
To:	Canadian National Railway Company (CN)	From:	Laura Marshall Andrew Taylor Stantec Consulting Ltd.
File:	160960844	Date:	March 30, 2023

**Reference: Canadian National Railway Company (CN)
2022 Follow-Up Monitoring Program Result:
Migratory Birds**

INTRODUCTION

Canadian National Railway Company (CN) retained Stantec Consulting Ltd. (Stantec) to conduct a migratory bird follow-up program (FUP) for the Milton Logistics Hub (the Project) in the Town of Milton, within the Regional Municipality of Halton (Halton Region), Ontario.

This report documents the implementation of the CN Milton Logistic Hub: Wildlife Management and Connectivity Plan” (WMCP) (Stantec 2022) for construction during the 2022 construction period.

Condition 8.4 of the Minister of Environment and Climate Change's (2021) Decision Statement states that the Proponent, Canadian National Railway Company (CN), shall implement a FUP to verify the accuracy of the environmental assessment and determine the effectiveness of mitigation measures as it pertains to the adverse environmental effects of the Milton Logistics Hub (the Project) on migratory birds, including migratory birds that are listed species at risk, their eggs and nests, including the mitigation measures implemented pursuant to Conditions 8.1, 8.3, 8.12 and 8.23. Requirements of each of the Conditions are summarized below:

- 8.1 – shall take into account Environment and Climate Change Canada's Avoidance Guidelines (<https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds/guidelines.html>).
- 8.3 – design and maintain buildings associated with the Designated Project in a manner that minimizes the risk of avian collisions, taking into account the City of Toronto's Bird Friendly Development Guidelines (2007).
- 8.12 - cause to be established and maintained, during construction and operation, 40.7 hectares of suitable replacement grassland habitat in the Luther Marsh Wildlife Management Area
- 8.23 - mitigate the adverse environmental effects on Barn Swallow and Bank Swallow attributed to the Project.

Buildings have not yet been constructed within the Project Development Area (PDA). As such, discussion of building mitigation associated with Condition 8.3 of the Decision Statement will be addressed in future annual FUP reports.

FUP monitoring associated with the replacement habitat in Condition 8.12, specifically as it pertains to Bobolink and Eastern Meadowlark, has been provided under separate cover (see CN 2022 Follow-Up Monitoring Program Result: Migratory Birds (Stantec, 2023))

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The existing barn where Barn Swallow nesting activity was observed remains on site, although removal of the smaller shed that similarly supported Barn Swallow nesting was removed in 2022. Prior to removal of the shed, two artificial barn swallow nesting structures were constructed and installed in and around March 10, 2022. One structure was installed adjacent to Tributary A and one was installed adjacent to Indian Creek. With completion of these structures in 2022, and continued activities associated with wildlife habitat enhancements along Tributary A (completed in December 2022) and Indian Creek (anticipated in 2023), FUP monitoring of these replacement structures will be provided in future annual FUP reports.

This report outlines the FUP monitoring, and measures implemented in 2022, which includes measures under Condition 8.1 and for Bank Swallow in accordance with Condition 8.23 of the Decision Statement.

MONITORING REQUIREMENTS - CONSTRUCTION

The WMCP was developed to ensure consistency and efficiencies in monitoring throughout the lifespan of the Project. The WMCP outlines the FUP monitoring protocol for migratory birds during construction and operation.

In accordance with Condition 8.4 of the Decision Statement, monitoring will take place to verify the accuracy of the assessment and to assess the effectiveness of mitigation measures to avoid harming migratory birds, including migratory birds that are listed species at risk, their eggs and nests. Migratory bird monitoring during construction will include:

- Weekly monitoring that vegetation in migratory bird habitat located within the PDA remains undisturbed during the breeding season (April 1 to August 31).
- Under very limited circumstances, where vegetation disturbance in migratory bird habitat is required during the breeding season, breeding bird monitoring will be undertaken to assess the potential presence of migratory bird nests or eggs. Where breeding evidence is observed, vegetation clearing will be avoided, to protect the nests and eggs.
- During the Bank Swallow nesting season (May 15 to August 3) daily monitoring of the PDA will be undertaken to assess the effectiveness of measures to dissuade Bank Swallow nesting. Monitoring will involve scanning areas of exposed soil (e.g., excavation areas and stockpiles) for Bank Swallows, or evidence of nesting (i.e., excavated nesting holes). In the event of confirmed Bank Swallow nesting activity in the PDA, specific protection measures will be implemented by the contractor at the direction of CN in consultation with a qualified ecologist.

RESULTS

Daily monitoring occurred as part of the environmental inspections during the first construction year of the Project. Vegetation clearing across portions of the PDA that had construction in 2022 occurred prior to the start of the breeding bird season (i.e., prior to April 1).

Grading and earth works took place in 2022, including stockpiling of soils through the breeding bird season. Daily monitoring did not observe evidence of Bank Swallow nesting, suggesting the measures to dissuade nesting were successful.

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Limited clearing of approximately 10 isolated trees and shrubs in an open field was required in May 2022 to facilitate grading of the future onsite habitat replacement area. A qualified biologist was deployed on May 27, 2022, prior to tree clearing. Visual assessments were made at each tree and shrub to be cleared to assess evidence of active nests of migratory birds.

Several inactive nests and one suspected active nest were identified during the initial visit on May 27, 2022. A positive identification of the species utilizing the suspected active nest could not be obtained during the visit. An American Robin and a Red-winged Blackbird were observed in the area at the time of the survey. A 5-metre buffer was established around the tree within which no human activity was permitted.

A second visit occurred on May 31, 2022, during which a male Red-winged Blackbird was observed exhibiting agitated behavior in proximity to the nest. Red-winged Blackbirds can become agitated and are defensive of nests (Knight and Temple, 1988). However, due to the height of the nest on site (located approximately 10 feet above the ground), it was unlikely to belong to the Red-winged Blackbird, who typically nest in grassy vegetation closer to the ground. Due to the agitated behavior in the vicinity of the nest, staff could not rule out the possibility that it was occupied, and the “potentially active” status remained in place. A third visit on June 2 and 3, 2022 could not confirm if the nest was occupied or unoccupied, and the “potentially active” status remained in place.

A site visit on June 17, 2022, confirmed that the nest was in use by American Goldfinches. A female was observed in the nest and a male was observed exhibiting agitated behavior in close proximity to the nest. The nest was active on July 13 when the female was observed incubating eggs. Nestlings were observed in the nest on July 27, and the nest was inactive on August 12, 2022, at which time the tree was permitted to be removed.

An active Killdeer nest was also reported by construction crews on July 4, 2022. The nest was in a previously disturbed area with ongoing grading activities. A 5-metre buffer was established around the nest, and it was added to the nest monitoring completed by the qualified biologist. On the July 13, 2022, site visit the nest was determined to be inactive with evidence of predation. The buffer was removed, and construction work resumed in the area.

Through the FUP monitoring conducted in 2022, there was no evidence of Project-attributable harm to migratory birds, including migratory birds that are listed species at risk, their eggs and nests. Mitigation measures in place appear to be effective at avoiding harm to migratory birds. As such, no modified or additional mitigation measures are recommended.

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