



## Erie Shores Wind Farm Case Study: Turbines and Birds

### Mortality Results

- Total findings: 29 or 30 birds per year
  - ⇒ All were common species
  - ⇒ 80% were small songbirds
  - ⇒ Of those, 50% were nocturnal migrants
  - ⇒ Estimated overall mortality rate: 2–2.5 birds/turbine/year
- Migrant Diurnal Hawks: 1 bird in two years
  - ⇒ Estimated overall mortality rate: 0.4 birds/turbine/year
- Level of mortality is lower than other human caused mortality to birds
- Level of mortality could not be considered significant to bird populations

### Mortality with respect to Distance from the Lake Erie Shore

- Nine turbines situated 200 m or less from the shore:
  - ⇒ Mortality was higher on average than further inland
- Four turbines located between 250 m and 350 m from the shore:
  - ⇒ One bird was found per year
- Inland mortality:
  - ⇒ Cannot be considered any higher than that at 250 m from the shore

### Site Visit Frequency:

- Every week: Careful searching at most turbines
- Two to three times per week: Searching at a number of turbines located near the shoreline
- Over 19 – 20 weeks per year, during migration seasons
- Two years of study: 2006-2007

### Conclusions

- Birds did not leave the area because of turbines
- Birds did not stop migrating because of turbines
- Birds, including those on migratory flights were not displaced from the area, except very locally very close to any one turbine
- The spacing and type of turbines will not result in decreased numbers of birds in the area
- Turbines are to be placed 250 m or more from the shores of major lakes to keep mortality at a minimum
- Additional setbacks are necessary to ensure continued use of the area by birds