3 |
| 2024-04-10 | North | A convoy escorted by HTO occurred today which consisted of 5 fuel tankers | 1 | 5 | 0 | 6 |
| 2024-04-10 | South | A convoy escorted by HTO occurred today which consisted of 5 fuel tankers | 1 | 5 | 0 | 6 |
| 2024-04-11 | North | Convoy escorted by HTO of 5 fuel tankers 2 passenger vans and a coach bus | 4 | 5 | 0 | 9 |
| 2024-04-11 | South | Convoy escorted by HTO of 5 fuel tankers 2 passenger vans and a coach bus | 4 | 5 | 0 | 9 |
| 2024-04-12 | North | Convoy escorted by HTO of 6 fuel tankers and a gasoline truck | 1 | 7 | 0 | 8 |
| 2024-04-12 | South | Convoy escorted by HTO of 6 fuel tankers and a gasoline truck | 1 | 7 | 0 | 8 |
| 2024-04-17 | North | Escorted by HTO, 2 passenger vans and 6 tankers north bound | 3 | 6 | 0 | 9 |
| 2024-04-17 | South | Escorted by HTO, 2 passenger vans and 2 tankers | 3 | 2 | 0 | 5 |
| 2024-04-18 | South | Convoy escorted by HTO of 7 tankers | 1 | 7 | 0 | 8 |
| 2024-04-18 | North | Convoy escorted by HTO of 4 tankers | 1 | 4 | 0 | 5 |
| 2024-04-19 | South | Convoy escorted by HTO of 2 passenger vans, 4 tankers and a tractor trailer | 3 | 5 | 0 | 8 |
| 2024-04-19 | North | Convoy escorted by HTO 2 passenger vans and 6 tankers | 3 | 6 | 0 | 9 |
| 2024-05-02 | North | Escorted by HTO, convoy consisted of bus and 6 fuel tankers | 2 | 6 | 0 | 8 |
| 2024-05-02 | South | Escorted by HTO, convoy consisted of bus and 3 fuel tankers | 2 | 3 | 0 | 5 |
| 2024-05-08 | North | Led by HTO, a convoy of 4 tankers and 1 pickup was completed. | 2 | 4 | 0 | 6 |
| 2024-05-09 | North | Led by HTO, a convoy of 4 tankers and a passenger bus was completed. | 2 | 4 | 0 | 6 |
| 2024-05-09 | South | Led by HTO, a convoy of 4 tankers and a passenger bus was completed. | 2 | 4 | 0 | 6 |
| 2024-09-03 | North | HTO Convoying Daily Ride (1 x bus) | 2 | 0 | 0 | 2 |

Table 3-16: Convoy Tracker for the AWAR and WTHR in 2024

| Date | Direction of Travel | Convoy Type | Light | Medium | Heavy | Total ^(a) |
|-------------|---------------------|--|-------|--------|-------|----------------------|
| 2024-09-03 | South | HTO Convoying Daily Ride (1 x bus) | 2 | 0 | 0 | 2 |
| 2024-09-05 | North | HTO Convoying Daily Ride (1 x bus) | 2 | 0 | 0 | 2 |
| 2024-09-05 | South | HTO Convoying Daily Ride (1 x bus) | 2 | 0 | 0 | 2 |
| 2024-10-17 | North | HTO Convoying Daily Ride (1 X Passenger Van) | 2 | 0 | 0 | 2 |
| 2024-10-17 | South | HTO Convoying Daily Ride (1 X Passenger Van) | 2 | 0 | 0 | 2 |
| 2024-11-06 | North | KivIA Convoying Daily Ride (2 x Passenger Van) | 3 | 0 | 0 | 3 |
| 2024-11-06 | South | KivIA Convoying Daily Ride (2 x Passenger Van) | 4 | 0 | 0 | 4 |
| 2024-11-07 | North | HTO Convoying Daily Ride (3 X Passenger Van) | 4 | 0 | 0 | 4 |
| 2024-11-07 | South | HTO Convoying Daily Ride (3 X Passenger Van) | 4 | 0 | 0 | 4 |
| 2024-11-29 | South | HTO Convoying Daily Ride (2 X Passenger Van) | 3 | 0 | 0 | 3 |
| 2024-11-29 | North | HTO Convoying Daily Ride (2 X Passenger Van) | 3 | 0 | 0 | 3 |
| 2024-12-05 | North | HTO Convoying Daily Ride (2 X Passenger Van) | 3 | 0 | 0 | 3 |
| 2024-12-05 | South | HTO Convoying Daily Ride (2 X Passenger Van) | 3 | 0 | 0 | 3 |
| 2024-12-10 | North | HTO Convoying Daily Ride (1 X Passenger Van) | 2 | 0 | 0 | 2 |
| 2024-12-10 | South | HTO Convoying Daily Ride (1 X Passenger Van) | 2 | 0 | 0 | 2 |
| 2024-12-12 | North | HTO Convoying Daily Ride (1 X Passenger Van) | 2 | 0 | 0 | 2 |
| 2024-12-12 | South | HTO Convoying Daily Ride (1 X Passenger Van) | 2 | 0 | 0 | 2 |
| WTHR | | | | | | |
| 2024-04-08 | South | Env tech escorted crew bus and kitchen cube northbound and then an ERT pickup southbound. | 4 | 0 | 0 | 4 |
| 2024-04-08 | North | Env tech escorted crew bus and kitchen cube northbound and then an ERT pickup southbound. | 4 | 0 | 0 | 4 |
| 2024-04-09 | South | Escorted crew bus northbound, then two graders and a service truck southbound | 3 | 2 | 0 | 5 |
| 2024-04-09 | North | Escorted crew bus northbound, then two graders and a service truck southbound | 3 | 2 | 0 | 5 |
| 2024-04-10 | South | Env tech escorted 3 crew busses and a cube truck southbound then the same group northbound afterward | 5 | 0 | 0 | 5 |
| 2024-04-10 | North | Env tech escorted 3 crew busses and a cube truck southbound then the same group northbound afterward | 5 | 0 | 0 | 5 |

Table 3-16: Convoy Tracker for the AWAR and WTHR in 2024

| Date | Direction of Travel | Convoy Type | Light | Medium | Heavy | Total ^(a) |
|------------|---------------------|---|-------|--------|-------|----------------------|
| 2024-04-11 | South | Env tech escorted 3 crew busses and a cube truck southbound then the same group northbound afterward | 5 | 0 | 0 | 5 |
| 2024-04-11 | North | Env tech escorted 3 crew busses and a cube truck southbound then the same group northbound afterward | 5 | 0 | 0 | 5 |
| 2024-04-13 | South | Escorted by Agnico environment, consisting of 2 coach buses, 1 cube truck, and including a grader with the current windy conditions | 4 | 1 | 0 | 5 |
| 2024-04-13 | North | Escorted by Agnico environment, consisting of 2 coach buses, 1 cube truck, and including a grader with the current windy conditions | 4 | 1 | 0 | 5 |
| 2024-04-15 | South | Convoy escorted by Environment of 2 coach bus, 1 cube truck, 1 grader for road maintenance | 4 | 1 | 0 | 5 |
| 2024-04-15 | North | Convoy escorted by Environment of 2 coach bus, 1 cube truck, 1 grader for road maintenance | 4 | 1 | 0 | 5 |
| 2024-04-17 | South | Under Agnico Eagle environmental staff escort, a convoy of 3 passenger buses, 1 cube truck and road maintenance vehicle took place | 5 | 1 | 0 | 6 |
| 2024-04-17 | North | Under Agnico Eagle environmental staff escort, a convoy of 3 passenger buses, 1 cube truck and road maintenance vehicle took place | 5 | 1 | 0 | 6 |
| 2024-04-19 | South | A convoy consisting of 3 passenger buses, 1 cube truck and road maintenance vehicle proceeded south bound | 5 | 1 | 0 | 6 |
| 2024-04-19 | North | Northbound convoy, the setup remained largely the same, with 3 passenger buses, 1 cube truck, a road maintenance vehicle, and a tractor trailer | 5 | 2 | 0 | 7 |
| 2024-04-22 | South | ENV tech escorted 1 bus, 1 cube truck and a grader (for road maintenance) | 3 | 1 | 0 | 4 |
| 2024-04-22 | North | ENV tech escorted 1 bus, 1 cube truck, 1 grader (for road maintenance) and 7 fuel tanker since there was no group above 200 on the road | 3 | 8 | 0 | 11 |
| 2024-04-23 | South | A passenger and fuel convoy took place, being composed of 2 passenger buses, 1 cube truck, 1 road maintenance vehicle south bound | 4 | 8 | 0 | 12 |
| 2024-04-23 | North | north bound convoy was composed of 2 passenger bus, 1 cube truck, and 1 road maintenance vehicle. | 4 | 1 | 0 | 5 |
| 2024-04-24 | South | A passenger and fuel convoy took place, being composed of 2 passenger buses, 1 cube truck, 1 road maintenance vehicle | 4 | 1 | 0 | 5 |
| 2024-04-24 | North | north bound convoy was composed of 2 passenger bus, 1 cube truck, 7 fuel tankers, 2 tractor trailer and 1 road maintenance vehicle | 4 | 10 | 0 | 14 |
| 2024-04-25 | South | Convoy was composed of 3 passenger buses, 1 cube truck, 7 fuel tankers, 3 tractor trailers and 1 road maintenance vehicle | 5 | 11 | 0 | 16 |

Table 3-16: Convoy Tracker for the AWAR and WTHR in 2024

| Date | Direction of Travel | Convoy Type | Light | Medium | Heavy | Total ^(a) |
|----------------------------|---------------------|--|------------|------------|----------|----------------------|
| 2024-04-25 | North | Convoy was composed of 2 passenger bus, 1 cube truck, 7 fuel tankers, and 2 tractor trailers | 4 | 9 | 0 | 13 |
| 2024-04-26 | South | Convoy consisted of 2 passenger buses, 1 cube truck, 7 fuel tankers, 2 tractor trailers and 1 road maintenance vehicle | 4 | 10 | 0 | 14 |
| 2024-04-26 | North | Convoy consisted of 2 passenger bus for crew change, and 1 cube truck | 4 | 0 | 0 | 4 |
| 2024-04-27 | South | The southbound convoy consisted of 2 pick-up trucks and 1 road maintenance vehicle | 2 | 1 | 0 | 3 |
| 2024-04-27 | North | The north bound convoy consisted of 2 pick-up trucks, 7 fuel tankers, 1 tractor trailer and 1 cube truck and 1 grader | 3 | 9 | 0 | 12 |
| 2024-04-28 | South | Convoy consisted of 2 cube trucks, 7 fuel tankers, 2 tractor trailer and 1 road maintenance vehicle | 3 | 10 | 0 | 13 |
| 2024-04-28 | North | Convoy consisted of 7 fuel tankers, 2 tractor trailer and 1 cube truck | 2 | 9 | 0 | 11 |
| 2024-05-01 | South | Under environmental staff escort, a passenger convoy took place | 3 | 0 | 0 | 3 |
| 2024-05-01 | North | Under environmental staff escort, a passenger convoy took place | 3 | 0 | 0 | 3 |
| 2024-05-02 | South | Under environmental staff escort, a passenger convoy took place | 3 | 0 | 0 | 3 |
| 2024-05-02 | North | Under environmental staff escort, a passenger convoy took place | 3 | 0 | 0 | 3 |
| 2024-07-31 | South | A convoy consisting of 2 buses, 1 cube and 1 road maintenance vehicle | 4 | 1 | 0 | 5 |
| 2024-07-31 | North | A convoy consisting of 2 buses, 1 cube and 1 road maintenance vehicle | 4 | 1 | 0 | 5 |
| 2024-11-28 | South | 1 Food Truck + Crew change bus | 3 | 0 | 0 | 3 |
| 2024-11-28 | North | 1 Food Truck + Crew change bus | 3 | 0 | 0 | 3 |
| 2024-11-29 | South | 1 Food Truck + Crew change bus + 1 Grader | 3 | 1 | 0 | 4 |
| 2024-11-29 | North | Crew change bus + 1 Grader | 2 | 1 | 0 | 3 |
| Total^(b) | | | 251 | 203 | 0 | 454 |

Note: Heavy equipment = haul trucks, float; Medium equipment = emulsion, fuel tanker, tractor trailer, roll off, vacuum, lube truck, and other similar sized vehicles; Light equipment = wildlife monitors, pick-up trucks, bus, cube truck, and other similar sized vehicles.

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

(a) Total number of vehicles per convoy.

(b) Total number of vehicles by vehicle type summed across all AWAR and WTHR convoys.

3.6.8 Caribou Responses to Mitigation

Caribou Crossings

The frequency of road surveys in 2024 demonstrate Agnico Eagle's commitment to minimizing impacts to caribou from the AWAR and WTHR (including Vault Haul Road). Mitigation measures such as reduced speeds, restricted access, convoys and multiple road closures function to minimize road-related effects including mortality and injury and to increase caribou passage. Incidental sightings in 2024 recorded in the Wildlife Log (Appendix A) and road surveys showed that caribou crossed roads throughout the year, with especially high numbers during fall and spring migration (Table 3-17).

A total of 9,243 caribou were observed crossing the AWAR and 2,468 caribou were observed crossing the WTHR in 2024. For the AWAR, most caribou crossing observations occurred during fall migration with 85% (7,858 of 9,243 caribou) of observed AWAR caribou crossings occurring during the fall. The months with the greatest number of caribou observed crossing the AWAR included October (over 1,975 observed crossings), and November (over 5,716 observations; Figure 3-6). There were no observed caribou crossings on the AWAR during July (Figure 3-6). During fall migration, 96% (1,593 of 2,371) of observed caribou crossings on the AWAR occurred on dates with a 24-hour AWAR closure (Table 3-17), which is to be expected given that high numbers of caribou observations trigger road closures. For annual caribou crossing observations on the AWAR, 82% (7,595 of 9,243 caribou) of observed crossing events occurred on dates with an AWAR closure.

For the WTHR, most caribou crossing observations occurred during the spring migration with 96% (2,371 of 2,468) of observed WTHR caribou crossing occurring during this season. The month with the greatest number of caribou crossing the WTHR was April with 1,714 caribou crossings observed. There were no observed caribou crossings on the WTHR in January, February, March, September or December (Figure 3-6). During spring migration, 67% (1,593 of 2,371 caribou) of observed caribou crossings on the WTHR occurred on dates with a 24-hour WTHR closure (Table 3-17). For annual caribou crossing observations on the WTHR, 96% (2,376 of 2,468 caribou) of observed crossing events occurred on dates with a WTHR 24-hour closure or partial closure, and 4% (89 of 2,468 caribou) occurred on a day with a speed or access restriction in place.

Table 3-17: Observations of Caribou Crossing AWAR and WTHR in 2024

| Season | Date | Closure Status | Crossing KM | Number of Caribou Crossing |
|-------------|------------|-------------------|-------------|----------------------------|
| AWAR | | | | |
| Winter | 2024-01-02 | Restricted Access | 50 | 5 |
| | 2024-01-06 | Partial Closure | 14 | 152 |
| | 2024-01-10 | Speed Restriction | 56 | 14 |
| | 2024-01-24 | Speed Restriction | 54 | 15 |
| | 2024-02-01 | Restricted Access | 58 | 5 |
| | 2024-02-03 | Partial Closure | 97 | 12 |
| | 2024-02-05 | Partial Closure | 33 | 6 |
| | 2024-02-07 | Open | 57 | 15 |
| | 2024-02-18 | Speed Restriction | 35 | 10 |
| | 2024-02-23 | Speed Restriction | 97 | 8 |
| | 2024-02-23 | Speed Restriction | 37 | 4 |
| | 2024-02-25 | Partial Closure | 57 | 6 |
| | 2024-02-25 | Partial Closure | 57 | 2 |
| | 2024-02-25 | Partial Closure | 33 | 1 |
| | 2024-02-25 | Partial Closure | 56 | 19 |
| | 2024-02-25 | Partial Closure | 96 | 9 |
| | 2024-03-02 | Speed Restriction | 12 | 16 |
| | 2024-03-06 | Restricted Access | 54 | 81 |
| | 2024-03-06 | Restricted Access | 22 | 8 |
| | 2024-03-13 | Partial Closure | 9 | 15 |
| | 2024-03-24 | Open | 98 | 4 |
| Spring | 2024-04-02 | Closed | 69 | 48 |
| | 2024-04-07 | Closed | 37 | 4 |
| | 2024-04-23 | Partial Closure | 99 | 16 |
| | 2024-04-29 | Open | 101 | 1 |
| | 2024-04-30 | Partial Closure | 101 | 470 |
| | 2024-05-01 | Partial Closure | 102 | 3 |
| | 2024-05-07 | Partial Closure | 104 | 9 |
| | 2024-05-12 | Partial Closure | 104 | 1 |
| | 2024-05-12 | Partial Closure | 100 | 12 |
| | 2024-05-12 | Partial Closure | 100 | 16 |
| | 2024-05-13 | Speed Restriction | 104 | 10 |
| | 2024-05-13 | Speed Restriction | 99 | 15 |
| | 2024-05-21 | Partial Closure | 100 | 3 |
| | 2024-05-24 | Closed | 40 | 4 |
| | 2024-05-25 | Closed | 79 | 1 |

Table 3-17: Observations of Caribou Crossing AWAR and WTHR in 2024

| Season | Date | Closure Status | Crossing KM | Number of Caribou Crossing |
|--------------|------------|-------------------|-------------|----------------------------|
| Summer | 2024-06-19 | Speed Restriction | 63 | 8 |
| | 2024-08-08 | Speed Restriction | 49 | 1 |
| | 2024-08-08 | Speed Restriction | 43 | 1 |
| | 2024-08-10 | Open | 87 | 1 |
| | 2024-09-02 | Partial Closure | 23 | 3 |
| | 2024-09-11 | Partial Closure | 42 | 53 |
| | 2024-09-11 | Partial Closure | 49 | 46 |
| | 2024-09-11 | Partial Closure | 60 | 73 |
| | 2024-09-11 | Partial Closure | 60 | 87 |
| | 2024-09-11 | Partial Closure | 77 | 55 |
| | 2024-09-12 | Partial Closure | 86 | 10 |
| | 2024-09-17 | Speed Restriction | 59 | 3 |
| | 2024-09-18 | Speed Restriction | 93 | 2 |
| Fall | 2024-09-23 | Restricted Access | 84 | 17 |
| | 2024-09-24 | Partial Closure | 54 | 55 |
| | 2024-10-05 | Partial Closure | 15 | 36 |
| | 2024-10-16 | Partial Closure | 76 | 41 |
| | 2024-10-16 | Partial Closure | 74 | 148 |
| | 2024-10-27 | Closed | 13 | 1000 |
| | 2024-10-27 | Closed | 13 | 750 |
| | 2024-11-03 | Closed | 21 | 15 |
| | 2024-11-03 | Closed | 18 | 100 |
| | 2024-11-04 | Closed | 6 | 5000 |
| | 2024-11-05 | Closed | 37 | 174 |
| | 2024-11-05 | Closed | 13 | 7 |
| | 2024-11-27 | Closed | 61 | 60 |
| | 2024-11-29 | Closed | 78 | 200 |
| | 2024-11-30 | Closed | 96 | 160 |
| | 2024-12-06 | Partial Closure | 102 | 11 |
| | 2024-12-07 | Open | 104 | 15 |
| | 2024-12-09 | Closed | 75 | 8 |
| | 2024-12-12 | Closed | 52 | 61 |
| Winter | 2024-12-17 | Closed | 51 | 3 |
| | 2024-12-21 | Partial Closure | 52 | 19 |
| Total | | | | 9,243 |

Table 3-17: Observations of Caribou Crossing AWAR and WTHR in 2024

| Season | Date | Closure Status | Crossing KM | Number of Caribou Crossing |
|--------------|------------|-------------------|-------------|----------------------------|
| WTHR | | | | |
| Spring | 2024-04-15 | Closed | 113 | 44 |
| | 2024-04-15 | Closed | 113 | 110 |
| | 2024-04-19 | Closed | 177 | 60 |
| | 2024-04-19 | Closed | 169 | 16 |
| | 2024-04-19 | Closed | 177 | 110 |
| | 2024-04-22 | Closed | 163 | 150 |
| | 2024-04-22 | Closed | 112 | 119 |
| | 2024-04-22 | Closed | 126 | 170 |
| | 2024-04-22 | Closed | 154 | 140 |
| | 2024-04-23 | Closed | 151 | 3 |
| | 2024-04-23 | Closed | 168 | 9 |
| | 2024-04-24 | Closed | 123 | 2 |
| | 2024-04-24 | Closed | 150 | 7 |
| | 2024-04-26 | Closed | 146 | 9 |
| | 2024-04-27 | Closed | 110 | 27 |
| | 2024-04-30 | Partial Closure | 113 | 670 |
| | 2024-04-30 | Partial Closure | 113 | 68 |
| | 2024-05-01 | Closed | 120 | 30 |
| | 2024-05-01 | Closed | 113 | 587 |
| | 2024-05-09 | Partial Closure | 177 | 40 |
| Summer | 2024-05-26 | Open | 129 | 1 |
| | 2024-06-01 | Speed Restriction | 113 | 16 |
| | 2024-07-31 | Partial Closure | 144 | 1 |
| | 2024-07-31 | Partial Closure | 143 | 1 |
| | 2024-08-02 | Restricted Access | 179 | 12 |
| | 2024-08-03 | Open | 172 | 1 |
| | 2024-08-07 | Speed Restriction | 120 | 1 |
| | 2024-08-07 | Speed Restriction | 170 | 2 |
| | 2024-08-12 | Speed Restriction | 169 | 1 |
| | 2024-08-12 | Speed Restriction | 151 | 1 |
| | 2024-08-12 | Speed Restriction | 129 | 1 |
| | 2024-08-19 | Speed Restriction | 135 | 1 |
| | 2024-08-21 | Speed Restriction | 152 | 2 |
| | 2024-08-27 | Open | 134 | 1 |
| | 2024-08-31 | Speed Restriction | 147 | 1 |
| Fall | 2024-10-08 | Speed Restriction | 139 | 51 |
| | 2024-11-29 | Closed | 174 | 3 |
| Total | | | | 2,468 |

AWAR = All-Weather Access Road, WTHR = Whale Tail Haul Road. Spring = Apr 1 to May 25, Summer = May 26 to Sep 21, Fall = Sep 22 to Dec 15, Winter = Dec 16 to Mar 31.

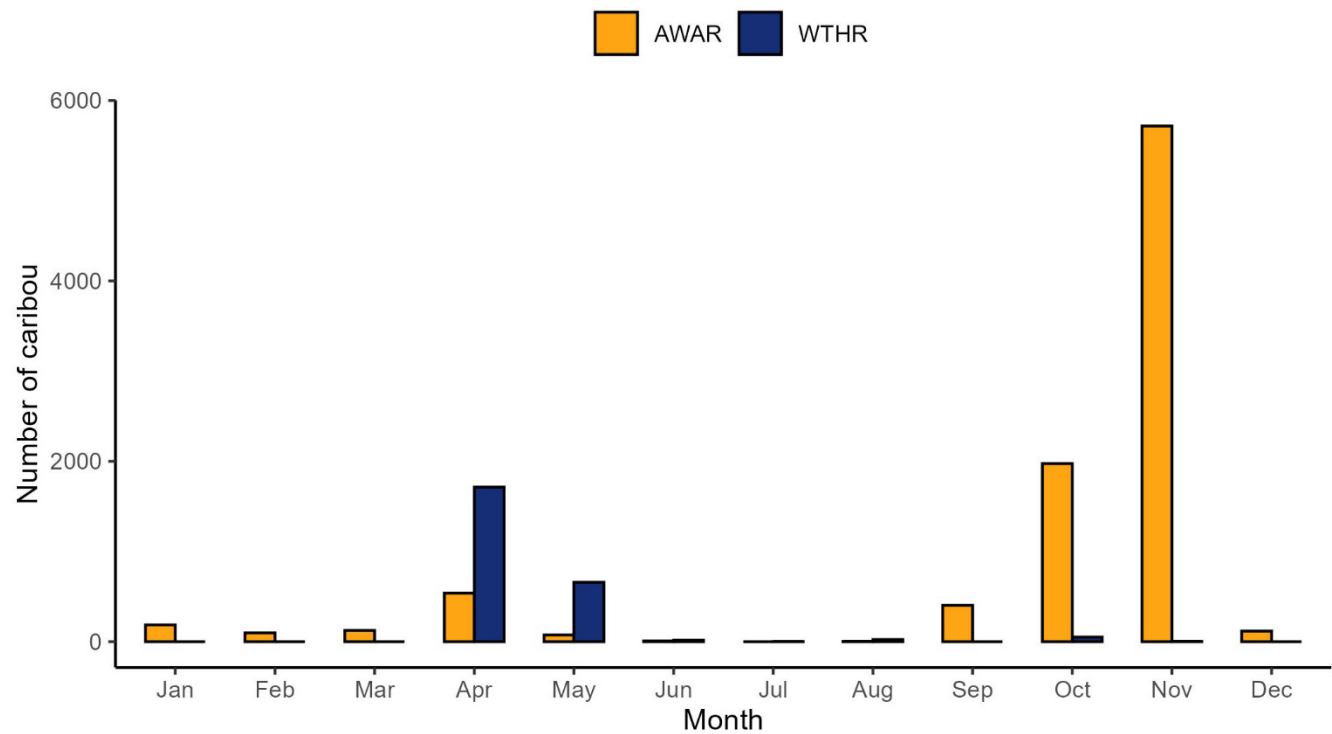


Figure 3-6: Number of Caribou Crossing Observations per Month on the All-Weather Access Road (AWAR) and Whale Tail Haul Road (WTHR) during 2024

Tolerant Caribou Observations

Observations of tolerant caribou along the AWAR and WTHR contribute to assessing risk and the success of mitigation measures. The TEMP version 7 defines Project tolerant caribou as:

“An animal or group of animals (i) observed within a mitigation distance buffer for greater than 72 hours during the winter or 48 hours during other season; and (ii) not visibility disturbed by the Project”

There were no observations of project tolerant caribou along the AWAR or WTHR in 2024.

3.6.9 Road-related Wildlife Mortality

Wildlife mortalities associated with the AWAR and WTHR during 2024 are recorded in Table 3-18, and reports are included in Appendix C. There were no road-related grizzly bear, muskox, or wolf mortalities associated with the AWAR or WTHR in 2024. There was one caribou mortality that took place on the AWAR on 05 January 2024 (Table 3-18). The night prior the road had been closed due to poor weather conditions with the road maintenance crew focused on the southern portion of the road. The caribou was observed by a grader operator about 2 m from the road being eaten by wolves. The Agnico Eagle Environment team was sent to investigate and collect the carcass at 7:30 a.m., there were no reports of wildlife incidents to Agnico Eagle prior to the grader operator. The carcass was delivered to Baker Lake GN conservation officers on 08 January 2024. GN Conservation officers suggested the caribou was struck by a vehicle. In addition, one wolverine mortality that took place on WTHR on 16 November 2024. Road-related mortalities from 2007 to 2024 are presented in Table 3-19. Mine site related mortalities are described in Section 4.5.8. There were more road-related mortalities reported in 2024 than 2021, 2022, and 2023 (Golder 2022; WSP 2023a; WSP 2024).

Upon discovery of any roadkill remains that had not been reported to Environment staff, employees were reminded of road rules and the need to enforce these rules by Environment staff and/or road supervisors. All employees are regularly reminded at toolbox meetings that all Project-related incidents are to be reported, and that wildlife have the right-of-way at all times. Mine staff are required to stop vehicles and wait for wildlife to cross roads. No feeding wildlife and waste management practices are also regularly reviewed with employees.

Table 3-18: Project Related Wildlife Mortalities Related to the All-Weather Access Road and Whale Tail Haul Road in 2024

| Date | Species | Count | Location | Comments |
|-------------|------------------------|-------|----------|----------------------------------|
| AWAR | | | | |
| 2024-01-05 | Caribou | 1 | KM 92 | Struck by a vehicle on the road. |
| 2024-05-13 | Arctic ground squirrel | 1 | KM 17 | Struck by a vehicle on the road. |
| 2024-05-20 | Ptarmigan | 1 | KM 52 | Struck by a vehicle on the road. |
| 2024-05-20 | Arctic ground squirrel | 1 | KM 30 | Struck by a vehicle on the road. |
| 2024-05-20 | Arctic ground squirrel | 1 | KM 63 | Struck by a vehicle on the road. |
| 2024-05-21 | Ptarmigan | 1 | KM 20 | Struck by a vehicle on the road. |
| 2024-06-06 | Ptarmigan | 1 | KM 13 | Struck by a vehicle on the road. |
| 2024-06-13 | Ptarmigan | 1 | KM 62 | Struck by a vehicle on the road. |
| 2024-06-13 | Arctic ground squirrel | 1 | KM 1 | Struck by a vehicle on the road. |
| 2024-07-08 | Arctic Fox | 1 | KM 48 | Struck by a vehicle on the road. |
| 2024-08-02 | Arctic ground squirrel | 1 | KM 64 | Struck by a vehicle on the road. |
| 2024-08-04 | Arctic Fox | 1 | KM 102 | Struck by a vehicle on the road. |
| 2024-08-06 | Arctic Hare | 1 | KM 35 | Struck by a vehicle on the road. |
| 2024-08-06 | Arctic Hare | 1 | KM 87 | Struck by a vehicle on the road. |
| 2024-08-06 | Arctic ground squirrel | 1 | KM 63 | Struck by a vehicle on the road. |
| 2024-08-08 | Arctic ground squirrel | 1 | KM 64 | Struck by a vehicle on the road. |
| 2024-08-09 | Arctic Fox | 1 | KM 98 | Struck by a vehicle on the road. |
| 2024-08-13 | Arctic ground squirrel | 1 | KM 85 | Struck by a vehicle on the road. |
| 2024-08-20 | Arctic Hare | 1 | KM 89 | Struck by a vehicle on the road. |
| 2024-08-23 | Arctic ground squirrel | 1 | KM 104 | Struck by a vehicle on the road. |
| 2024-09-18 | Ptarmigan | 1 | KM 65 | Struck by a vehicle on the road. |
| 2024-10-14 | Arctic Fox | 1 | KM 18 | Struck by a vehicle on the road. |
| 2024-12-19 | Arctic Hare | 1 | 8 | Struck by a vehicle on the road. |
| WTHR | | | | |
| 2024-08-07 | Arctic ground squirrel | 1 | KM 160 | Struck by a vehicle on the road. |
| 2024-08-07 | Arctic ground squirrel | 1 | KM 127 | Struck by a vehicle on the road. |
| 2024-08-07 | Arctic Fox | 1 | KM 116 | Struck by a vehicle on the road. |
| 2024-11-16 | Wolverine | 1 | KM 135 | Struck by a vehicle on the road. |
| 2024-11-21 | Arctic Hare | 1 | KM 127 | Struck by a vehicle on the road. |
| 2024-11-26 | Arctic Fox | 1 | KM 163 | Struck by a vehicle on the road. |
| 2024-12-24 | Arctic Fox | 1 | KM 168 | Struck by a vehicle on the road. |

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

Table 3-19: Summary of Road-related Wildlife Mortality Records (2007 to 2024)

| Year | Caribou | Grizzly Bear | Muskox | Wolverine | Wolf | Fox | Small Mammals | Small Birds | Unidentified Small Animal |
|-------------|---------|--------------|--------|-----------|------|-----|---------------|-------------|---------------------------|
| AWAR | | | | | | | | | |
| 2007 | 3 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 0 |
| 2008 | 10 | 0 | 0 | 0 | 2 | 13 | 7 | 17 | 0 |
| 2009 | 1 | 0 | 0 | 0 | 0 | 1 | 6 | 2 | 0 |
| 2010 | 1 | 0 | 0 | 0 | 0 | 2 | 6 | 2 | 0 |
| 2011 | 2 | 0 | 0 | 0 | 1 | 0 | 5 | 4 | 0 |
| 2012 | 2 | 0 | 0 | 1 | 0 | 0 | 3 | 1 | 0 |
| 2013 | 5 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 |
| 2014 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2015 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 2 | 1 |
| 2016 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 0 |
| 2017 | 0 | 0 | 0 | 0 | 0 | 5 | 3 | 3 | 0 |
| 2018 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 |
| 2019 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 |
| 2020 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2021 | 0 | 0 | 0 | 0 | 0 | 5 | 9 | 1 | 0 |
| 2022 | 0 | 0 | 0 | 1 | 0 | 0 | 3 | 1 | 0 |
| 2023 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 |
| 2024 | 1 | 0 | 0 | 0 | 0 | 4 | 13 | 5 | 0 |
| WTHR | | | | | | | | | |
| 2018 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 |
| 2019 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 |
| 2020 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2021 | 0 | 0 | 0 | 0 | 0 | 2 | 11 | 0 | 0 |
| 2022 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 |
| 2023 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 |
| 2024 | 0 | 0 | 0 | 1 | 0 | 3 | 3 | 0 | 0 |

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

3.7 Accuracy of Impact Predictions

The summary of the impact predictions identified in the TEMP version 7 (Agnico Eagle 2019) are listed in Table 3-20. The 2024 AWAR and WTHR survey data were compared to the impact prediction thresholds to evaluate adherence to the impact predictions and the provision of adaptive management, as either a necessary or proactive measure. None of the thresholds were exceeded in 2024.

Table 3-20: Accuracy of Impact Predictions – Sensory Disturbance and Mortality along the All-Weather Access Road and Whale Tail Haul Road in 2024

| Potential Effect | Threshold | Threshold Exceeded (2024) | Adaptive Management Implemented | Monitoring Methods |
|---|--|---------------------------------------|--|--|
| Sensory Disturbance | No threshold but Decisions Trees followed when caribou are seen near mine facilities | Not Applicable | YES Multiple road closures and notices, good engagement of Wildlife Log by site staff. Use of Decision Tree for Management and Monitoring. | AWAR and WTHR Surveys, Wildlife Log, Mortality Reporting Satellite-collaring data |
| Project-related Mortality (ungulates) | Threshold level of mortality is two individuals per year. | NO One caribou mortality on AWAR | YES Incident of caribou road mortality reviewed with all LHT crews. Road users reminded to be alert and cautious of wildlife along the roadways, especially during night shift and low visibility conditions. | AWAR and WTHR surveys Satellite-collaring data surveys Incidental wildlife reporting |
| Project-related Mortality (predatory mammals) | Predatory mammals (i.e., grizzly bear, wolverine, wolf) will not be killed or injured by vehicle collisions. Threshold level of mortality is two individuals per year. | NO One wolverine mortality on WTHR | YES Incident of wolverine road mortality reviewed with all LHT crews. Road users reminded to be alert and cautious of wildlife along the roadways, especially during night shift and low visibility conditions. | AWAR and WTHR surveys Incidental wildlife reporting |
| Project-related Mortality | Raptors or waterbirds will not be killed along Project roads. Threshold is one individual due to vehicle collision per year. | NO | NO | AWAR and WTHR surveys Incidental wildlife reporting |

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

3.8 Management Recommendations

The AWAR and WTHR survey data are important for documenting sensitive periods when the area near the road is utilized by various wildlife species and for evaluating the need, if any, to adaptively manage mitigation (e.g., temporary road closures and radio announcements). Mitigation actions linked to individual wildlife observations (Appendix A) should continue to be recorded, and caribou movement patterns continue to require close monitoring in 2025. No other management mitigations are recommended at this time.

4.0 PITS AND MINE SITE GROUND SURVEYS

4.1 Overview

The Mine site ground survey monitoring program (i.e., for Meadowbank/Vault, and Whale Tail) has been designed to verify that impacts to wildlife in and around the Project LSA are minimized. The program has a strong emphasis on monitoring mortality and disturbance of various wildlife groups utilizing habitats near the Project. In addition, the Mine site ground survey monitoring program is an integral component of the monitoring strategy for evaluating sensory disturbance indicators for caribou.

4.2 Objectives

The primary objectives of the Mine site ground surveys are to:

- 1) Use Decisions Trees when caribou are seen near Project facilities to determine the level of adaptive management (e.g., suspend activities) required.
- 2) Confirm that caribou will not be killed through other Project-related mortality such as falling in pits, tailings sludge, or other means. The cumulative Project threshold level of mortality is two individuals per year.
- 3) Verify that measures are in place such that grizzly bears, wolverines, or wolves will not need to be destroyed at the Project site in association with human-wildlife conflicts. The threshold level of mortality for predatory mammals is two individuals per year.
- 4) Verify that disturbance to high value habitats (e.g., sedge meadows) and nesting migratory birds is avoided, and all activities within 100 m of a migratory bird nest site be monitored, if deemed necessary.

4.3 Duration

The Mine site ground surveys are to be conducted regularly by Agnico Eagle Environment personnel over the operation and closure phases of the Project. Surveys are conducted at least once per week, with increased frequency if caribou are present.

4.4 Methods

In 2024, Environment personnel conducted regular Mine site inspections focusing on waste management, spills, hazardous waste management, and wildlife monitoring. Formal Mine site inspections were carried out at least weekly as part of broader environmental on-site management. During these inspections, if non-conformities were identified they are rapidly addressed by the responsible department.

Weekly inspections included:

- Regular monitoring of all wildlife species near the facilities. Large mammal presence within the Project is documented during daily and weekly (formal) inspections. Any issues related to safety or proximity effects are identified and the appropriate mitigation is implemented. If risks to animal health are perceived, efforts are made to avoid the wildlife and provide them the right-of-way. In 2024, Mine-site ground survey inspections were conducted on average once or twice per week (Meadowbank survey frequency was on average 1 survey every 4.24 days and Whale Tail survey frequency was on average 1 survey every 4.20 days).
- Regular monitoring of all large mammals in the Project LSA.
- Regular monitoring of breeding birds (especially in the spring), raptors, and nests located in the Project LSA.
- Inspections of waste management areas, bins, and hazardous material storage.

Environment Department inspections and wildlife ground surveys focus on migratory birds, ungulates, Arctic fox, wolf, grizzly bear, and wolverine. Through these observations and those of other Agnico Eagle employees (i.e., incidental observations), and incidence reports provided to the Environment Department. Technicians follow up as needed to ensure the protection of wildlife near the Project. Monthly summary reports and wildlife observation data are submitted to the GN and KivIA, and quarterly reports are submitted to the KivIA.

4.4.1 Incidental Mine Site Wildlife Observations

All Mine site personnel, including construction and support staff, are required to document and report wildlife observed within the LSA of the Project as well as ancillary areas (e.g., AWAR and WTHR). The protocol involves notifying staff in the Environment Department, which is intended to ensure that potential problem animals are identified. Pertinent data, and daily and weekly Mine site inspection reports are consolidated and entered into an electronic database (EQuIS). Monthly summary reports and wildlife observation data are submitted to the GN and KivIA. Quarterly reports are submitted to the KivIA.

4.5 2024 Results

4.5.1 Pit and Mine Site Ground Surveys

The number of surveys completed at Meadowbank Mine and Whale Tail mine sites each in 2024 is provided in Table 4-1. Mine and Pit surveys were distinguished from incidentals starting in October 2021 and were recorded separately from incidentals for all of 2022, 2023, and 2024. Weekly mine inspections at Meadowbank and Whale Tail include a wildlife observation component and are also included in this count.

In 2024, Meadowbank had a total of 86 formal Mine and Pit surveys conducted between 14 January and 30 December. The average frequency of surveys was approximately one survey every 4.24 days during this period, with the largest number of surveys occurring in November and December. Whale Tail had a total of 87 formal Mine and Pit surveys conducted between 6 January and 28 December. The average frequency of surveys was approximately one survey every 4.20 days during this period, with the largest number of surveys occurring in November and December.

Table 4-1: Number of Formal Pit and Mine Site Ground Surveys by Month, 2024

| Location | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| Meadowbank | 4 | 4 | 5 | 4 | 4 | 5 | 4 | 3 | 8 | 14 | 16 | 15 | 86 |
| Whale Tail | 4 | 4 | 5 | 5 | 3 | 5 | 4 | 11 | 5 | 11 | 14 | 16 | 87 |

4.5.2 Wildlife Observations from Pit and Mine Surveys

Wildlife observations from formal Pit and Mine surveys conducted between January and December of 2024 are shown in Table 4-2 and wildlife observations from incidental surveys at the Meadowbank and Whale Tail sites are provided in Appendix A. Observations were used by Environment personnel to monitor wildlife activity within the Project and to identify potential problematic or sensitive animals requiring deterrence.

Seven mammal species were reported during formal Pit and Mine surveys at Meadowbank in 2024, including Arctic fox, Arctic ground squirrel, Arctic hare, caribou, wolf, muskox, and wolverine (Table 4-2). Caribou sightings were in April and one observation occurred in August. and muskox sightings were highest in December and were observed in June, July, and September. Wolverines were only reported in December. Four species of birds were reported during formal Pit and Mine surveys at Meadowbank, including Canada goose, common raven, crow, and gull spp. Common raven was the most frequently observed bird species and was reported mostly between January to March.

Five mammal species were reported during formal Pit and Mine surveys Whale Tail Mine in 2024, including Arctic fox, Arctic hare, caribou, grizzly bear, and muskox (Table 4-2). The highest caribou sightings took place in August, followed by November. Muskox sightings were observed most frequently in October for both sites combined. Eight species of birds were observed during formal surveys at Whale Tail in 2024 (Table 4-2). The most frequently observed species were snow goose in September and Canada goose in August.

Table 4-2: Wildlife Observations from Formal Pit and Mine Site Ground Surveys by Month 2024

| Species Group | Species | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total |
|-------------------|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------------|
| Meadowbank | | | | | | | | | | | | | | |
| Mammal | Arctic fox | 0 | 0 | 6 | 2 | 1 | 12 | 1 | 0 | 0 | 0 | 1 | 5 | 28 |
| | Arctic ground squirrel | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 2 |
| | Arctic hare | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 9 |
| | Caribou | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 14 |
| | Muskox | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 2 | 0 | 0 | 5 | 11 |
| | Wolf | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 3 |
| | Wolverine | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 |
| Bird | American Crow | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 15 | 22 |
| | Canada goose | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 4 | 0 | 0 | 0 | 0 | 17 |
| | Common raven | 12 | 55 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 88 |
| | Gull sp. | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Whale Tail | | | | | | | | | | | | | | |
| Mammal | Arctic fox | 3 | 0 | 1 | 1 | 0 | 0 | 3 | 0 | 1 | 0 | 4 | 14 | 27 |
| | Arctic hare | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| | Caribou | 0 | 0 | 0 | 7 | 0 | 8 | 4 | 114 | 0 | 0 | 27 | 0 | 160 |
| | Grizzly bear | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | Muskox | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 0 | 0 | 20 | 0 | 0 | 25 |
| Bird | Canada goose | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 0 | 0 | 0 | 0 | 28 |
| | Common raven | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 6 |
| | Gull sp. | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| | Gyr Falcon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| | Passerine bird | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| | Peregrine falcon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| | Sandhill crane | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| | Snow goose | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 52 | 0 | 0 | 0 | 52 |

Five mammal species were reported as incidental sightings at Meadowbank in 2024 including Arctic fox, caribou, muskox, wolf, and wolverine (Table 4-3). Incidental caribou sightings were highest between April to June, and one muskox sighting was in June. Wolf were only observed in November and December, and wolverine sightings only occurred during winter months between January to April, and November to December. Arctic fox was sighted in June and once in December. Bird species were recorded incidentally at Meadowbank in July and September (Table 4-3). There were no incidental species recorded at Meadowbank during March or October in 2024.

Six mammal species were reported as incidental sightings at Whale Tail in 2024 including Arctic fox, caribou, grizzly bear, muskox, wolf, and wolverine (Table 4-3). The highest number of caribou sightings took place in August, and sightings occurred between July and September, and December. One grizzly bear was observed in June, and one wolf was observed in January. Twenty-eight muskoxen were observed in July. All incidental bird sightings occurred in July and August at Whale Tail in 2024, with most sightings in July (Table 4-3). There were no incidental species recorded at Whale Tail during February, March, April, or October during 2024.

Table 4-3: Incidental Wildlife Observations in 2024 by Month

| Species Group | Species | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total |
|-------------------|------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| Meadowbank | | | | | | | | | | | | | | |
| Mammal | Arctic fox | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 1 | 11 |
| | Caribou | 0 | 0 | 0 | 22 | 8 | 17 | 0 | 1 | 0 | 0 | 0 | 12 | 60 |
| | Muskox | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | Wolf | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 8 |
| | Wolverine | 1 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 7 |
| Bird | American robin | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| | Long-tailed duck | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 6 |
| | Duck spp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| Whale Tail | | | | | | | | | | | | | | |
| Mammal | Arctic fox | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 5 |
| | Caribou | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 98 | 9 | 0 | 0 | 0 | 134 |
| | Grizzly bear | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | Muskox | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 0 | 0 | 0 | 0 | 0 | 28 |
| | Wolf | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | Wolverine | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Bird | Golden eagle | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| | Gull sp. | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 5 |
| | Gyr Falcon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| | Passerine bird | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2 |

4.5.3 Bird Nests

An exemption permit was obtained on April 12, 2024, from the GN for removal of common raven nests that posed risk to proper maintenance of the fuel tank and could possibly result in fire hazard. The exemption permit is provided in Appendix D.

Results of raptor nest monitoring and waterbird nest monitoring are provided in Sections 13.0 and 14.0, respectively.

4.5.4 Wildlife Deterrent Records

Wildlife deterrents are implemented when habituated or problematic wildlife pose a threat to the wildlife or Mine personnel through human-wildlife conflicts. Necessary deterrent strategies are determined and implemented by the Environment Department based on the severity of risk and the nature of the interaction. Each deterrence event is reported using the EQUIS database.

Wildlife deterrents were used and reported at the Project throughout 2024. A total of 25 deterrence activities were reported from interactions with four species of mammals: caribou, grizzly bear, wolf, and wolverine (Table 4-5, Table 4-6). The total number of deterrence actions in 2024 were lower than prior years apart from 2017 (Table 4-4).

Table 4-4: Total Number of Deterrent Records by Year for the Project

| Location | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | Total |
|------------|------|------|------|------|------|------|-------------------|------|------|------|-------|
| Meadowbank | - | - | - | - | - | 33 | 17 | 32 | 59 | 16 | - |
| Whale Tail | - | - | - | - | - | 10 | 19 | 10 | 3 | 9 | - |
| Total | 27 | 45 | 21 | 32 | 31 | 43 | 37 ^(a) | 42 | 62 | 25 | 361 |

Note: Hyphen symbol indicates unavailable data due to changes in data recording over time. Site totals only available for some years.

(a) One deterrence event included in the total for 2021 occurred on the AWAR.

Deterrence actions in the winter months for 2024 were primarily related to wolverine and wolves, whereas in the spring and summer deterrence actions were related mostly to caribou. Caribou wildlife deterrents involved herding caribou away from potential vehicle or equipment collisions around the mine sites.

Sixteen deterrence actions were taken at Meadowbank, and nine actions were taken at Whale Tail. Whale Tail deterrence actions were for caribou and grizzly bear. Meadowbank deterrence actions involved caribou, wolf, and wolverine. Of the 25 deterrence actions taken in 2024, 22 were classified as successful deterrence and three were classified as unsuccessful deterrence. In December 2024, a wildlife destruction permit was issued for two wolves at Meadowbank, however, deterrence actions following the receipt of the permit did not occur in 2024.

Table 4-5: Details of Deterrence Activities for 2024

| Date | Species | Number | Behaviour | Deterrence Reason/Context | Deterrence Method | Deterrence Action | Deterrence Reaction | Deterrence Outcome |
|-----------------|--------------|--------|------------------|--|---|---|--|-------------------------|
| Meadowbank Mine | | | | | | | | |
| 2024-06-11 | Caribou | 6 | Foraging | Caribou near airstrip with plane on final approach. Wanted to protect caribou | Banger | Used banger to keep away from airstrip | Moved away | Successful deterrence |
| 2024-06-14 | Caribou | 5 | Foraging | Caribou near airstrip with plane on final approach. Wanted to protect caribou | Pick up truck horn | As plane was coming used horn to ensure they were walking away from airstrip | Walked away from airstrip | Successful deterrence |
| 2024-11-22 | Wolf | 1 | Walking | Approaching an unsafe distance from workers | Banger | Used banger | Walked away | Successful deterrence |
| 2024-11-22 | Wolf | 1 | Walking | Approaching workers and equipment | Banger | Used banger | Walked away from site | Successful deterrence |
| 2024-11-30 | Wolverine | 1 | Walking | Approaching workers and equipment | Banger | Mentioned to workers if they hear bang its good | Wolverine walked away from site west on Third Portage Lake | Successful deterrence |
| 2024-12-10 | Wolf | 1 | Foraging | Increase deterring and dispatch | Banger | Wolf traveled northeast | Walked away from landfill | Successful deterrence |
| 2024-12-15 | Wolf | 1 | Resting | Increase deterring and dispatch | 6mm pistol with bangers | Notified roll-off operators of this wolf at the landfill on MBK surface channel. | Wolf got up and slowly started to walk away, only mildly bothered. | Unsuccessful deterrence |
| 2024-12-15 | Wolf | 1 | Walking | Nearby workers working outdoors at central dike | Pickup truck and horn | Stopped to notify the three employees in person, notified dewatering & LHT teams and Geotech personnel over the radio | Wolf climbed over east berm and upon to the Pit a WR stockpile, last seen going down Pit A ramp toward east dike. | Successful deterrence |
| 2024-12-15 | Wolf | 1 | Walking/foraging | Nearby workers offloading sewage at south cell. | 6mm pistol with bangers | Two people returned during his next offload. | Wolf took off toward the landfill and later viewed at the compost heap in the landfill. Successfully deterred out toward the north cell. | Successful deterrence |
| 2024-12-16 | Wolf | 1 | Trotting/running | Wolf traveled back and forth between sewage offload point (south cell) and landfill offloading area. | Pickup truck & horn | Deterred the wolf out onto south cell and away from employees | The wolf left the area. | Successful deterrence |
| 2024-12-16 | Wolf | 2 | Resting | The wolves were resting near employees working outdoors | Pickup + horn, and a Megaphone | Approached the wolves with pickup & horn, only one wolf moved, the other stayed sleeping. I then used the megaphone siren to deter both wolves successfully | They both left, out toward the south cell | Successful deterrence |
| 2024-12-17 | Wolf | 1 | Walking | Move away from highly traveled area by workers | Horn and banger when the horn didn't work | Tried to get it away from camp as there are pedestrians in certain areas. | Traveled towards the freshwater barge. | Unsuccessful deterrence |
| 2024-12-20 | Wolverine | 1 | Running | Proximity to site | 6mm banger pistol | Drove toward wildlife to help deter it away from camp | Ran on top of waste dump | Successful deterrence |
| 2024-12-22 | Wolverine | 1 | Standing | Wolverine near roll-off bin drop area | 6mm pistol with bangers | Notified E&I supervisor, so that he can prevent roll off drops at landfill until the animal is deterred | Animal burrowed into the landfill contents | Unsuccessful deterrence |
| 2024-12-27 | Wolverine | 1 | Feeding | Proximity to site | Banger | Used banger and whistler | Went to north cell | Successful deterrence |
| 2024-12-30 | Wolverine | 1 | Lying Down | Proximity to site | Banger | Used banger | Ran away | Successful deterrence |
| Whale Tail Mine | | | | | | | | |
| 2024-04-28 | Grizzly bear | 1 | Walking | Proximity to site | Pistol banger | Advise departments and block roads | Ran north then continued to walk | Successful deterrence |
| 2024-07-05 | Caribou | 2 | Trotting/running | Protect caribou from collision with equipment/vehicles. | Pick up truck | Caribou were guided off the road towards the Nemo Lake. | Caribou moved off the road slowly. | Successful deterrence |
| 2024-07-23 | Caribou | 1 | Milling | Protect caribou from collision with equipment/vehicles. | Audio pyrotechnics deterrent | Used bangers and whistlers to deter caribou from UG ramp and from long haul loading area | Minor reaction | Successful deterrence |
| 2024-07-29 | Caribou | 1 | Running | Protect caribou from collision with equipment/vehicles. | Pick up truck | Radio communication with operation crew, ramps blocked with vehicle | Walking and running | Successful deterrence |

Table 4-5: Details of Deterrence Activities for 2024

| Date | Species | Number | Behaviour | Deterrence Reason/Context | Deterrence Method | Deterrence Action | Deterrence Reaction | Deterrence Outcome |
|------------|---------|--------|------------------|---|-------------------|--|--|-----------------------|
| 2024-08-12 | Caribou | 3 | Lying Down | Protect caribou from collision with equipment/vehicles. | Pick up truck | Traffic stopped. Environmental employee gently guided the caribou off the road. Speed restriction in place | The animal slowly raised and left the road | Successful deterrence |
| 2024-08-27 | Caribou | 1 | Standing | Protect caribou from collision with equipment/vehicles. | Pick up truck | They were guided out of the road | Caribou trotted to IVR Dike south and rested at the area | Successful deterrence |
| 2024-08-27 | Caribou | 2 | Standing | Protect caribou from collision with equipment/vehicles. | Pick up truck | The two caribou were directed toward a less disturbed location, away from heavy equipment | They walked towards the tundra area of WT Dike | Successful deterrence |
| 2024-08-27 | Caribou | 1 | Walking | Protect caribou from collision with equipment/vehicles. | Pick up truck | Used pickup truck to direct the caribou to a less disturbed location, out of traffic | Caribou walked to the WRSF dike area | Successful deterrence |
| 2024-08-28 | Caribou | 5 | Trotting/running | Protect caribou from collision with equipment/vehicles. | Pick up truck | Used truck to direct caribou towards tundra away from heavy traffic and equipment | Went into tundra and started feeding | Successful deterrence |

Table 4-6: Summary of Deterrence Events in 2024

| Location | Species | Number of Deterrence Events | | |
|------------|--------------|-----------------------------|--------------|-------|
| | | Successful | Unsuccessful | Total |
| Meadowbank | Caribou | 2 | 0 | 2 |
| | Wolf | 7 | 2 | 9 |
| | Wolverine | 4 | 1 | 5 |
| Whale Tail | Caribou | 8 | 0 | 8 |
| | Grizzly bear | 1 | 0 | 1 |
| Total | | 22 | 3 | 25 |

4.5.5 Waterbird Monitoring

Waterbird monitoring is completed to minimize accidental waterbird confinement around the Meadowbank and Whale Tail sites, entrapment in the tailings, and mortality. No waterbird nest monitoring was completed in 2024, though regular inspections were completed throughout the migratory period and during weekly or daily inspections, as deemed necessary by Environment personnel.

Previous research to investigate mitigation options to minimize flooding-related impacts to birds in the Whale Tail South area was completed in collaboration with Trent University, and a manuscript was published in October 2024 (Holmes et al. 2024).

Further discussion of 2024 waterbird monitoring is provided in Section 14.0.

4.5.6 Raptor Monitoring

Raptor monitoring was conducted as part of routine Mine site inspections of the pit and other areas to ensure adequate bird protection and management. Adult peregrine falcons were observed on 44 occasions at 10 quarry monitoring locations, and eggs or chicks were observed at six quarry monitoring locations. At Quarry 7, the nest was used by Gyrfalcon (*Falco rusticolus*) and four eggs were produced. In addition to observations as part of the raptor nest monitoring (Section 13), there were seven bald eagle (June, July, August), six gyrfalcon (May, August), 46 peregrine falcon detections (May, June, July, August, September), and five rough-legged hawk (March, April, May) along the AWAR and WTHR (Table 3-9, Table 3-10). Additionally, four unidentified falcons were observed along the AWAR and WTHR (Table 3-10).

4.5.7 Predatory Mammal Deterrence and Protection

Improved practices for waste segregation and incineration, the use of enclosed food waste facilities, and skirting around buildings have improved Arctic fox protection and decreased fox-human interactions (Table 4-7).

Deterrence actions for wolverine, which followed the Wildlife Protection and Response Plan (Appendix C in 2019 TEMP), were required on five occasions at the Meadowbank site (Table 4-6). One grizzly bear was successfully deterred from Whale Tail site. For the wolverine deterrence actions at Meadowbank Mine, four were successful and one was unsuccessful. None of the unsuccessful deterrence events resulted in destruction permits to be issued by the wildlife officer. The number of wolverine deterrence efforts were lower in 2024 compared to prior to 2016 (Table 4-6).

Table 4-7: Summary of Deterred Predatory Mammals at the Meadowbank Mine and Whale Tail Sites from 2015 to 2024

| Species | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
|--------------|-----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|-----------|
| Arctic fox | 6 | 6 | 2 | 0 | 4 | 1 | 0 | 5 | 0 | 0 |
| Grizzly bear | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Red fox | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Wolf | 1 | 4 | 9 | 14 | 9 | 5 | 2 | 7 | 22 | 9 |
| Wolverine | 5 | 3 | 10 | 17 | 16 | 17 | 6 | 18 | 25 | 5 |
| Total | 23 | 37 | 21 | 31 | 31 | 43 | 8 | 30 | 47 | 15 |

Wolves were also regularly observed around the Meadowbank site primarily in the winter months (Table 4-5). Deterrence actions were required on nine occasions at Meadowbank (Table 4-5). For the wolf deterrence actions at Meadowbank Mine, seven were successful and two were unsuccessful. None of the unsuccessful deterrence events resulted in destruction permits to be issued by the GN wildlife officer (Table 4-6). The number of wolf deterrence efforts were lower in 2024 compared to 2023 (Table 4-6).

Notices are sent to Meadowbank employees regarding the presence of wildlife, waste management procedures, and requesting all sea cans and doorways be closed when a non-conformity occurs.

4.5.8 Wildlife Mortality – Meadowbank and Whale Tail Sites

One wildlife Project-related mortality event was observed at Meadowbank in 2024 resulting in six long-tailed duck mortalities (Table 4-8). One Project-related mortality of an Arctic fox occurred at Whale Tail during 2024 following unsuccessful deterrence (Section 4.5.4). There were no Project-related mortalities of caribou, grizzly bear, wolverine, or wolves at either Mine site during 2024 (Table 4-9). Road-related mortalities are tabulated and discussed in Section 3.6.9. Mortality reports are included in Appendix C.

Table 4-8: Wildlife Mortalities at Meadowbank and Whale Tail Sites in 2024

| Date | Species | Count | Project Related | Location | Comments |
|------------|------------------|-------|-----------------|----------------------|---|
| 2024-09-06 | Long-tailed duck | 6 | Yes | Meadowbank Mill Area | A small group of ducks flew into the side of the Mill building in between Mill Door B and Mill Door C. One of the seven birds survived. These were originally believed to be black scoters but have since been identified as long-tailed ducks. |
| 2024-12-15 | Arctic Fox | 1 | Yes | Whale Tail | Struck by a vehicle on the road. |

Table 4-9: Summary of Project-Related Wildlife Mortality Records for Caribou and Predatory Mammals (2007 to 2024)

| Year | Caribou | Grizzly Bear | Wolverine | Wolf |
|------|---------|--------------|-----------|------------------|
| 2007 | 0 | 0 | 0 | 0 |
| 2008 | 0 | 0 | 0 | 2 |
| 2009 | 0 | 0 | 0 | 4 |
| 2010 | 0 | 0 | 0 | 1 |
| 2011 | 0 | 0 | 1 | 4 |
| 2012 | 0 | 0 | 0 | 1 |
| 2013 | 0 | 0 | 1 | 0 |
| 2014 | 0 | 0 | 0 | 1 |
| 2015 | 0 | 0 | 0 | 0 ^(a) |
| 2016 | 0 | 0 | 0 | 0 |
| 2017 | 0 | 0 | 1 | 2 |
| 2018 | 0 | 0 | 1 | 2 ^(b) |
| 2019 | 0 | 0 | 1 | 0 |
| 2020 | 0 | 0 | 2 | 0 |
| 2021 | 0 | 0 | 1 | 0 |
| 2022 | 0 | 0 | 1 | 0 |
| 2023 | 0 | 0 | 3 | 3 |
| 2024 | 0 | 0 | 0 | 0 |

(a) There was one naturally injured wolf that needed to be euthanized.

(b) Wolf died at Mine site of head injuries; did not need to be dispatched.

4.5.8.1 Caribou

No caribou mortality related to Project activities occurred in 2024.

4.5.8.2 Predatory Mammals

All incident reports, observations, deterrence activities, and Environment team responses to predatory mammal sightings are included in Appendix D. There was one Arctic fox mortality in 2024 at the Whale Tail Mine.

4.5.8.3 Other Wildlife

Six mortalities of long-tailed duck occurred in 2024. On 06 September 2024 a group of seven long-tailed ducks flew into the side of the Mill building in between Mill Door B and Mill Door C. One of the seven birds survived. The ducks were originally believed to be black scoters but have since been identified as long-tailed ducks based on mortality report photos. As per the migratory bird regulated, ECCC was emailed at the time of the mortality of six long-tailed ducks.

4.5.9 Helicopter Activity

- Helicopters are utilized at the Project for various reasons including mobilization of equipment, transport, exploration, surveying, monitoring, and reconnaissance. Pilots are required to review an air traffic procedure that includes the following project specific flight restrictions:
- Long-range flights are a minimum of 650 m above ground level, except for take-off and landings.
- Short-range flights are a minimum of 300 m above ground level, except for take-off and landings.

- Notification of caribou, muskox or other wildlife sightings within 1 km of the helicopter pad.
- Caribou groups of 50 or more animals, and muskoxen of 10 or more animals must be avoided by a minimum of 1,000 m vertically and 1,500 m horizontally. Flocks of migratory birds must be avoided by 1,100 m vertically and 1,500 m horizontally. Flying over known raptor nests will be avoided.
- Harassing wildlife (flying below 300 m) is expressly forbidden unless animals pose an immediate danger to humans.
- However, certain activities are required to be completed at lower altitudes than specified in the air traffic management plan. External load operations (equipment/material slinging), site inspections, reconnaissance and environmental surveys often require lower flight. Flights with these purposes have been considered permissible for low flight. Similarly, flights lower than 300 m have been considered permissible when flying low due to low visibility (poor weather conditions) or for emergency medevac services.

Helicopter methods used in the 2023 report (WSP 2024) to define short and long-term flights as well as take-off and landing were presented and discussed with the TAG in fall 2024 (Agnico Eagle 2024d). TAG members were in support of continuing with the methods applied in 2023. In alignment with the principles of adaptive management, quantitative approaches may be adjusted as needed to improve identification of take-off and landing and to improve flight data summaries.

4.5.9.1 Methods

Track logs and altitudes are recorded using the Honeywell Skyconnect Tracker II, which runs on the Iridium satellite network. This product provides two-way satellite voice communication, ground to asset texting, and asset to ground location tracking service. Spatial location, altitude, and speed of helicopters are collected throughout flights.

While the spatial location, altitude, speed, and detailed flight time of helicopters are tracked and available as detailed GPS points (e.g., a new GPS point provided every minute), flight reports including the purpose for the trip (e.g., passenger, ferry, equipment/material slinging operations, etc.) and the site that the trip was associated with (e.g., Meadowbank Complex), among other details, are recorded by pilots manually using approximate flight times. The connection between the two sets of flight data is complex and not automated. As the aircraft's GPS track flight from all flights starting from their origin city in southern Manitoba and are used intermittently throughout the year for flights at other sites, it is not clear which GPS flights are attributed as Meadowbank flights from GPS points alone. To facilitate this, the following methods were developed to connect manual flight report and GPS data together to allow for more detailed analysis of the flight restrictions outlined above.

Flight track GPS logs for each aircraft operating in the area were combined in ArcGIS Pro (ArcGIS, Redlands, CA). As project flight restrictions specify height above the ground in meters (versus altitude in meters above sea level), the elevation of the ground was determined for each GPS point using the Arctic Digital Elevation Model (ArcticDEM) and the flying height above the ground was calculated. All GPS points were then converted to flight paths specific to each aircraft connecting sequential GPS points during each flight day. Hundreds of flight paths may make up a flight leg (e.g., one flight consisting of GPS points taken each minute flown). For each flight path, details relating to its change in time, speed, altitude and height above the ground were calculated. To facilitate in the connection of GPS data to manual flight reports, start and end times of each path were rounded to the nearest 10 minutes.

Flight reports were provided for each aircraft and flight day, in pdf format, as well as in a spreadsheet containing information from all pdf reports. Pilots were instructed to record comments related to reasons for flying lower than the normally required altitude, such as a low ceiling (i.e., < 2000 ft) or due to poor visibility due to weather or wildfire smoke. Each report provides details on the flights operated during that day for each aircraft and are separated by flight leg, depending on the purpose of flight. Flight reports include an approximated time, which was rounded to the nearest 10 minutes to facilitate in the connection with detailed GPS flight paths.

An iterative process was run on the thousands of flight paths, assigning a flight report number and flight leg number to each path based on the aircraft name, date of flight and rounded time of flight. Connections between the GPS flight legs, and flight reports were successful for 94% of flights provided (1,386 of 1,481 flights, 994.2 hours of 1,022.2 flight hours). The remaining mis-joined flights made up 6% of all flights and corresponded to approximately 28 flight hours. This mis-joined data may not have been captured due to inaccuracies in recorded data such as: errors in recorded details of the flight by the pilot, a mismatch of time zones of the flight report and detailed GPS data or similar inaccuracies. Data from the two flight datasets were joined together using an identifier field that was created using the aircraft, date, flight report number and flight leg number. The following discussion reports metrics based only on the flights legs that were successfully connected to flight reports.

Flights were classified as short- or long-range by calculating the maximum distance spanned during an individual flight leg. This was done by identifying GPS points for individual flights that were the furthest away from each other. If this distance was <25 km, the flight was classified as short-range. Flights with longer flight spans were classified as long range. While total flight length was considered to classify flight range, many flight legs consist of multiple trips between two locations (e.g., slinging material back and forth or a return flight to drop off passengers) and many flights that intuitively appear to be short-range would be misclassified. For an accurate assessment of flying height above ground, take-off and landing should not be considered. Flight paths were classified as take-off/landing using the following definitions, which evaluates the change in flying height and flying speed on a 3-timestep moving window (i.e., t , $t-1$ and $t-2$). Due to the nature of helicopter flight, which can vary in speed and flying heights even at cruising altitude, the definitions include a cruising altitude limit. This means that take-off/landing definitions differ for short- and long-range due to the different height considered to be cruising altitude (i.e., 300 m for short-range flights and 650 m for long-range flights). If a short-range flight path had a change in speed of ± 15 knots or a change in height of ± 40 m over the last three timesteps and was within 984 ft/300 m above the ground, or if the flight path was ≤ 20 m from the ground or flight speed was ≤ 5 knots, it was classified as take-off/landing. Similarly, if a long-range flight path had a change in speed of ± 15 knots or a change in height of ± 40 m over the last three timesteps and was within 2,133 ft/650 m above the ground, or if the flight path was ≤ 20 m from the ground or flight speed was ≤ 5 knots, it was classified as take-off/landing. Take-off/landing flight paths were removed from the flying height calculations included in this section. Two examples are shown in Figure 4-11, which display example flight paths and their corresponding change in height above the ground (m), indicating the flight segments classified as take-off/landing in grey. The short-range flight example in Figure 4-1 highlights how a flight may drop below the flying height requirement (300 m) for some time prior to landing (i.e., a gradual descent). The long-range flight example highlights an example where large changes in flying height occur above cruising altitude, which would be classified as takeoff/landing without a cruising height limitation set on the definition. Short- and long-range flights are shown in Figure 4-2. Short- and long-range flights during each season (i.e., spring, summer, and fall) are shown in Figure 4-3 to Figure 4-7.

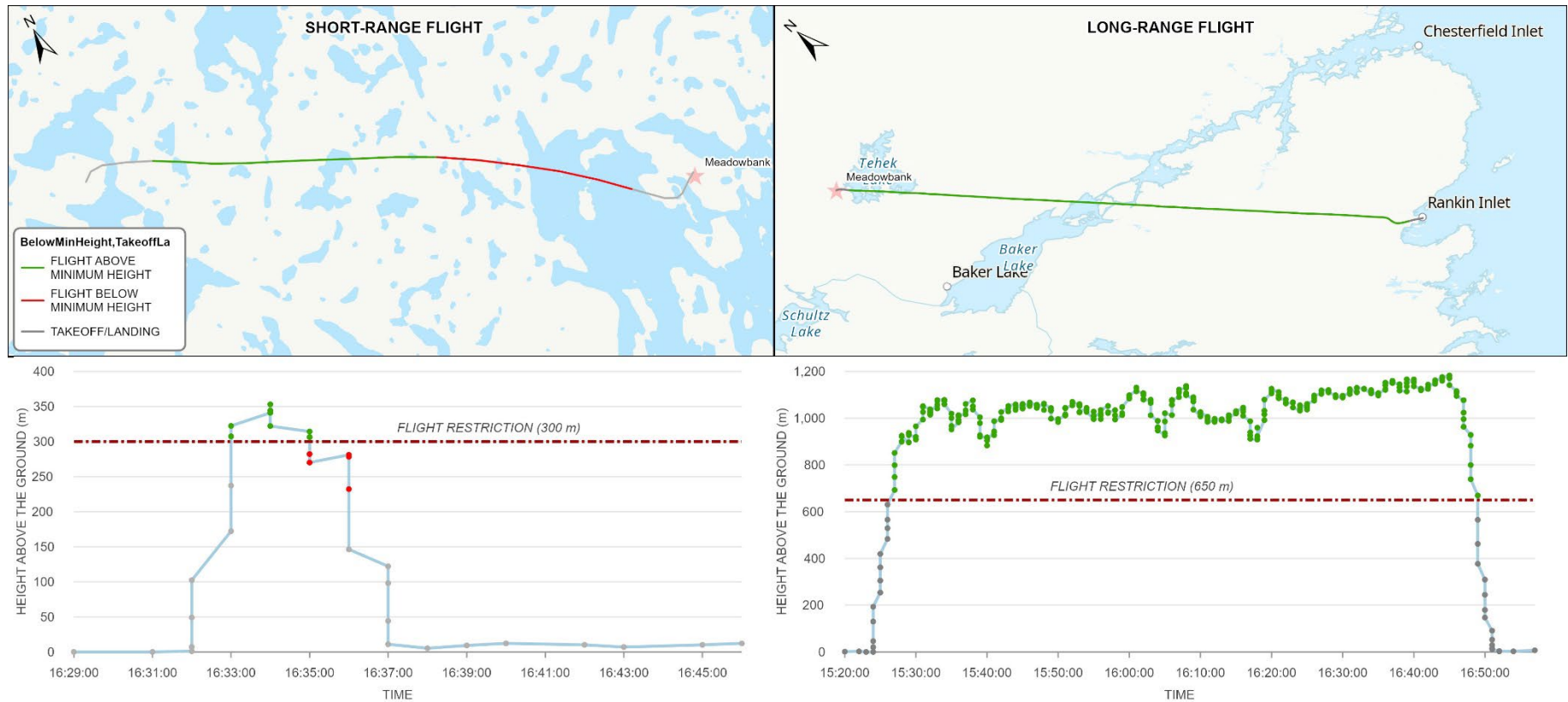
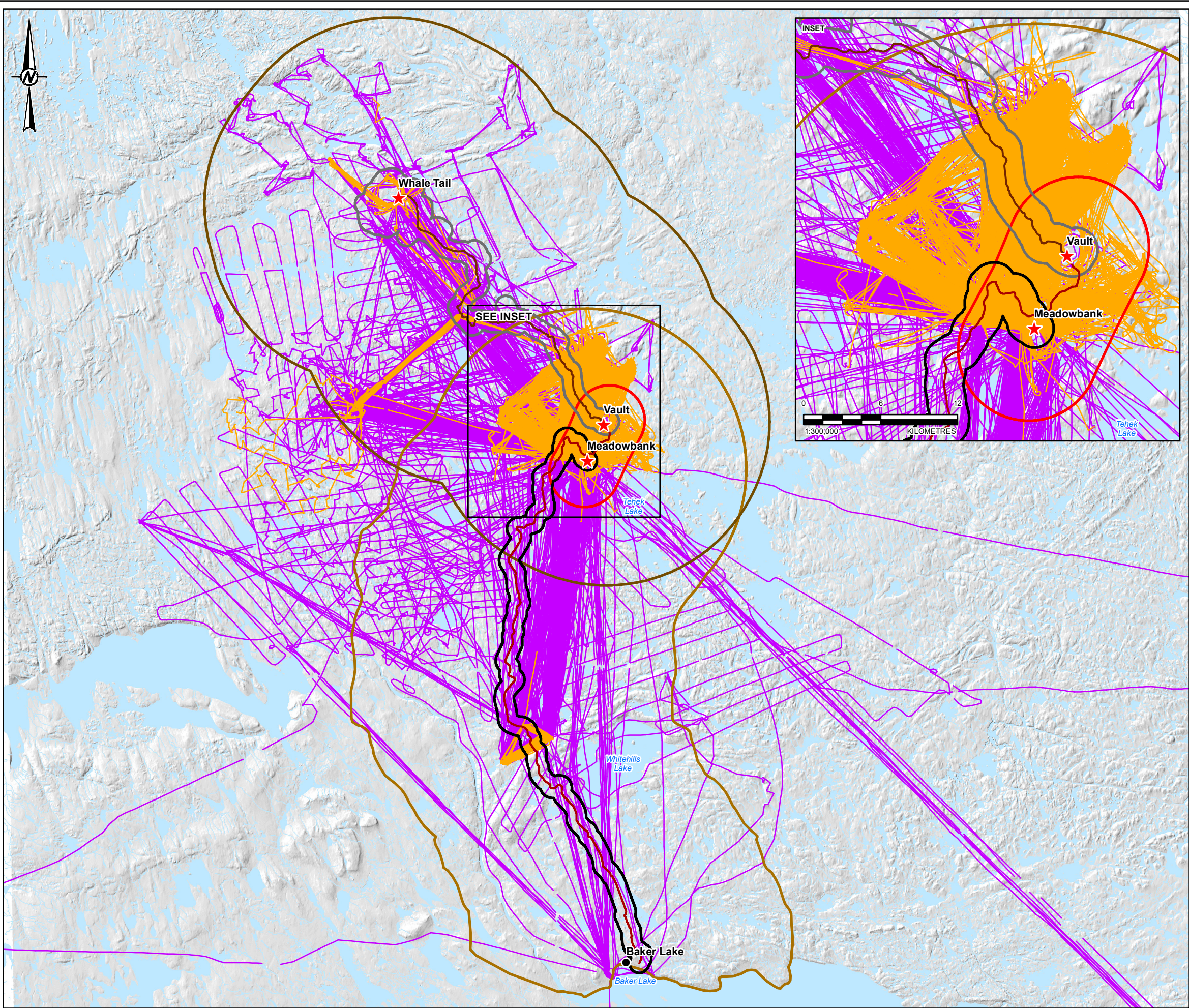


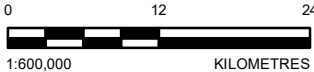
Figure 4-1: Examples of Short-Range and Long-Range Flights with Flight Segments Classified as Take-off/Landing (grey), and Remaining Flight Segments Classified as Above or Below the Minimum Required Height Above the Ground.

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LEGEND

- ALL-WEATHER ACCESS ROAD (AWAR)
- WHALE TAIL HAUL ROAD (WTHR)
- FLIGHT PATH**
- SHORT-RANGE
- LONG-RANGE
- AWAR LOCAL STUDY AREA (LSA)
- WTHR LOCAL STUDY AREA (LSA)
- WTHR REGIONAL STUDY AREA (RSA)
- MEADOWBANK LOCAL STUDY AREA (LSA)
- MEADOWBANK REGIONAL STUDY AREA (RSA)
- WATERCOURSE
- WATERBODY



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**
AGNICO EAGLE MINES LIMITED:
MEADOWBANK DIVISION

PROJECT
MEADOWBANK COMPLEX
2024 WILDLIFE MONITORING SUMMARY REPORT

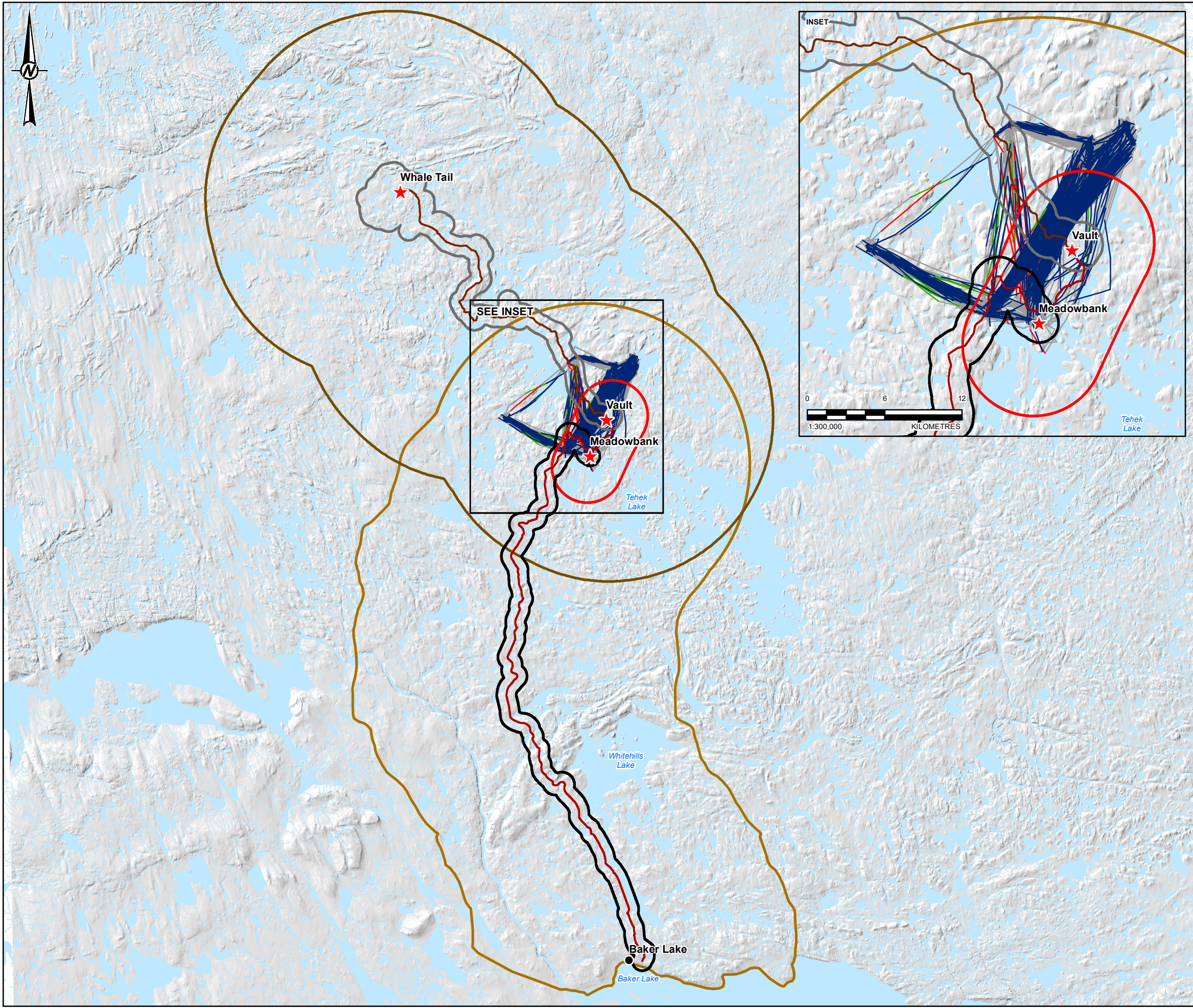
TITLE
MINE-RELATED HELICOPTER ACTIVITY ALONG THE ALL-WEATHER ACCESS ROAD AND WHALE TAIL HAUL ROAD, 2024

| | | | |
|---|------------|------------|------------|
|  | CONSULTANT | YYYY-MM-DD | 2025-03-19 |
| | DESIGNED | DM | |
| | PREPARED | DM | |
| | REVIEWED | JF | |
| | APPROVED | CDLM | |

PROJECT NO. CONTROL REV. FIGURE
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LEGEND

- ALL-WEATHER ACCESS ROAD (AWAR)
- WHALE TAIL HAUL ROAD (WTHR)
- SHORT-RANGE FLIGHT PATH**
 - FLIGHT ABOVE MINIMUM ALTITUDE (300 m ABOVE GROUND)
 - FLIGHT BELOW MINIMUM ALTITUDE (300 m ABOVE GROUND)
 - PERMISSIBLE LOW FLIGHT
 - TAKEOFF/LANDING
- AWAR LOCAL STUDY AREA (LSA)
- WTHR LOCAL STUDY AREA (LSA)
- WTHR REGIONAL STUDY AREA (RSA)
- MEADOWBANK LOCAL STUDY AREA (LSA)
- MEADOWBANK REGIONAL STUDY AREA (RSA)
- WATERCOURSE
- WATERBODY

REFERENCE(S)

- INFRASTRUCTURE OBTAINED FROM AGNICO EAGLE MINES LIMITED.
- 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
2024 WILDLIFE MONITORING SUMMARY REPORT

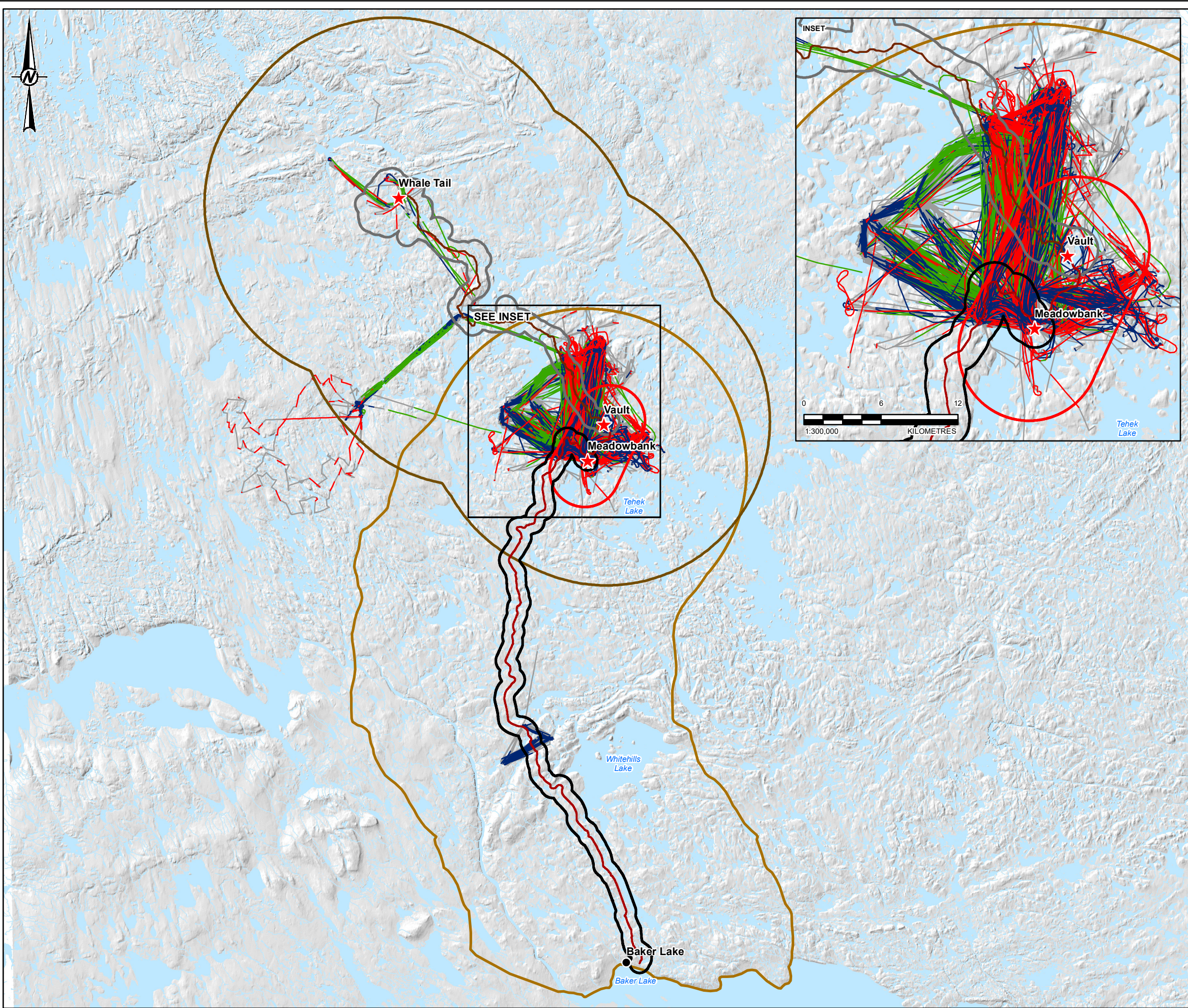
TITLE
MINE-RELATED SHORT-RANGE FLIGHTS OPERATED BELOW
THE MINIMUM FLIGHT ALTITUDE DURING SPRING (2024)

| | | |
|------------|------------|------------|
| CONSULTANT | YYYY-MM-DD | 2025-03-19 |
| | DESIGNED | DM |
| | PREPARED | DM |
| | REVIEWED | JF |
| | APPROVED | CDLM |

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| PROJECT NO. | CONTROL | REV. | FIGURE |
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LEGEND

- ALL-WEATHER ACCESS ROAD (AWAR)
- WHALE TAIL HAUL ROAD (WTHR)
- SHORT-RANGE FLIGHT PATH**
 - FLIGHT ABOVE MINIMUM ALTITUDE (300 m ABOVE GROUND)
 - FLIGHT BELOW MINIMUM ALTITUDE (300 m ABOVE GROUND)
 - PERMISSIBLE LOW FLIGHT
 - TAKEOFF/LANDING
- AWAR LOCAL STUDY AREA (LSA)
- WTHR LOCAL STUDY AREA (LSA)
- WTHR REGIONAL STUDY AREA (RSA)
- MEADOWBANK LOCAL STUDY AREA (LSA)
- MEADOWBANK REGIONAL STUDY AREA (RSA)
- WATERCOURSE
- WATERBODY

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
2024 WILDLIFE MONITORING SUMMARY REPORT

TITLE
MINE-RELATED SHORT-RANGE FLIGHTS OPERATED BELOW
THE MINIMUM FLIGHT ALTITUDE DURING SUMMER (2024)

CONSULTANT


| | |
|------------|------------|
| YYYY-MM-DD | 2025-03-19 |
| DESIGNED | DM |
| PREPARED | DM |
| REVIEWED | JF |
| APPROVED | CDLM |

PROJECT NO.
CA0039984.7604

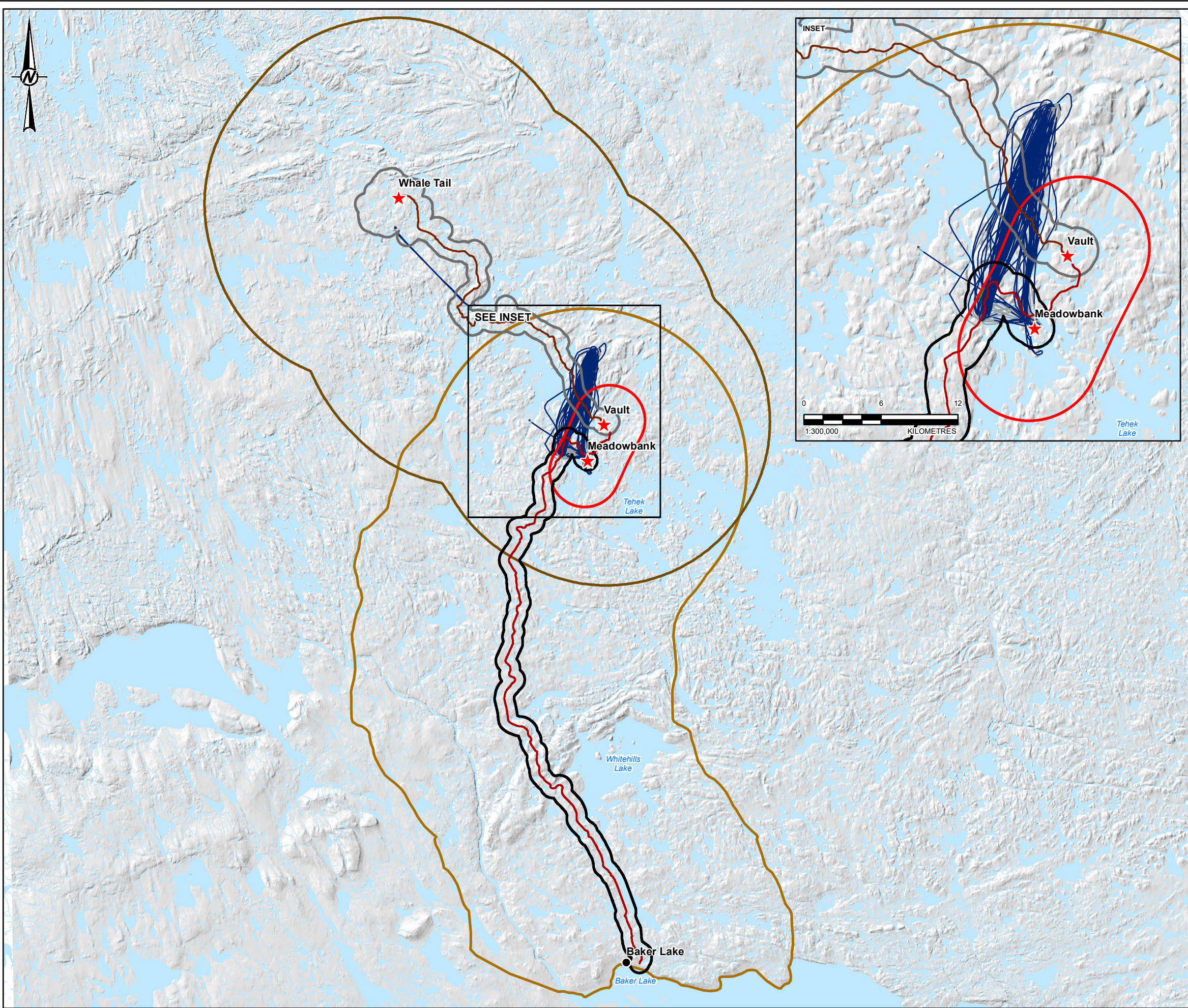
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FIGURE
4-4

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LEGEND

- ALL-WEATHER ACCESS ROAD (AWAR)
- WHALE TAIL HAUL ROAD (WTHR)
- SHORT-RANGE FLIGHT PATH**
 - FLIGHT ABOVE MINIMUM ALTITUDE (300 m ABOVE GROUND)
 - FLIGHT BELOW MINIMUM ALTITUDE (300 m ABOVE GROUND)
 - PERMISSIBLE LOW FLIGHT
 - TAKEOFF/LANDING
- AWAR LOCAL STUDY AREA (LSA)
- WTHR LOCAL STUDY AREA (LSA)
- WTHR REGIONAL STUDY AREA (RSA)
- MEADOWBANK LOCAL STUDY AREA (LSA)
- MEADOWBANK REGIONAL STUDY AREA (RSA)
- WATERCOURSE
- WATERBODY

1:600,000

REFERENCE(S)

- INFRASTRUCTURE OBTAINED FROM AGNICO EAGLE MINES LIMITED.
- 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
2024 WILDLIFE MONITORING SUMMARY REPORT

TITLE

MINE-RELATED SHORT-RANGE FLIGHTS OPERATED BELOW
THE MINIMUM FLIGHT ALTITUDE DURING FALL (2024)

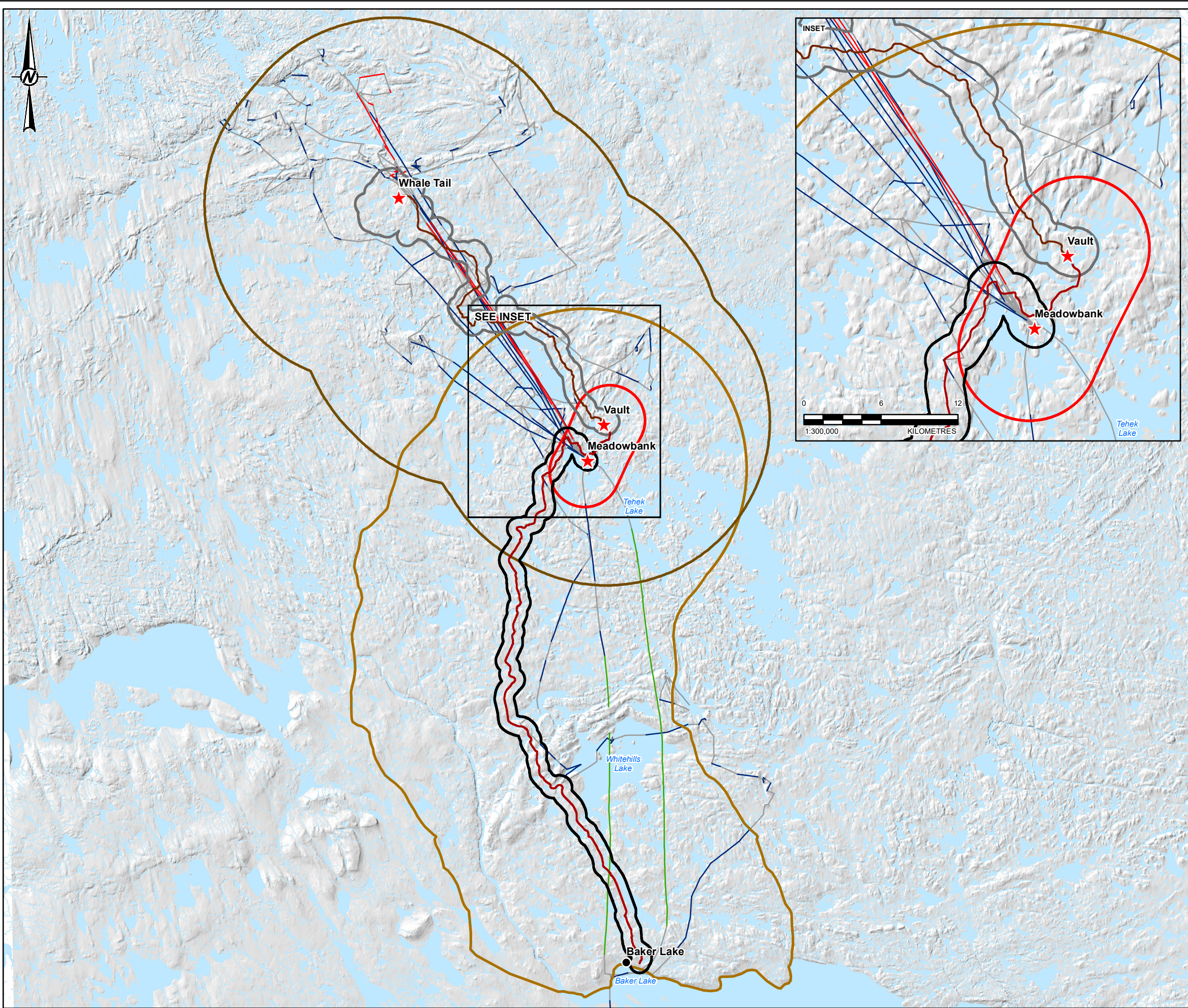
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| | |
|------------|------------|
| YYYY-MM-DD | 2025-03-19 |
| DESIGNED | DM |
| PREPARED | DM |
| REVIEWED | JF |
| APPROVED | CDLM |

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| PROJECT NO. | CONTROL | REV. | FIGURE |
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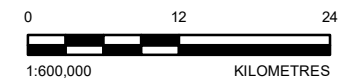
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LEGEND

- ALL-WEATHER ACCESS ROAD (AWAR)
- WHALE TAIL HAUL ROAD (WTHR)
- LONG-RANGE FLIGHT PATH**
- FLIGHT ABOVE MINIMUM ALTITUDE (650 m ABOVE GROUND)
- FLIGHT BELOW MINIMUM ALTITUDE (650 m ABOVE GROUND)
- PERMISSIBLE LOW FLIGHT
- TAKEOFF/LANDING
- AWAR LOCAL STUDY AREA (LSA)
- WTHR LOCAL STUDY AREA (LSA)
- WTHR REGIONAL STUDY AREA (RSA)
- MEADOWBANK LOCAL STUDY AREA (LSA)
- MEADOWBANK REGIONAL STUDY AREA (RSA)
- WATERCOURSE
- WATERBODY



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
2024 WILDLIFE MONITORING SUMMARY REPORT

TITLE

MINE-RELATED LONG-RANGE FLIGHTS OPERATED BELOW
THE MINIMUM FLIGHT ALTITUDE DURING SPRING (2024)

CONSULTANT



YYYY-MM-DD

2025-03-19

DESIGNED

DM

PREPARED

DM

REVIEWED

JF

APPROVED

CDLM

PROJECT NO.

CA0039984.7604

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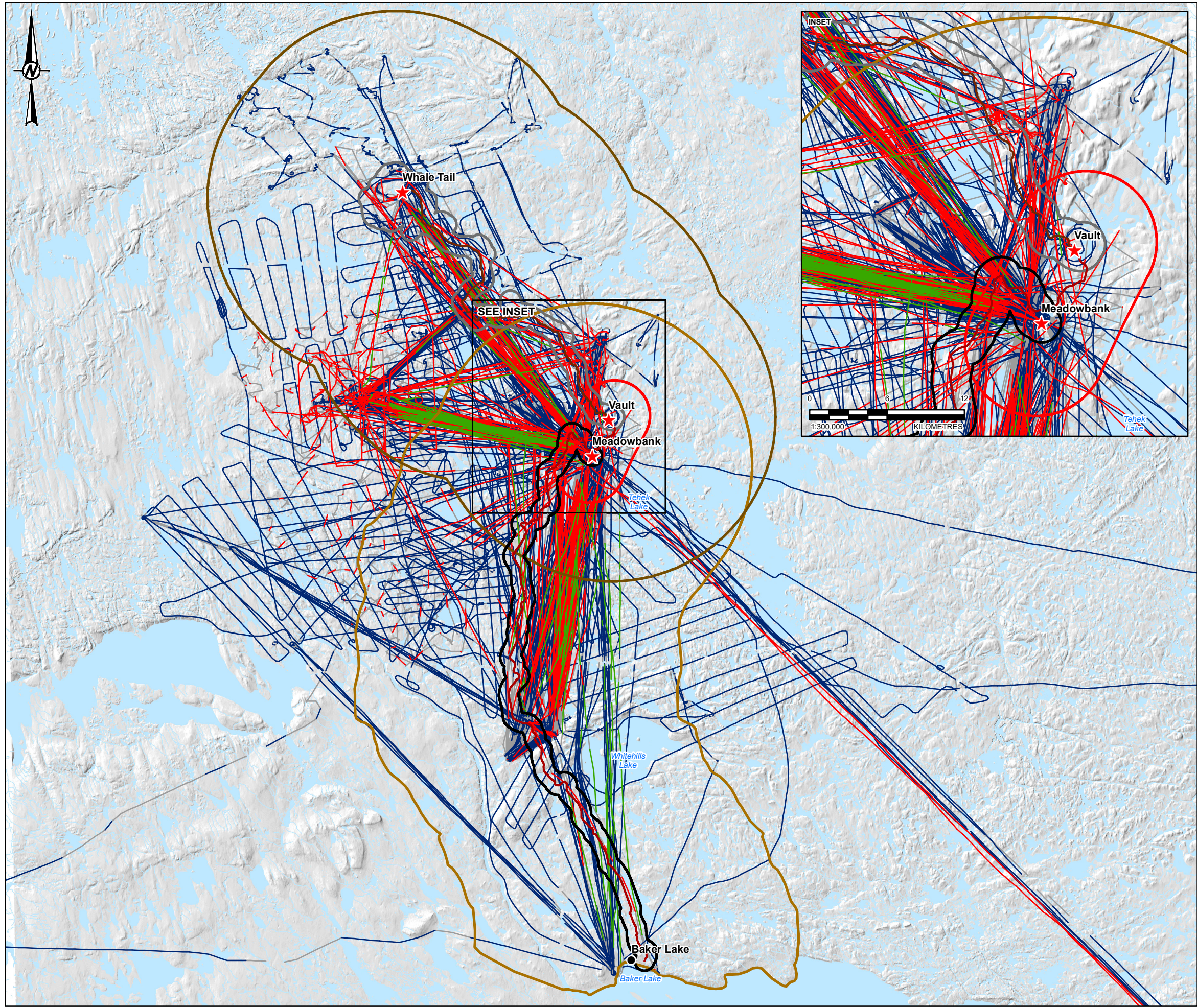
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FIGURE

4-6

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B
28mm

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LEGEND

- ALL-WEATHER ACCESS ROAD (AWAR)
- WHALE TAIL HAUL ROAD (WTHR)
- LONG-RANGE FLIGHT PATH**
- FLIGHT ABOVE MINIMUM ALTITUDE (650 m ABOVE GROUND)
- FLIGHT BELOW MINIMUM ALTITUDE (650 m ABOVE GROUND)
- PERMISSIBLE LOW FLIGHT
- TAKEOFF/LANDING
- AWAR LOCAL STUDY AREA (LSA)
- WTHR LOCAL STUDY AREA (LSA)
- WTHR REGIONAL STUDY AREA (RSA)
- MEADOWBANK LOCAL STUDY AREA (LSA)
- MEADOWBANK REGIONAL STUDY AREA (RSA)
- WATERCOURSE
- WATERBODY

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** **MEADOWBANK DIVISION**

PROJECT
MEADOWBANK COMPLEX
2024 WILDLIFE MONITORING SUMMARY REPORT

TITLE
MINE-RELATED LONG-RANGE FLIGHTS OPERATED BELOW THE MINIMUM FLIGHT ALTITUDE DURING SUMMER (2024)

| | | | |
|---|------------|------------|------------|
|  | CONSULTANT | YYYY-MM-DD | 2025-03-19 |
| | DESIGNED | DM | |
| | PREPARED | DM | |
| | REVIEWED | JF | |
| | APPROVED | CDLM | |

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

28mm

4.5.9.2 Results and Discussion

Flight length in distance (km) and hours, average cruising altitude (m) and average cruising height above the ground (m) were determined for each flight leg using the ID field described above. For each season, the number of flying dates, number of flights and number of flying hours were summarized (Table 4-10). The average flight distance and total distance flown within the Meadowbank and Whale Tail RSAs are also shown. A more detailed breakdown of flight hours is shown for short-range (Table 4-11) and long-range flights (Table 4-12). By season, total flight hours are summarized based on time spent above or below the minimum flying height described by the project specific flight restrictions (300 m for short-range flights; 650 m for long-range flights), excluding time classified as takeoff/landing or for a permissible reason of low flight. The average cruising height above the ground was determined for each season using the average cruising height above the ground (m) calculated for each flight leg, excluding takeoff/landing and any permissible low flights. A full catalog of flight details for all flights, including pilot comments are shown in Appendix E.

Table 4-10: Summary of Helicopter Flights in 2024

| Season ^{(a),(d)} | Flight Days | Number of Flights | Total Distance Flown within the RSA (km) ^(b) | Average Flight Leg Distance (km) ^(c) (mean \pm SD) | Total Duration (hours) |
|---------------------------|-------------|-------------------|---|--|------------------------|
| Spring | 33 | 181 | 10,495.8 | 59.9 \pm 55.4 | 107.5 |
| Summer | 114 | 1165 | 71,802.4 | 65.1 \pm 64.8 | 739.7 |
| Fall | 5 | 40 | 2,730.1 | 68.2 \pm 68.7 | 24.2 |

a) Table includes data only for flights where both a flight report and helicopter GPS data are available.

b) Represents total length of flight paths intersecting with the combined RSA (Whale Tail RSA and Meadowbank RSA).

c) Represents average flight leg distance, including all flights whether or not they occurred within the RSAs.

d) Spring = Apr 1 to May 25, Summer = May 26 to Sep 21, Fall = Sep 22 to Dec 15.

km = kilometres; SD = standard deviation.

Five percent of all short-range flight hours in 2024 (24.8 hours) were identified below the minimum requirement (300 m), without documentation of the purpose of low flight, which is an improvement from 2023 (11% [27.8 hours] of 2023 short-range flight hours identified below 300 m). Short-range flights below 300 m occurred most frequently during summer (22.7 hours), when the number of flights and flight hours were also highest. The average flying height was highest for short-range flights during spring (240.4 \pm 71.5 m), which is also visible in Figure 4-8 while average flying height during summer varies greatly but is lower on average.

Similar to short-range flights, the majority of long-range flights took place during summer. There were 16% of all long-range flight hours in 2024 (61.6 hours) that were identified below the minimum height requirement, without documentation of the purpose of low flight. This is an improvement compared to the proportion of long-range flight hours identified below 650 m in 2023 (32% or 28.9 hours identified in 2023). The average flying height of all long-range flight legs during summer was 395.0 \pm 133.5 m, which was lower than the average flying height of long-range flight legs conducted during spring (534.0 \pm 405.7m). As all long-range flights that occurred during fall were flagged as permissible low flights due to their reason for flight (e.g., environmental surveys) or from pilot comments (e.g., due to weather and smoke), this metric is not available for fall long-range flights. Figure 4-9 displays the distribution of average flying heights for all long-range flight legs conducted during spring and summer. Overall, 10% of all flight hours in 2024 (86.4 hours) were identified as operating below the Project specific flight restrictions, without documentation for the purpose of low flight. While improvements were observed in the percentage of 2024 flight hours found to adhere to project specific flight restrictions compared to 2023 (down from 16% of flight hours in 2023 [56.7 hours]), improvements may be partially related to changes in the definition of takeoff/landing.

Helicopter use varies across years and seasons and is based on operations, including establishment of remote camps and the amount of exploration. However, Figure 4-8 and Figure 4-9 indicate that flying height identified within seasons and flight-ranges is varied. This may be due to reasons such as, but not limited to:

- differences in flying height between flight-types (e.g., passenger flights [flight codes: PaxLoc, CrewChg, etc.] are often conducted at lower heights than ferry flights [flight code: Ferry])
- differences between aircraft and/or pilots (e.g., one or more aircrafts flying lower than others)
- differences between altimeter and GPS readings
- inaccuracies or generalizations of the recorded reason for flight (e.g., only recording one reason for flight even if the flight had multiple purposes)
- inaccurate or missing comments (e.g., not recording a reason if low flight was required)

Inaccuracies in the calculated flight height may be responsible for many flights being flagged for low flight. It is important to note that pilots have instruments in the helicopters showing their current height above ground level, but this information is not part of the GPS system. While the project flight restrictions reference flying height about the ground (m), data provided from the aircraft tracking system provides the flying altitude (meters above sea level). To obtain flying height about the ground, the ground height above sea level must be accounted for. This was completed using the Arctic Digital Elevation Model, which provides the ground elevation for high resolution pixels but is generalized for large area download (greater than 50 m x 50 m area on the ground). This pixel size may generalize topography and cause inaccuracies in the flying height calculation. Obtaining the height above the ground directly from the aircraft tracking systems (if available) or obtaining a higher resolution digital elevation model (e.g., 10 m x 10 m resolution or better) may improve flying height calculations. Additionally, as differences between flying height has been observed between aircrafts, calibration of equipment may improve flying height data. Many of the average heights that were identified as below the target thresholds were identified by the pilots as having flown above the required threshold according to their onboard instruments. Agnico Eagle will continue to work with helicopter contractors to improve helicopter data collection, including collection of detailed notes for flight classification.

Table 4-11: Summary of Short-Range Helicopter Flights in 2024

| Season ^(a) | Number of Flights ^(b) | Duration (hours) | | | | | Average Height (m) Flights ^(d) (mean ± SD) | Percentage of Flights Below Minimum Height ^(e) |
|-----------------------|----------------------------------|------------------|--|-------------------------------------|-------------------------------------|--------------|---|---|
| | | Take-off/Landing | Permissible Low Flights ^(c) | Above Minimum Height ^(d) | Below Minimum Height ^(d) | Total | | |
| Spring | 173 | 62.0 | 27.8 | 1.4 | 2.2 | 93.4 | 240.4 ± 71.5 | 2.3% |
| Summer | 704 | 232.3 | 77.6 | 27.5 | 22.7 | 360.1 | 229.2 ± 98.9 | 6.3% |
| Fall | 31 | 8.6 | 11.0 | 0.0 | 0.0 | 19.6 | NA | 0.0% |
| Total | 908 | 302.9 | 116.4 | 28.9 | 24.8 | 473.0 | 234.8 ± 85.2 | 5.2% |

a) Spring = Apr 1 to May 25, Summer = May 26 to Sep 21, Fall = Sep 22 to Dec 15.

b) Table includes data only for flights where both a flight report and helicopter GPS data are available.

c) Represents flights where flight activities with expected low altitudes were performed (e.g., slinging), or an adequate reason for low flight was provided (e.g., weather, emergency, etc.).

d) Values exclude takeoff/landing and low permissible flights; minimum height for short-range flights is 300 m; values shown in metres above the ground. Flight classification remains challenging, and results should be interpreted with caution.

e) Percentage of flight duration below the minimum height for short-range flights using a threshold of 300 m, excluding permissible low flights.

m = metres; SD = standard deviation.

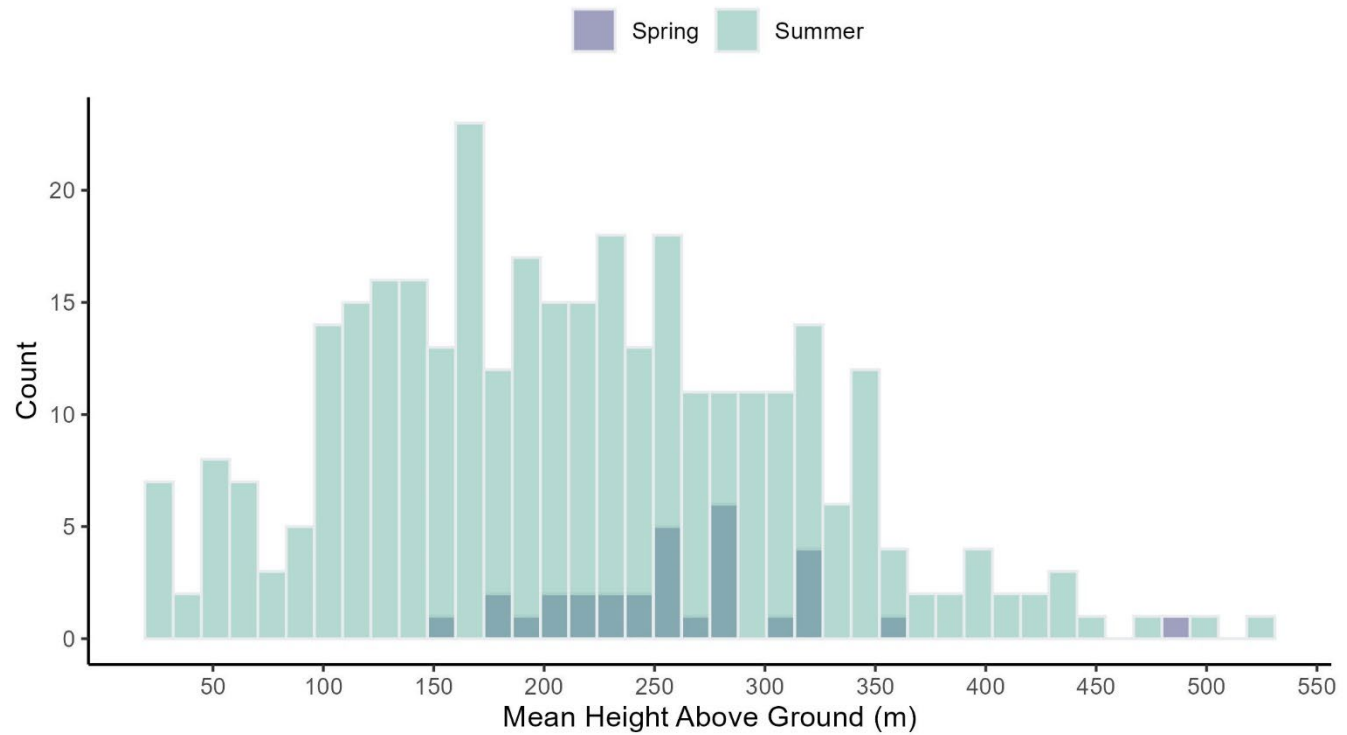


Figure 4-8: Distribution of the Average Cruising Height (m) of Short-Range Flights, Excluding Take-off/Landing and Permissible Low Flights

Table 4-12: Summary of Long-Range Helicopter Flights in 2024

| Season ^(a) | Number of Flights ^(b) | Duration (hours) | | | | | Average Height (m) ^(d) (mean ± SD) | Percentage of Flights Below Minimum Height ^(e) |
|-----------------------|----------------------------------|------------------|--|-------------------------------------|-------------------------------------|-------|--|---|
| | | Take-off/Landing | Permissible Low Flights ^(c) | Above Minimum Height ^(d) | Below Minimum Height ^(d) | Total | | |
| Spring | 8 | 8.0 | 5.0 | 0.5 | 0.6 | 14.1 | 534.0 ± 405.7 | 4.6% |
| Summer | 462 | 179.7 | 130.9 | 8.0 | 61.0 | 379.6 | 395.0 ± 133.5 | 16.1% |
| Fall | 9 | 1.7 | 2.9 | 0.0 | 0.0 | 4.7 | N/A | 0.0% |
| Total | 479 | 189.4 | 138.8 | 8.5 | 61.6 | 387.4 | 394.6 ± 121.7 | 15.5% |

a) Spring = Apr 1 to May 25, Summer = May 26 to Sep 21, Fall = Sep 22 to Dec 15.

b) Table includes data only for flights where both a flight report and helicopter GPS data are available.

c) Represents flights where flight activities with expected low altitudes were performed (e.g., slinging), or an adequate reason for low flight was provided (e.g., weather, emergency, etc.).

d) Values exclude takeoff/landing and low permissible flights; minimum height for short-range flights is 300 m; values shown in metres above the ground. Flight classification remains challenging, and results should be interpreted with caution.

e) Percentage of flight duration below the minimum height for short-range flights using a threshold of 300 m, excluding permissible low flights.

m = metres; SD = standard deviation.

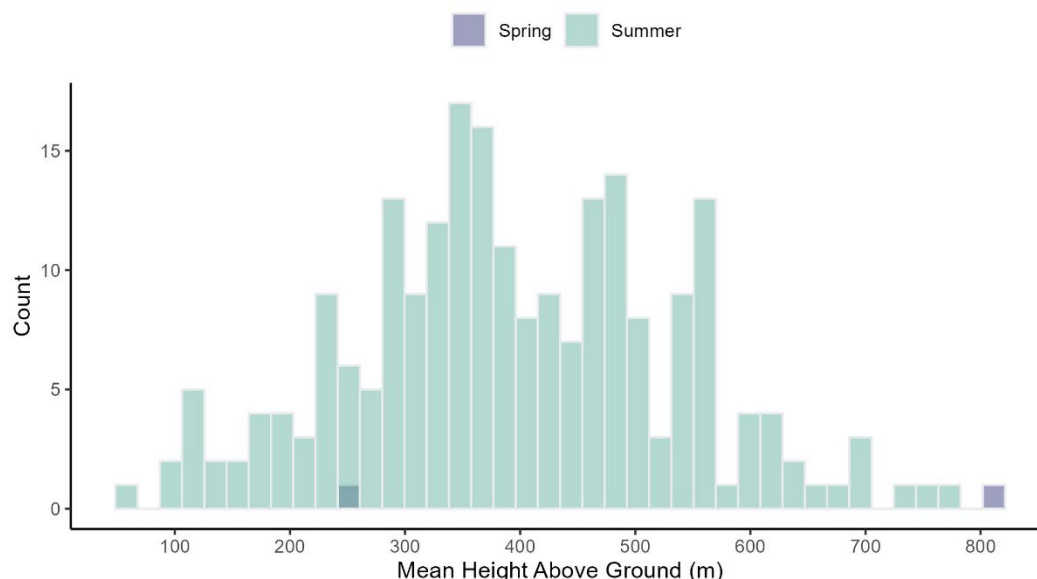


Figure 4-9: Distribution of the Average Cruising Height (m) of Long-Range Flights, Excluding Take-off/Landing and Permissible Low Flights

4.5.10 Helicopter Activity and Wildlife

As a part of the project flight restrictions, pilots are made aware to avoid flocks of migratory birds by 1,100 m vertically and 1,500 m horizontally, avoid groups of caribou and muskox larger than 50 by 1,000 m vertically and 1,500 m horizontally, and avoid known raptor nests. Locations of these flights in relation to caribou, muskox, and raptor nests was assessed using the helicopter timestep locations (described above), the road survey point locations, caribou satellite collar data, and known nest locations.

4.5.10.1 Methods

Potential helicopter and caribou, muskox, and raptor nest co-occurrences were assessed using the *sf* package in R v4.4.2 (2024). This was done by overlapping buffered flight locations with known or estimated caribou, muskox, or raptor nest locations. The flight locations were buffered with an avoidance zone based on flight restriction parameters (1,500 m for caribou and muskox and 100 m for raptor nests). The buffered area of 100m for raptor nests was selected to assign an area around the nest that would be considered as a flyover (given the low likelihood of a point and flight line perfectly overlapping). The *st_intersects* function was then used to check if animal/nest observations fell within any buffered flight location. For satellite collar data and nest data, the spatial locations of the animals/nests were known and could be intersected with flight locations directly. For road surveys, the data provided the locations of the observers, who estimated the distance of the animals from the road. As such, for the road surveys, this estimated distance was used to buffer the road within a 2,000 m radius of the known observer locations. A 2,000 m radius was chosen to balance view distance with precision. Areas not visible from the road, based on elevation (Agnico Eagle, 2020b), were excluded from these buffered locations. An estimated co-occurrence was then calculated as the intersection of these buffered observer location and a buffered flight location. Only intersections on the same side of the road were retained.

Potential co-occurrences were also defined within a time buffer. A collared caribou and a flight location was considered to have co-occurred if the flight location time was within 1 hour of the GPS fix time. A large time window was used because GPS fixes only occur every 4 hours. Road surveys do not have the same 4 hours time window as GPS fixes. Therefore, the temporal restriction for determining a co-occurrence for these observations was set to 10 minutes. For both GPS fixes and road surveys, the difference between the flight timestamp and an observation timestamp was calculated as the absolute difference between the two times. As it is unknown what occurred during this time gap, this time difference is referred to hereafter as event uncertainty. As the times and dates of the raptor nest usage were unknown, no temporal filters could be applied to these data.

The final result of temporal and spatial filtering was a set of potential co-occurrences with takeoffs and landings excluded. These data were inspected to ensure accuracy and to remove double-counts. Double-counts occurred when flight time locations were close together and overlapped the same observation on the same flight leg. In this situation, the flight location with the least event uncertainty was retained. If two observations occurred at the same place at the same time, the observation with the highest group estimate was retained.

4.5.10.2 Results

In total, there were 25 ungulate-flight co-occurrences in 2024. Of these, only one was a collared caribou. This co-occurrence was with a low-level raptor survey during the summer. The event uncertainty in this case was 24.43 minutes. The remaining 24 co-occurrences were with road survey locations. Seventeen of these occurred during summer (5 caribou and 12 muskox), and 7 during spring (5 caribou and 2 muskox). No group size recorded for these observations exceeded the 50 individual threshold. The largest group for any co-occurrence event was 13 caribou on April 28th with a flight height of 184 m. The event uncertainty for this case was 4.65 minutes. The flight was a low-level sling flight. A co-occurrence event with 13 individuals was a significant anomaly ($Z = 2.19$, $p = 0.028$). The reported group sizes for co-occurrence events on average was 4.21 individuals ($SD = 4.01$). The most common group size was 1 individual. The mean flight height was 218.3 m ($SD = 108.38$). The majority of the flights (20) were cleared for low heights or provided a sufficient comment. The remaining 5 co-occurrence events primarily involved summer passenger flights (Table 4-13). Across road survey co-occurrences, event uncertainty averaged 3.24 minutes and ranged from 0.05 to 8.52 minutes.

In 2024, there were 10 potential raptor nest-flight co-occurrence events with 3 peregrine falcon nests and 1 gyrfalcon nest. The majority (7) were confined to a single peregrine falcon nest at Quarry 22 which is along the AWAR near Meadowbank Mine. The remaining three occurred at separate nesting locations (Table 4-13). Most events (5) occurred during the summer. The average height was 236.69 m ($SD = 205.43$). Nine of the 10 involved flights were cleared for a low-level flying or reported performing low level surveys. The remaining flight was a passenger flight.

Table 4-13: Summary of Wildlife and Flight Co-occurrences

| Date | Season | Species | Group Size | Height (m) | Reason | Low Eligible ^(a) | Location | Event Uncertainty (min) |
|--|--------|---------|------------|------------|-----------|-----------------------------|-----------|-------------------------|
| Satellite Collar Co-occurrences^(b) | | | | | | | | |
| 08-07 | Summer | Caribou | - | 90.73 | Passenger | Yes | - | 24.43 |
| Road Survey Co-occurrences | | | | | | | | |
| 04-28 | Spring | Caribou | 13 | 184.28 | Slingsing | Yes | HAUL ROAD | 4.65 |
| 05-06 | Spring | Caribou | 9 | 151.59 | Slingsing | Yes | AWAR | 5.32 |
| 05-24 | Spring | Muskox | 2 | 174.53 | Slingsing | Yes | AWAR | 2.37 |
| 05-24 | Spring | Caribou | 2 | 246.57 | Slingsing | Yes | AWAR | 2.37 |
| 05-24 | Spring | Muskox | 2 | 187.52 | Slingsing | Yes | AWAR | 0.28 |
| 05-24 | Spring | Caribou | 2 | 147.99 | Slingsing | Yes | AWAR | 0.28 |
| 05-25 | Spring | Caribou | 9 | 355.95 | Passenger | No | AWAR | 1.30 |
| 05-26 | Summer | Caribou | 3 | 254.65 | Passenger | No | AWAR | 5.08 |
| 06-09 | Summer | Muskox | 1 | 183.89 | Slingsing | Yes | AWAR | 0.05 |
| 06-09 | Summer | Caribou | 7 | 176.98 | Passenger | Yes | AWAR | 1.07 |
| 06-13 | Summer | Muskox | 2 | 118.68 | Slingsing | Yes | AWAR | 3.83 |
| 06-19 | Summer | Muskox | 2 | 185.06 | Passenger | No | AWAR | 0.65 |
| 06-24 | Summer | Caribou | 8 | 275.52 | Passenger | No | AWAR | 8.52 |
| 06-27 | Summer | Muskox | 1 | 275.52 | Slingsing | Yes | HAUL ROAD | 3.42 |
| 07-01 | Summer | Muskox | 1 | 217.84 | Slingsing | Yes | HAUL ROAD | 2.95 |
| 07-01 | Summer | Muskox | 1 | 346.30 | Slingsing | Yes | HAUL ROAD | 1.60 |
| 07-03 | Summer | Muskox | 9 | 83.15 | Passenger | No | AWAR | 4.48 |
| 07-03 | Summer | Muskox | 9 | 562.46 | Slingsing | Yes | AWAR | 3.25 |
| 07-11 | Summer | Muskox | 1 | 178.76 | Passenger | Yes | AWAR | 3.03 |
| 07-16 | Summer | Muskox | 1 | 243.98 | Slingsing | Yes | AWAR | 6.73 |
| 07-17 | Summer | Muskox | 1 | 191.35 | Passenger | Yes | AWAR | 6.98 |
| 08-07 | Summer | Caribou | 2 | 396.03 | Passenger | Yes | HAUL ROAD | 4.38 |
| 08-13 | Summer | Caribou | 1 | 139.97 | Passenger | Yes | HAUL ROAD | 0.23 |
| 09-17 | Summer | Muskox | 12 | 88.21 | Passenger | Yes | AWAR | 4.85 |
| Raptor Nest Co-occurrences | | | | | | | | |
| 05-25 | Spring | PEFA | - | 197.03 | Slingsing | Yes | Quarry 22 | - |
| 05-25 | Spring | PEFA | - | 42.04 | Wildlife | Yes | Quarry 21 | - |
| 05-25 | Spring | PEFA | - | 226.63 | Slingsing | Yes | Quarry 22 | - |
| 07-27 | Summer | PEFA | - | 769.44 | Slingsing | Yes | Quarry 22 | - |
| 07-29 | Summer | PEFA | - | 306.77 | Passenger | No | Quarry 22 | - |
| 08-09 | Summer | PEFA | - | 59.25 | Passenger | Yes | Quarry 22 | - |
| 08-22 | Summer | GRFA | - | 190.51 | SAR | Yes | Quarry 07 | - |
| 08-22 | Summer | PEFA | - | 280.60 | SAR | Yes | Quarry 02 | - |
| 09-24 | Fall | PEFA | - | 146.43 | Slingsing | Yes | Quarry 22 | - |
| 09-25 | Fall | PEFA | - | 148.21 | Slingsing | Yes | Quarry 22 | - |

AWAR = All Weather Access Road; SAR = Search and Rescue; PEFA = Peregrine Falcon; GRFA = Gyrfalcon

(a) Low flight eligibility was determined from flight logs. See section 4.5.9 for details

(b) Collar caribou locations were derived from GPS coordinates, and the group size could not be determined from GPS data.

(c) The group size for raptor nests was a single nest. No event uncertainty based on time could be calculated.

4.5.10.3 Discussion

This analysis compared caribou and other wildlife observations from road surveys, collar locations, and known raptor nest locations to flight tracks as a coarse assessment of potential wildlife co-occurrences. Location data from caribou collars and raptor nests were more accurate, which facilitated realistic comparisons between wildlife observations and flight tracks. Helicopter flyovers with raptor nests occurred on 10 occasions, specifically near Quarry 22, which is likely due to the fact the quarry is located close to the Meadowbank Mine and may be near helicopter take off and landing sites. Nine of the 10 co-occurrences were near peregrine falcon nests. A literature review of animal responses to helicopter disturbances identified peregrine falcons as having a limited response to most close proximity flights (Anderson 2007). Caribou collars intersected with buffered flight paths (1,500 m) on 1 occasion, indicating that interactions of this type occur infrequently.

Road survey comparisons to flight tracks provided a coarse review of potential co-occurrences because coordinates for observations were from the road, not at the actual location of wildlife. Therefore, intersections between buffered wildlife observations and buffered helicopter tracks could represent co-occurrences within 1,500 m or as far as ~5500 m or more. Given this uncertainty, these results should be interpreted with caution. Ungulate-helicopter co-occurrences within an estimated 1,500 m buffer did not exceed group size thresholds of 50 animals on any occasion (Table 4-13). Observations with refer animals co-occurred with flight data on 7 occasions during spring and 17 occasions during summer. Overall, instances of helicopters co-occurring near wildlife were relatively rare, though data available are coarse and comparisons are largely limited to areas near roads. The exception is in instances where collared caribou were identified near helicopter tracks. Even with data limitations, helicopter flights mainly occur during summer (84% of flights), meaning that the majority of flights are outside of the sensitive seasons and mainly occur during a time of year with fewer ungulates near the Project. Agnico Eagle will continue working with helicopter contractors to minimize interactions with wildlife.

4.6 Accuracy of Impact Predictions

A summary of the impact predictions identified in the TEMP version 7 (Agnico Eagle 2019) that are evaluated, in part, by the Mine site ground surveys is presented in Table 4-14. Specifically, the 2024 Mine site ground survey monitoring data were compared to the impact prediction thresholds and the provision of adaptive management, as either a necessary or proactive measure. The Project-related mortality threshold for waterbirds was exceeded in 2024. No other thresholds were exceeded. The monitoring results support that the mitigation implemented in 2024 was effective at minimizing Project-related mortalities to wildlife.

Table 4-14: Accuracy of Impact Predictions – Mine Site Wildlife Disturbances

| Potential Effect | Threshold | Threshold Exceeded? (2024) | Adaptive Management Implemented | Monitoring Methods |
|--|--|--|--|---|
| Sensory Disturbance | No threshold but Decisions Trees followed when caribou are seen near mine facilities | Not Applicable | YES Use of Decision Tree for Management and Monitoring. | Satellite-collaring data Road surveys Daily and weekly pit and Mine-site ground surveys Incidental wildlife reporting |
| Disturbance to Nesting Raptors | Raptor nest failures will not be caused by Project-related activities. Threshold is one nest failure per year | NO | YES Mine-related activity restricted within quarries with nesting activity. | Daily and weekly pit and Mine-site ground surveys Incidental wildlife reporting Dedicated raptor nest surveys Road surveys |
| Disturbance of Nesting, Roosting or Moulting Waterfowl | Mine facilities and activities will not affect the breeding success of waterbirds occurring in the area or disturb large concentrations of roosting or moulting waterbirds. Threshold level is one nest failure per year | NO | NO | Daily and weekly pit and Mine-site ground surveys Incidental wildlife reporting |
| Project-related Mortality | Destruction of two problem grizzly bear, wolverine, or wolf per year | NO | NO | Daily and weekly pit and Mine-site ground surveys Wildlife deterrents and mortality reporting |
| Project-related Mortality | Two caribou or muskoxen mortality per year because of Project-related activities (e.g., falling into pits, tailing, sludge or other means) | NO | NO | Daily and weekly pit and Mine-site ground surveys Incidental wildlife reporting Wildlife mortality reporting |
| Project-related Mortality | Raptors and waterbirds will not be killed at the Mine site. Threshold is one individual per year | YES – six long-tailed duck mortalities | NO This is a rare occurrence and is not expected to be repeated. | Daily and weekly pit and Mine-site ground surveys |

4.7 Management Recommendations

The 2024 Mine site ground surveys were an effective source of monitoring to address the impact predictions for managing ungulates, predatory mammals, nesting raptors, and Project-related mortalities. Mitigation implemented in 2024, and previous years continues to be effective at minimize Project-related injuries and mortalities. The following are specific management recommendations for the Mine site ground survey monitoring program:

- Complete wildlife incident reports, according to the TEMP version 7, including deterrence events (Agnico Eagle 2019). All wildlife deterrence events are currently submitted to the EQUIS database.
- Continue to conduct formal weekly pit and Mine surveys to document wildlife activity and to verify that effects to wildlife are not occurring from Project-related activities.
- Continue raptor nest monitoring within the Meadowbank and Whale Tail LSAs, and along the AWAR and WTHR.
- Continue to document the use of deterrents to prevent habituation of wildlife near the Project or to relocate problematic wildlife.
- Continue to apply the Wildlife Protection and Response Plan (Appendix C, 2019 TEMP version 7), which includes waste provisions, training, incident reporting, and protocols for problem wildlife. Efforts should be taken to ensure all perishable garbage is directed to the composter and other proper waste disposal facilities.
- Continue training and education to ensure that incidental wildlife reporting is completed by all Mine site personnel so that Environment personnel can remain informed of pertinent wildlife-related activity near the Mine site.
- Monitor tailings ponds daily during the waterbird migration period, beginning in mid-May. Increase the frequency of deterrent use if required.
- Continue to gather detailed information (e.g., sex, age, photos) on deceased animals and include in incident reports, when possible.
- Review of methods with the TAG and helicopter contractor to discuss decisions made for take-off/landing and short versus long-range flights.
- Improve comments for reasons for low flights, even if flying low for only a portion of the flight.