



Nation Rise Wind Farm 2024 Significant Wildlife Habitat Monitoring

Natural Resource Solutions Inc. (NRSI) was retained to conduct post-construction wildlife monitoring at the operational Nation Rise Wind Farm (WF), located within the Township of North Stormont and the United Counties of Stormont, Dundas and Glengarry, Ontario. This wind energy project has a generating capacity of 100MW and consists of 29 turbines. The purpose of this fact sheet is to provide an executive summary of the methods and results of the fourth year of post-construction monitoring of Significant Wildlife Habitat at the Nation Rise WF, undertaken in 2024.

Methods

NRSI biologists conducted post-construction Significant Wildlife Habitat monitoring at the Nation Rise WF following methods approved by the Ministry of Natural Resources (MNR), as part of the project's Natural Heritage Assessment (NHA; NRSI 2017), and the corresponding Pre-construction Monitoring Report (NRSI 2019) and Environmental Effects Monitoring Plan (EEMP; NRSI 2017). The monitoring program and updated schedule was later summarized in the Post-construction Monitoring Schedule Memo (NRSI 2022), which was submitted to the MNR and the Ministry of the Environment, Conservation, and Parks (MECP). As outlined in these documents, nine provincially Significant Wildlife Habitats, representing three habitat types, required post-construction monitoring in 2024:

- One Open Country Bird Breeding Habitat (OCB-001);
- Six Eastern Wood Pewee (*Contopus virens*) Habitats (Species of Conservation Concern; EAWP-004, EAWP-008, EAWP-009, EAWP-010, EAWP-013, EAWP-015); and
- Two Wood Thrush (*Hylocichla mustelina*) Habitats (Species of Conservation Concern; WOTH-004, WOTH-005).

These habitats were confirmed, or assumed, to be provincially significant in the Environmental Impact Study (EIS) report of the NHA (NRSI 2017) and/or within the associated pre-construction monitoring report (NRSI 2019), 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 MNR.

As per the EIS report of the NHA (NRSI 2017) and the EEMP (NRSI 2017), the following generalized methods were implemented for post-construction monitoring in 2024:

- Three rounds of point count and transect surveys were conducted in the Open Country Bird Breeding Habitat from June to early July;
- Three rounds of point count surveys were conducted at each Eastern Wood-pewee Habitat from June to early July; and
- Three rounds of point count surveys were conducted at each Wood Thrush Habitat from June to early July.

Results

The results of the post-construction monitoring conducted in 2024, in comparison with the baseline data collected in 2017, are outlined below. The majority of the Significant Wildlife Habitats monitored in 2024 continue to meet the established standards for significance, as defined within the Project's NHA (NRSI 2017), based on post-construction monitoring conducted in 2024. Two of the nine monitored habitats did not meet the standards for significance based on monitoring conducted in 2024.

Feature ID	Pre-construction Monitoring Results (2017)	Post-construction Monitoring Results (2024)
Open Country Bird Breeding Habitat		
OCB-001	Significant	Significant
Eastern Wood-Pewee Habitat		
EAWP-004	Significant	Significant
EAWP-008	Significant	Not Significant
EAWP-009	Significant	Significant
EAWP-010	Significant	Significant
EAWP-013	Significant	Significant
EAWP-015	Significant	Significant
Wood Thrush Habitat		
WOTH-004	Significant	Significant
WOTH-005	Significant	Not Significant

Discussion

Post-construction monitoring in 2024 represents the third of three years of required post-construction monitoring at the Open Country Bird Breeding Habitat, Eastern Wood-Pewee Habitats, and Wood Thrush Habitats. Although the majority of the Significant Wildlife Habitats monitored in 2024 continue to meet the established standards for significance, one Eastern Wood-Pewee Habitat and one Wood Thrush Habitat did not meet the standards for significance. However, these results do not necessarily indicate disturbance or avoidance effects resulting from the construction or operation of the Nation Rise WF.

Eastern Wood-Pewee Habitat EAWP-008 did not meet the criteria for significance following monitoring completed in 2024. This represents the first year of post-construction monitoring during which Eastern Wood-Pewee was not documented in this habitat. A change in habitat use in 2024 was noted, which included small quantities of tree clearing for agricultural purposes along the edges of EAWP-008, which has reduced the overall size of habitat EAWP-008 and availability of interior habitat. It is therefore expected that EAWP-008 may not be occupied by breeding Eastern Wood-Pewee every year, particularly if other, more suitable habitats are available to breeding pairs of the species. Habitat EAWP-008 met the criteria for significance in two of the three years of post-construction monitoring, as a result it is not expected that construction or operation of the Nation Rise WF has altered the suitability of the habitat for Eastern Wood-Pewee.

Wood Thrush Habitat WOTH-005 did not meet the criteria for significance following monitoring completed in 2024. However, WOTH-005 could not be surveyed fully in 2024 due to site access restrictions imposed by the landowner, and a roadside point count station was established, which was located approximately 170m from the nearest portion of the WOTH-005 habitat. As a result, any vocalizing Wood Thrush within the habitat may have been too distant to be detected by surveyors. No alterations to the habitat were observed in 2024, and it is anticipated that the habitat continues to provide suitable breeding habitat for Wood Thrush, although this could not be confirmed during 2024 monitoring.

The results of the third year of post-construction monitoring at the Open Country Bird Breeding, Eastern Wood-Pewee, and Wood Thrush Habitats indicate that no displacement, avoidance, or any other apparent negative effects associated with the construction or operation of the Nation Rise WF have been documented. All post-construction monitoring commitments for these habitats have been met, and no further monitoring of these habitats is required at the Nation Rise WF.

Additional Monitoring Commitments

A third and final year of post-construction monitoring for the Savannah habitat (SAV-001) at the Nation Rise WF will be completed in 2025.