NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

# North Kent Wind 1 Project

## 2022 Disturbance Monitoring

Natural Resource Solutions Inc. (NRSI) was retained to conduct post-construction monitoring at the operational North Kent Wind 1 Project (North Kent WP) located north of the City of Chatham, in the Municipality of Chatham-Kent Ontario. This wind energy project has a total nameplate capacity of 100MW and consists of 34 turbines. This document provides an executive summary of the methods and results of the post-construction Significant Wildlife Habitat (SWH) monitoring conducted in 2022 at the North Kent Wind 1 WP, which represents the third year of post-construction monitoring for Vegetation Species of Conservation Concern (SCC) habitats.

### Methods

NRSI biologists conducted post-construction monitoring at the North Kent WP following methods approved by the Ministry of Natural Resources and Forestry (MNRF) as part of the Project's Natural Heritage Assessment (NHA; NRSI 2015a) and Pre-construction Monitoring Report (NRSI 2017). As outlined in these documents, two provincially SWHs required post-construction surveys in 2022, including:

- Two habitats for Vegetation SCC [Muskingum Sedge (*Carex muskingumgensis*) (MSE-001)] and [Pawpaw (*Asimina triloba*) (PAW-001)].

These habitats were identified to be provincially significant in the Environmental Impact Study (EIS) report of the NHA (NRSI 2015a) and/or the Pre-construction Monitoring Report (NRSI 2017), which were completed prior to the construction of the Project. Provincial significance of the habitats was identified based on criteria established, or otherwise approved, by the MNRF.

As per the EIS report of the NHA (NRSI 2015a), the following methods were implemented for the monitoring study:

- One standardized area search was conducted for each Vegetation SCC habitat during a time period when plant species exhibit characteristics that allow for confident identification.

### Results

*Vegetation Species of Conservation Concern Habitats*

The results of the post-construction surveys of the Vegetation SCC habitats (Muskingum Sedge and Pawpaw) conducted in 2022, in comparison with the baseline data collected in 2016, and post-construction results from 2018 and 2020 are outlined below:

| Feature ID | Pre-construction Results (2016) | Post-construction Results (2018) | Post-construction Results (2020) | Post-construction Results (2022) |
|---|---|---|---|---|
| **MSE-001** | **Significant**<br><br>Approximately 15 individual stems observed of Muskingum Sedge | **Significant**<br><br>Approximately 55 individual stems observed of Muskingum Sedge | **Significant**<br><br>Approximately 35 individual stems observed of Muskingum Sedge | **Significant**<br><br>Approximately 136 individual stems observed of Muskingum Sedge. |
| **PAW-001** | **Significant**<br><br>Approximately 160 individual stems observed of Pawpaw | **Significant**<br><br>Approximately 641 individual stems observed of Pawpaw | **Significant**<br><br>Approximately 634 individual stems observed of Pawpaw | **Significant**<br><br>Approximately 591 individual stems observed of Pawpaw |

The Vegetation SCC habitats continue to meet the standards for significance based on post-construction monitoring surveys conducted in 2022.

### Additional Monitoring Commitments

Post-construction SWH monitoring conducted by NRSI in 2022 at the North Kent WP represents the third and final year of post-construction monitoring for Vegetation SCC habitats.

All post-construction disturbance monitoring commitments for Vegetation SCC habitats have been met and no further disturbance monitoring for vegetation is required for the North Kent WP.