

Sent: Wednesday, January 04, 2012 10:46 AM
Subject: Ostrander Point IBA

Dear Ontario Nature member,

The Gilead Power turbine project at Ostrander Point has been posted for public comment on the Registry http://www.ebr.gov.on.ca/ERS-WEB-External/searchNotice0.jsp?clearForm=true&menuIndex=1_1&language=en EBR#011-5239 until Feb. 2, 2012.

As you know the ON AGM 2010 passed a Resolution for a moratorium on turbine projects in bird migration areas such as our Prince Edward County South Shore Important Bird Area. There is no other location on the Canadian side of Lake Ontario where densities and abundance of migrants are known to compare with those at Prince Edward Point. The IBA was also designated as a refuge for Species at Risk that have been documented using Ostrander Point such as Loggerhead Shrike, Henslow's Sparrow, King Rail, Black Tern, Bobolink, Whip-poor-will and Blanding's Turtle.

Whatever your members' views of wind energy may be, we ask you to support our objection to industrial development in our Crown lands that are so important to bird and bat migration and Species at Risk. We believe that if this project gets approval it will set a precedent for developments in all IBAs and Crown land ANSIs. Attached is the PECFN EBR comment with more details about the site.

Canada's response to climate change requires urgent attention to conservation and sustainable energy use. If industrial wind turbines are to be included in those plans then governments must make siting decisions that protect the environment we hope to save.

Please submit this request to your Executive and members as soon as possible.

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Shannon McNeill, Senior Project Evaluator
Ministry of the Environment
Operations Division Environmental Approvals Branch
2 St, Clair Ave. W, Floor 12A
Toronto, ON M4L 1L5

Re: EBR 011-5239 and EBR 011-3181

Prince Edward County Field Naturalists and Prince Edward Point Bird Observatory object to the approval of the Gilead Power wind project at Ostrander Point as well as the Permit to kill, harm, harass and destroy habitat of Blanding's Turtle and Whip-Poor-Will. The two most important reasons why this site should not be industrialized:

1. Migration function
2. Species at Risk habitat

Ostrander Point Crown Block, a Candidate Area of Natural and Scientific Interest, is in the centre of the Prince Edward County South Shore Important Bird Area (IBA).

1. Migration function

The IBA is located on approximately 26 square kilometres of land and 65 square kilometres of nearshore waters. It encompasses 30 kilometres of one of the few shorelines of Lake Ontario that has remained undeveloped.

The land portion is comprised of various Crown lands: the Prince Edward Point National Wildlife Area (NWA) 560 ha, Ostrander Point Crown Block 324 ha, the Point Petre Provincial Wildlife Area 1276 ha, Point Petre Antenna Site, Little Bluff Conservation Area, and False Duck and Timber Islands. The remaining land portion is approximately 60 privately owned properties, mainly vacant land or cottages. The waters of the IBA extend 5k out from the shore along its entire length and east to False Duck Island, as well as the sheltered nearshore of South Bay, north to the Black River.

This IBA has been designated *globally significant* under the congregatory species category and *nationally significant* under the threatened species category. During spring and fall, the geographical and habitat features of the peninsula that forms Prince Edward County act as a funnel for birds on migration. There is no other known location on the Canadian side of Lake Ontario where the birds appear in such densities and abundance. -The Prince Edward Point Bird Observatory (PEPtBO) sees more birds than any other single migration monitoring station in Ontario.

As a member of Environment Canada's Protection and Operations Division – Ontario has described Ostrander Point:

“This is one of the most important landfall sites in Ontario. Unique about this particular site is that birds are ascending and descending during migration, whereas normally they migrate over the landscape in a broad front above the typical height of wind turbines. Since birds on migration in this area can therefore be found at tower height, and are typically very tired and stressed when descending, they may be more at risk of collision with wind turbines.”

Denise Fell, Environmental Assessment Officer, Mar 4, 2008.

Ostrander Point meets eleven criteria of a “very high sensitivity” site where no turbines should be sited including:

- The presence of a bird species listed as “at risk” by the SARA, COSEWIC or provincial/territorial threat ranking, or the presence of the residence(s) of individuals of that species if listed under the SARA, or of its critical habitat. To be of concern, either the bird or its residence or critical habitat must be considered to be potentially affected by the project;

- Site is in an Important Bird Area;
- Site is adjacent to a National Wildlife Area;
- Site of fall migration of large concentrations of raptors;
- Site is on a known migration corridor;
- Site contains shoreline on a peninsula;
- Site will disrupt large contiguous wetland habitat;
- Site located close to significant migration staging area for waterfowl;
- Site contains species of high conservation concern, eg. Aerial flight displays, PIF/CWS priority species;
- Site is recognized as provincially important alvar habitat type.

(Guidance Document: Wind Turbines and Birds. V.8.2 p.21 Feb. 2007)

The migration monitoring data from PEPtBO suggests that approximately 12 million songbirds fly through the area from Presqu'ille Point in the west to Wolfe Island in the east during migration. The spring migration consists mostly of passerines, while the fall migration also includes hawks and owls. Hawks and owls are known to fly back and forth, parallel to the South Shore until there are favourable conditions for crossing the lake. The raptors that are noted at PEPtBO therefore, are using the whole south shore of PEC as a staging area. PEPtBO sees more Northern Saw-Whet Owls than any other banding station in North America.

In order to cover the full extent of the migration times, PEPtBO operates for 20 weeks of the year, and observes annually between 500,000 and 750,000 birds of over 200 species along a 1 km wedge of shoreline - a small fraction of the total number of birds estimated to pass through the IBA during migration times.

Further, a recent study at a *similar peninsula migratory habitat*, Long Point on Late Erie, tracked birds and bats moving **1–30 km over the stopover landscape** for days to feed before continuing on their migration. (Landscape Movements of Migratory Birds and Bats Reveal an Expanded Scale of Stopover by Taylor, P.D. et al. 2011)

This study defines 'stopover landscape' as the time and space where birds rest and refuel for subsequent migratory flights. Individual birds (passerines and owls) were tagged and followed in both spring and fall seasons. Up to 50% of these individuals were observed making stopover flights of .10k to 2.5 k distances from their point of initial capture 52% of stopover flights occurred 24 hours or more after capture, mostly at night and 20% at or near dawn.

“Our results reveal that during a stopover bout, migrants from multiple taxa with diverse migration strategies frequently undertake flights from monitored stopover sites that do not result in a continuation of migration, but rather are *movements between stopover sites* within a broader stopover landscape... The implication of this result is that to *properly quantify migratory behaviour* at stopover, researchers need to ensure that they are surveying at spatial scales that fully represent the stopover landscape.’ And’...demonstrate that non-migratory nocturnal flights from monitored sites do occur, and that such flights can result in the *spatial scale of stopover extending tens of kilometres or possibly more*, in any direction from the site of first capture.”

Such surveys of the stopover landscape contained within the IBA have **not** been done by Gilead during the 4-5 years of contracted bird studies. In fact, the studies done by contractor Stantec Inc. *reduce the spatial scale surveyed* to the boundaries of the Ostrander Point Crown Block and again further down to *within 120 metres* of specific natural features near each turbine site. The Taylor et al. Landscape study shows that many of the large numbers of migrants observed at PEPtBO will be moving 10k to feeding habitat at Ostrander Point.

2. Habitat of Species at Risk threatened with destruction

Coastal peninsula

Forest, shrubland, grassland and wetland habitats within 2–10 km of Great Lakes shorelines, especially along the north shores of lakes Erie and Ontario, are considered particularly important as rest stops and refuelling areas as they consistently support the highest concentrations and highest diversity of migrants. PEPtBO has recorded the 20 Partners In Flight (PIF) *Species of Continental Importance* in substantial numbers.

Near-shore waters

Ostrander Point's shoreline, approximately 3k from South Bay, is directly within the flyway of the waterfowl staging there in *globally significant* numbers.

Provincially significant coastal wetlands

Ostrander Point is part of the South Bay Coastal Wetland ranked as a 'minimally disturbed' site (Project # WETLAND3-EPA-01 Technical Report 2005 p.52) is important to the breeding success of Blanding's Turtle (THR), Eastern Musk Turtle (THR), Map Turtle (SC), Snapping Turtle (SC), and Milksnake (SC). Adjacent is the continuance of the wetlands with proven breeding records of Black Tern (SC), King Rail (END), and Least Bittern (THR). (C.G. Harris, An Investigation of the Breeding Birds of South Prince Edward County, Ontario, June 2000)

These wetlands are also very important to swallows, martins and blackbirds, as post-breeding roosts (marshes, swamp thickets), serve as concentration areas for hordes of passing migrants (especially lakeshore wetlands) and provide essential foraging sites for swallows on cold days early in the breeding season (wetlands with open water). (Ontario PIF 2008 Plan BCR 13 App G)

Provincially significant woodlands and Seasonal Concentration Area – Landbird migration stopover

The 89 ha of woodland communities include treed alvar, deciduous and thicket swamps and are connected to surrounding woodlands within the South Bay Coastal wetland.

The Stantec Environmental Impact Study (EIS) shows that 6 of the 9 proposed turbines and access roads will encroach on these woodlands. PIF states that neotropical migrant landbirds are negatively affected by development within 2k of woodlands.

PIF **priority forest landbirds** in significant population decline found within the IBA: Golden-winged Warbler(SC), Blue-winged Warbler, American Woodcock, Brown Thrasher, Black-billed Cuckoo, Wood Thrush, Loggerhead Shrike (END), Red-headed Woodpecker (SC), Whip poor will (THR).

Amphibian breeding habitat

Stantec's EIS found high levels of activity across the site of both early and late breeding species: Spring peeper, Chorus frog, American toad, Grey treefrog, Green frog, and Northern Leopard Frog and five Species At Risk turtles listed above. One proposed turbine site (#9) is in the area of the Blanding's Turtle (THR) year round habitat and amphibian breeding ponds. Over 5k access roads as well as permanent crane pads and lay down areas etc. will be further threats to the movement of foraging, breeding and hatchling animals.

Alvar

All components of the Project are located within alvar habitat.

Alvars are globally rare communities of plants, amphibians, insects and birds which interact in a unique manner. For instance about 600 to 1,000 insect species are peculiar to alvars – a significant number in

terms of conserving biodiversity. This important contribution of insect life to the species diversity of alvar habitats has also been noted from European studies where it has been observed that alvars (and especially dry grassland alvars) are thought to be among the most species-rich communities in the world on the small scale (10 to 100 cm²) and are of extraordinary protection value.

Alvar bird species common to the IBA: Upland Sandpipers, American Kestrels, Common Nighthawks, Whip-poor-wills, Brown Thrashers, Golden-winged Warblers, Bobolinks, Eastern Meadowlarks, Eastern Towhees, Clay-colored Sparrows, Vesper Sparrows and Grasshopper Sparrows - all in population decline.

Grassland and Shrub/successional breeding habitat

Ontario PIF 2008 Plan BCR 13 states that *habitat loss* is the primary threat to most shrub species. The habitat proposed to be destroyed at Ostrander Point includes Swamp thickets in wetland areas, Riparian thickets, Shrub dune and shoreline communities, and Shrub alvar and savannah on limestone or sand plains.

Shrub/successional habitats at Ostrander Point are also important to post-breeding and migrating landbirds and specifically to **grassland priority species**: American Woodcock (CC), Golden-winged warbler (SC), Willow Flycatcher, Blue-winged warbler, Black-billed cuckoo, Brown Thrasher, Eastern Kingbird, Eastern Towhee, Field Sparrow, Loggerhead Shrike, and Yellow-breasted Chat (SC) as well as Bobolink and Eastern Meadowlark, recent additions to the Species At Risk list.

Insectivorous Species

Of special concern at Ostrander Point are the aerial insectivores which share a common feeding strategy of capturing and eating flying insects while in continuous flight. This particular guild of landbirds and bats has recently been recognized as one of high conservation concern in Ontario because of widespread declines, such as the Threatened Whip poor will. These species are among the highest mortality rates at the nearby Wolfe Island TransAlta wind project: Tree Swallow, Purple Martin, Bobolink, and Wilson's Snipe. This guild also includes aerial-display species, American Woodcock and Wilson's Snipe, that breed at Ostrander Point in significant numbers.

Raptors

Fall migration of raptors across the South Shore can number in the thousands while staging for optimal winds. Bald Eagle(SC) population has increased in all seasons, thereby approaching the possibility of nesting. PEPTBO recorded 63 Golden Eagles (END) passing over the South Shore on one day in October 2009. PEPTBO banding records of Northern Saw-whet owls are the highest in North America. The grassland habitats of the South Shore are conducive to nesting for the Short-eared owl (SC) which appears to have been displaced on Wolfe Island where records have been kept on this species for over 25 years. A Peregrine Falcon (THR) fitted with a satellite transmitter has spent the last two winters hunting on the South Shore.

Monarchs

In 1996 Canada chose the IBA as one of three conservation areas for the Monarch butterfly as part of its agreement with the Trilateral Committee for Wildlife and Ecosystem Conservation. The importance of this habitat became clearer with the 2010 study Guelph University which established the existence of a separate population of Monarchs that travels along the east coast. Ryan Norris, professor of Integrative Biology said: "It means that the viability of east coast populations is highly dependent upon productivity on the other (eastern) side of the mountains."

Bats

Long-distance migratory bats, a group which appears to be at higher risk of collision with wind turbines, concentrate near the shorelines of the Great Lakes. The mortality rate of bats at the nearby Wolfe Island wind project has been extremely high,

Gilead Power's proposed mitigation to the rate of bat mortality has been to move the placement of turbines to 200m from the shoreline where there are three proposed.

Cumulative Effect

This project should be evaluated as part of the cumulative effect (CE) of similar projects in the area on migrating species and their habitats. Gilead Power states that the Ontario Renewable Energy Regulations do not require such consideration, but they are providing one due to public interest. The area included in their CE study proceeds from Ostrander Point approximately 50k to Wolfe Island in the east and encompasses four IBAs. It lists only 4 projects: 1 operating and 3 that have a power purchase agreement. Others known to be seeking approval including Gilead's Dorland Project, both on and off shore, raise the number of proposed turbines into the hundreds covering the *entire northern shore of Lake Ontario*. An additional number of projects are proposed for the southern shore in New York. In other words, wind energy proponents have targeted every square kilometre, on land and off shore, of the Lake Ontario flyway for development - threatening increased mortality from collisions in flight and also the destruction of much of the staging and feeding landscape for migrants.

[All bird species rankings and information from Ontario Species at Risk 2011 and Partners in Flight 2008.]

3. **Resolution** passed unanimously at the Annual General Meeting of **Ontario Nature**, May 29, 2010: asks Ontario to place a moratorium on wind farm development within 5 km of areas of known significance to migrating birds and spaces such as National Parks, Provincial Parks, and Important Bird Areas, until thorough, multi-year radar studies of bird migration are conducted at proposed development sites; and urges the government to protect these sites from wind farm development if studies determine that they have significant bird migration concentrations, for example, of over 100,000 birds in a season or are found to be situated within major migratory pathways.

In December, Canada's **Senate** unanimously passed a motion:

That, in the opinion of the Senate, the province of Ontario should institute a moratorium on the approval of wind energy projects on islands and onshore areas within three kilometres of the shoreline in the Upper St. Lawrence-Eastern Lake Ontario region, from the western tip of Prince Edward County to the eastern edge of Wolfe Island, until the significant threat to congregating, migrating or breeding birds and migrating bats is investigated thoroughly and restrictions imposed to protect internationally recognized important bird areas from such developments.

Prince Edward County Field Naturalists, member of Ontario Nature and Nature Canada.
Prince Edward Point Bird Observatory, member of the Canadian Migration Monitoring Network.