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**Reference: Canadian National Railway Company (CN)  
2022 Follow-Up Monitoring Program Results:  
Snapping and Midland Painted Turtle**

## INTRODUCTION

Canadian National Railway Company (CN) retained Stantec Consulting Ltd. (Stantec) to conduct a Snapping Turtle and Midland Painted Turtle 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 Snapping Turtle and Midland Painted Turtle component of the CN Milton Logistic Hub: Wildlife Management and Connectivity Plan (WMCP) (Stantec 2022) for construction during the 2022 construction period.

Condition 8.21 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 Snapping Turtle and Midland Painted Turtle, including mitigation measures implemented pursuant to Conditions 8.15 to 8.20 of the Decision Statement.

The requirements of each of the 2 Conditions are summarized below:

- 8.15 – construction and maintenance of enhancement habitat, specifically nesting mounds.
- 8.16 - conduct in-water construction activities outside of the overwintering period for snapping turtle (*Chelydra serpentina*) (October 1 to April 30), unless not technically feasible.
- 8.17 – install and maintain exclusion fencing during construction of the facility.
- 8.18 – install and maintain exclusion fencing during operation of the facility.
- 8.19.1 install and maintain c taking into account Ontario's Reptile and Amphibian Exclusion Fencing: Best Practices, Version 1.1. Species Technical Note (MNRF 2013) and Ontario's Best Management Practices for Mitigating the Effects of Roads on Amphibians and Reptile Species at Risk in Ontario (MNRF 2016).
- 8.19.2 inspect all exclusion fencing at least monthly, or more frequently following a heavy rain event, and repair damage promptly.
- 8.20 – Installation of signage to notify drivers of the risk of turtle collisions

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Furthermore, Condition 8.21.1 of the Decision Statement requires monitoring the effectiveness of exclusion fencing. Condition 8.21.2 requires monitoring roads within the Project Development Area (PDA) for turtle crossings or turtle collisions. Finally, if the monitoring demonstrates that modified or additional mitigation measures are required to mitigate the risk to turtles, including the risk of collisions with vehicles, Condition 8.21.3 requires development and implementation of modified or additional mitigation measures.

Some habitat enhancements, including wetlands and nesting mounds, were constructed in 2022 (i.e., adjacent to Tributary A and Indian Creek), although only became active / accessible late in the year (i.e., December 2022). Other habitat enhancements (i.e., those proposed along the realigned portion of Indian Creek) have not yet been constructed. As such, monitoring for Condition 8.15 of the Decision Statement will be addressed in future annual FUP reports. This report outlines the monitoring requirements of Condition 8.20, 8.21.1 and 8.21.2 of the Decision Statement.

## **MONITORING REQUIREMENTS**

The WMCP was developed to ensure consistency and efficiencies in monitoring throughout the lifespan of the project. With respect to construction monitoring relating to turtles, the WMCP outlines the FUP monitoring protocol for Snapping Turtle and Midland Painted Turtle during construction and includes the following:

- Sightings of turtles (road collisions or live) in the PDA will be reported to the Environmental Monitor and the sighting will be recorded in daily reports. Specific protection measures will be implemented by the contractor at the direction of CN in consultation with a qualified ecologist.
- Inspection and maintenance of turtle exclusion fencing on a weekly basis during construction.
- Develop and implement modified or additional mitigation measures for turtles, if mitigation measures are found to be insufficient.
- CN developed an internal reporting system for onsite employees, which allows for recording and tracking turtle crossing or collision observations in areas of construction activities. All observations will also be submitted to the Natural Heritage Information Centre.
- The internal reporting system will be reviewed by a qualified biologist annually through construction and 5-years post-construction, to assess the effectiveness of the exclusionary fence design.
- If it is determined fencing modifications or additional mitigation measures are required to reduce the risk of turtle collisions, such measures will be developed and implemented, taking into account Ontario's Reptile and Amphibian Exclusion Fencing: Best Practices, Version 1.1. Species Technical Note (MNR 2013) and Ontario's Best Management Practices for Mitigating the Effects of Roads on Amphibian and Reptile Species at Risk in Ontario (MNR 2016).

Section 3.4.1 of the Plan provides requirements for relocating Snapping Turtles or Midland Painted Turtles before conducting in-water works:

- In-water construction activities will occur outside of the overwintering period for Snapping Turtle (October 1 to April 30), unless not technically feasible. Prior to in-water works, relocation of turtles will be completed by qualified professionals.

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- Relocation will be undertaken between May 1 to September 30, unless not technically feasible. All handling of reptiles will be undertaken by qualified biologists taking into account Ontario Species at Risk Handling Manual: For Endangered Species Act Authorization Holders (MNRF undated) and Best Management Practices for Mitigating the Effects of Roads on Amphibian and Reptile Species at Risk in Ontario (MNRF 2016).
- In terrestrial habitats, turtles will be relocated when encountered incidentally during construction.
- Water will be drawn down so that turtles present will be visible. If the turtle does not appear willing or able to leave the construction area, it will be captured by a qualified professional. Turtles will be handled with gloved hands only, and safe handling techniques as described in Ontario Species at Risk Handling Manual will be used. Netting is not a preferred method of capturing turtles. However, if netting is the only viable capture technique, then nets used will be fine-meshed and sturdy enough to prevent turtles from becoming entangled. Captured turtles will immediately be placed individually into secure covered containers with adequate ventilation and moisture.
- All captured individuals will be released as soon as possible. No turtle will be left in an unsupervised container, no container will be left standing in direct sunlight or unattended vehicle, and all containers will be checked every 15 minutes by a qualified animal care professional who will respond to any signs of distress. Captured individuals will be released in the designated relocation habitat as quickly as possible. Handling of any animal will be kept to a minimum during the release.
- Turtles will be relocated within the same watercourse. If multiple turtles are being relocated, they will be released as far apart as possible within the target area. In anticipation of potential translocations, a qualified biologist will identify suitable release sites on both Indian Creek and Tributary A. In the event of inadvertent injury during the course of relocation, the qualified animal care professional will transport the turtle to an authorized wildlife rehabilitator.
- In accordance with Condition 8.16 of the Decision Statement, in the event it is not technically feasible to avoid in-water works during the overwinter period, turtles captured during the overwintering period will be directly transported to an authorized wildlife rehabilitator.

## **RESULTS**

Signage to notify drivers of the risk of turtle collisions was installed on temporary access roads within the PDA prior to the active turtle season (installed May 4, 2022).

Phase 1 construction exclusion fencing was installed prior to the start of the turtle active season in 2022. Some sections of fencing were completed in fall of 2021 and some in the early spring of 2022, as construction moved into different portions of the PDA. Weekly monitoring found the exclusion fencing remained intact through the turtle active season in 2022, with only minor repairs made as needed.

Monitoring of roads within the PDA did not identify any turtle crossings or turtle mortalities. However, a Snapping Turtle was observed by the contractor on Tremaine Road (outside the PDA) on June 16, 2022. The turtle had been struck and had an injury to its snout and foot. The collision did not appear to be the result of the Project but was associated with public traffic on the road. The Environmental Monitor captured the injured turtle, and it was sent to rehabilitation centre in Peterborough. Following recovery, the turtle was re-released by the rehabilitation centre July 23, 2022, into the same general area it was found.

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Relocation of Snapping Turtles was required in 2022 for observations within the PDA, specifically,

- Nine turtle eggs were uncovered in fill material along Indian Creek on July 20, 2022. Construction activity stopped and the Environmental Monitor contacted the Ontario Turtle Conservation Centre (OTCC) for guidance; as directed by OTCC, eggs were collected by the Environmental Monitor and transferred to OTCC for incubation. A single turtle egg uncovered on August 3, 2022, in fill material along Indian Creek was also sent to the OTCC for incubation.
- A Snapping Turtle was observed on September 1, 2022, in the agricultural pond on Tributary A adjacent to the coffer dam, inside the wildlife fence (outside active work area, where future channel work is anticipated). The individual was within a future work area, so was captured and relocated to Indian Creek on CN property.
- Two Snapping Turtles were observed on September 7, 2022, in the agricultural pond on Tributary A adjacent to the coffer dam, inside the wildlife fence (outside active work area, where future channel work is anticipated). Both individuals were within a future work area, so were captured and relocated to Indian Creek on CN property.

All Snapping Turtle observations within the PDA were recorded in CN's internal reporting system and records were submitted to the Natural Heritage Information Centre. A completed list of observations is provided in **Table 1**. No Midland Painted Turtle were observed in the PDA in 2022.

**Table 1: Snapping Turtle Observations as part of the 2022 Follow-up Program Monitoring**

#	Date	Observation	Action
1	May 26	Observed Snapping Turtle in Tributary A upstream of CN mainline	None; no construction activity in this area
2	June 3	Observed Snapping Turtle basking near beaver dam in creek	None; observation only
3	June 15	Observed Snapping Turtle in Tributary A upstream of CN mainline	None; no construction activity in this area
4	June 16	Contractor observed a Snapping Turtle being struck by a vehicle travelling on Tremaine Road (outside of the PDA)	Environmental Monitor (EM) captured the injured turtle (injury to snout and foot) and sent to rehabilitation centre in Peterborough.
5	July 20	9 turtle (sp.) eggs uncovered in fill material along Indian Creek	Construction activity stopped; EM contacted Ontario Turtle Conservation Centre (OTCC) for guidance; eggs were collected by EM and transferred to OTCC for incubation; biologist completed survey
6	August 3	1 turtle (sp.) egg uncovered in fill material along Indian Creek	Construction activity stopped, egg was covered in place; EM contacted OTCC for guidance; egg was collected by EM and transferred to OTCC for incubation; biologist completed sweep of the area and recommended protection measures
7	August 31	Observed Snapping Turtle in agricultural pond on Tributary A adjacent to coffer dam, inside	Observation only. EM returned the next day to relocate.

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**Table 1: Snapping Turtle Observations as part of the 2022 Follow-up Program Monitoring**

#	Date	Observation	Action
		wildlife fence (outside active work area, where future channel work is anticipated)	
8	September 1	Observed Snapping Turtle (presumably the same individual observed on August 31 <sup>st</sup> ) in agricultural pond on Tributary A adjacent to coffer dam, inside wildlife fence (outside active work area, where future channel work is anticipated)	EM captured the turtle and relocated it to Indian Creek on CN property (assumed to be the same turtle as August 31)
9	September 7	Observed Two Snapping Turtles in agricultural pond on Tributary A adjacent to coffer dam, inside wildlife fence (outside active work area, where future channel work is anticipated)	EM captured the turtles and relocated them to Indian Creek on CN property

Through the FUP program monitoring conducted in 2022, there was no evidence of Project-related harm to Snapping Turtle or Midland Painted Turtle. The Snapping Turtles that were observed within Tributary A, inside the exclusion fencing, were anticipated to be resident when the fence was installed and not to have breached the fence. As such, the fencing appears to be functioning at excluding turtles from the construction areas. As such, no modified or additional mitigation measures are recommended.

**Stantec Consulting Ltd.**

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