



## Port Ryerse Wind Farm 2022 Bat Mortality Monitoring

Natural Resource Solutions Inc. (NRSI) conducted post-construction monitoring at the operational Port Ryerse Wind Farm, located near the community of Port Ryerse in Norfolk County, Ontario. This wind energy project has a generating capacity of 10MW and consists of four turbines. The purpose of this fact sheet is to provide an executive summary of the methods, analysis, and results of the sixth year of post-construction mortality monitoring that was conducted at the Port Ryerse Wind Farm in 2022. This sixth year of monitoring for bat mortality was conducted as a result of previous exceedances of the provincial threshold of 10 bats/turbine/year.

### Methods

NRSI biologists conducted bat mortality monitoring at the Port Ryerse Wind Farm following Ministry of Natural Resources and Forestry (MNRF) guidelines (*Bats and Bat Habitats: Guidelines for Wind Power Projects*, July 2011) and the project's Environmental Effects Monitoring Plan (EEMP; Stantec 2013). In accordance with the MNRF guidelines and the approved EEMP, the following methods were implemented for the monitoring study:

- All four turbines were searched twice-weekly from May through October;
- Searches were conducted in circular plots with a 50m radius, centered at each turbine tower;
- Searcher efficiency trials were conducted in each study season to assess the effectiveness of each searcher; and
- Scavenger removal trials were conducted in each study season to assess the level of scavenging activity at the turbines.

### Results

During 2022 post-construction mortality monitoring at the Port Ryerse Wind Farm, six bat mortalities were documented within the search radii of the turbines. Bat mortalities consisted of both resident and long-distance migratory species.

Following the MNRF guidelines, NRSI biologists incorporated the searcher efficiency, scavenger removal, and proportion of area searched variables into the MNRF's estimated mortality equation to determine an estimated rate of bat mortality at the Port Ryerse Wind Farm of **3.78 bats/turbine/year**. This is below the MNRF threshold of 10 bats/turbine/year.

### Summary

Based on the results of the 2022 post-construction monitoring at the Port Ryerse Wind Farm, the annual estimated bat mortality rate of 3.78 bats/turbine/year did not exceed the provincial threshold of 10 bats/turbine/year.