

Bringing back the birds

August 24, 2016

The Honorable Catherine McKenna Minister of the Environment and Climate Change Environment and Climate Change Canada 200 Sacre-Coeur Boulevard Gatineau, Quebec City K1A 0H3

Dear Minister McKenna:

The American Bird Conservancy (ABC) is writing to express its serious concerns about the Ontario Environmental Review Tribunal's recent decision to approve construction of the Amherst island Wind Energy Project. Twenty-six 500-foot tall turbines are to be built across the length and breadth of the 10 x 7 mile long island in close proximity to Lake Ontario, one of the largest confluences of migratory birds and bats in the world. From the perspective of wildlife conservation, Amherst Island may prove to be one of the worst sited wind energy projects in all of North America, perhaps even rivaling the notorious Altamont Wind Resource Area in California (Smallwood and Thelander 2008).

ABC is a 501(c) (3) not-for-profit membership organization whose mission is to conserve native birds and their habitats throughout the Americas (<u>www.abcbirds.org</u>). ABC acts by safeguarding the rarest species, conserving and restoring habitats, and reducing threats, while building capacity in the bird conservation movement.

ABC supports the development of clean, renewable sources of energy such as wind power, but also believes that it must be done responsibly and with minimal impact on our public trust resources, including native species of birds and bats, and particularly threatened, endangered and other protected species.

ABC is a proponent of Bird Smart Wind Energy, which is described in some detail in Hutchins et al. (2016). In the case of wind energy, careful wind generation siting is crucial in preventing the unintended impacts to native bird and bat species, and ABC is concerned that the proposed site for this project poses an unacceptably high risk to protected and shared Canadian and U.S. wildlife. In the United States, the second leading wind power producer in the world, this risk can be substantial, with hundreds of thousands of birds and bats being killed annually, at minimum, through collisions with the fast-moving turbine blades (Erickson et al. 2015, Smallwood, 2013, Loss et al. 2013). This estimate balloons into the tens of millions when collisions and electrocutions at their associated infrastructure, notably power lines and towers, is included (Loss et al. 2015). Wind turbines are also known to cause displacement and reproductive failure in declining grassland breeding birds (e.g., Shaffer and Buhl 2015, Stevens et al. 2013).

The wind energy industry publically claims to be concerned about bird and bat mortality, but continues to try to build large, commercial wind energy facilities in major migratory corridors and sensitive breeding areas for birds and bats in the United States (Casey 2015), thus placing our continent's

ecologically important wildlife at great risk. Canada would do well not to replicate U.S. mistakes and should better regulate the wind energy industry to avoid such losses.

Some segments of the public, and even some mainstream conservation organizations, seem to be treating large scale, commercial wind energy as if it were our only hope to address global climate change. In fact, there are many other alternative approaches, such as forest, soil, ecosystem, and biodiversity conservation, energy efficiency, reduction in meat consumption, and distributed solar on our already-built environment, that would be just as effective, but not have the same destructive impacts on wildlife as large, commercial wind energy projects. Even the U.S. Fish and Wildlife Service recognizes that the contribution of wind energy to addressing climate change will be minimal at best:

"If the volume of development increases over what it would have been without the new permit regulations, then the increased amount of fossil fuel emissions that are replaced by wind energy production could provide a greater beneficial impact of the proposed action, although in the context of planetary emissions the impact on climate change would still be minor." (FWS 2016, page xiii).

ABC questions whether the sacrifice of hundreds of thousands, if not millions, of our shared continent's ecologically important birds and bats justifies building any large, commercial wind energy facility in areas with high concentrations of birds and bats, like the Great Lakes. The ecological services—pest control, pollination, and seed dispersal--that birds and bats provide are worth billions to the Canadian and U.S. economies (Sekercioglu, 2015, Sekercioglu et al. 2016). Bird watching also brings millions of dollars through travel and recreational equipment purchases (Kaufman 2016). Yet, many of North America's bird species are in precipitous decline, with over a third in need of concerted conservation action (North American Bird Conservation Initiative 2016).

We should remember that hydroelectric dams were once touted as the answer to clean, renewable energy, but are now being torn down due to their unexpected negative impacts on wildlife (e.g., salmon) and their habitats (Howard 2016, Yaggi 2016). Poorly sited large, commercial wind facilities have a similar profile. Furthermore, a recent study has shown that more immediate threats to wildlife are the traditional ones, including agriculture, over-exploitation and development, not climate change (Maxwell et al 2016). Despite its benefits, poorly sited wind energy is another form of development, altering wildlife habitat and directly killing large numbers of birds and bats.

Siting this large, commercial wind energy facility in a globally recognized Important Bird Area, and an area on Heritage Canada's "Most Endangered Places List", would be a mistake of epic proportions, and ABC urges you and the Canadian Government to reconsider this ill-considered decision. Vast numbers of migratory birds and bats move through this area every spring and fall and other protected species (e.g. Blanding's turtle) are present, including some 25 endangered, threatened or other species of conservation concern.

Industry consultants, such as those who testified on behalf of this project, frequently claim that large, commercial wind projects pose little threat to migratory birds as they fly far above the rotor swept

areas of the turbines. However, recent radar studies conducted by the U.S. Fish and Wildlife Service on Lake Erie and Lake Ontario show this to be patently false. Horton et al (2016) and Rathbun et al. (2016) both found vast numbers of birds and bats moving along the shorelines and over the lakes, and furthermore, that they frequently flew within the rotor swept area of wind turbines, thus placing them at great risk of collision. There is no reason to believe that the findings would be any different on the Canadian side of the Great Lakes. Recognizing this threat, the U.S. Fish and Wildlife Service currently recommends that no wind turbines be built within three miles of the Great Lakes shorelines. Nature Conservancy recommends five miles. These new studies suggest that the setbacks should be extended to 5-10 miles (Miner 2016). Furthermore, these studies essentially invalidate the findings of paid consultants who typically base their conclusions on limited daytime visual observations, while the vast majority of songbird and bat migration occurs at night.

Wind energy developers are supposed to assess the risks associated with this development to sensitive wildlife, especially birds and bats. However, there is a problem with such studies being conducted by paid consultants to industry. Hiring paid consultants to collect this data preordains the result and is a clear violation of scientific integrity practices:

"Scientists with conflicts of interest are viewed as being at least partially integrity-compromised, and, even with complete and open disclosure, are regarded, at least to an extent, as of suspect scientific credibility" (Rowe and Alexander 2012).

It is therefore not surprising that independent researchers have found a very poor correlation between pre-construction risk studies at wind energy facilities and actual number and type of birds killed post-construction (Ferrer et al, 2011). We note that paid consultants would not be in business very long if their findings and testimony did not support the goals of their employers. This conflict of interest calls into question the validity of any studies they conduct.

Similarly, transparency of bird and bat kill data has been a continuing and serious problem with wind energy development in the United States and Canada (Associated Press 2015, Jackson 2016, Wrightman 2016). If this project is eventually built despite widespread opposition, then all postconstruction bird and bat fatality data should be collected by independent, third party experts using standardized methods and reported directly to regulatory agencies. These data should also be made available to the public and concerned conservation organizations. These are public trust resources being taken and the public has a right to know (ABC, 2015, Clarke 2014, Wrightman 2016).

Should you move forward with this project over the objections of many experts, a plan for compensating the public for any loss of federally protected species should be worked out before any construction takes place, and should include setting aside or rehabilitating additional lands outside the project area for bird and bat conservation purposes. If and when data show that large numbers of birds and bats are killed by the project when it begins operation, especially federally protected species,

then the option of total shut down and dismantlement of the turbines must be considered – and that should be made clear at the outset.

The developer will also claim that they know how to mitigate for bird kill at wind energy facilities, but the only proven mitigation methods to date are proper siting and curtailment (Arnett and May 2016). Curtailment of the wind turbines is not a popular solution for wind energy companies, as it cuts into their profit margins.

ABC agrees with the expert witnesses Shaun Smallwood's and Bill Evan's concerns expressed in the Tribunal's Record of Decision (Environmental Review Tribunal 2016) and is shocked that the Tribunal did not listen to these respected independent biologists. Dr. Smallwood, in particular, is one of the world's most respected experts on the impacts of wind energy on birds and bats. ABC does not agree with the testimonies of Andrew Taylor, Eric Bolliger and Paul Kerlinger, all paid consultants to the wind industry.

ABC considers the Amherst Island WEP another example of the wind industry's blatant disregard for Canadian and U.S. federally protected wildlife. ABC notes that the United States and Canada share their migratory wildlife and have a legal and moral obligation to protect our ecologically important birds, both being signatories of the 100 year-old Migratory Bird Treaty Act, one of the most important, but least enforced pieces of environmental legislation on our continent.

Thank you for your consideration.

Respectfully Yours,

Munul Huter

Michael Hutchins, Ph.D. Director, Bird Smart Wind Energy Campaign

Cc: T. Ouimet, K. McGarry, G. Murray, M. Bossio, C. Schultz, K. Hennige

## References

ABC 2015. Bird conservation group calls for changes In collection of data at wind developments. <u>https://abcbirds.org/article/bird-conservation-group-calls-for-changes-in-collection-of-data-at-wind-developments/</u>

Arnett, E.B. and May, R.F. 2016. Mitigating wind energy impacts on wildlife: Approaches for multiple taxa. Human-Wildlife Interactions 19: 28-41.

http://www.berrymaninstitute.org/files/uploads/pdf/journal/spring2016/MitigatingWindEnergyArnett May.pdf

Associated Press. 2015. PacifiCorp sues to block release of bird-death data at wind farms. Oregonlive.com:

http://www.oregonlive.com/business/index.ssf/2014/11/pacificorp sues to block relea.html

Casey, M. 2015. 30,000 wind turbines located in sensitive areas for birds. CBSNews.com: http://www.cbsnews.com/news/30000-wind-turbines-located-in-critical-bird-habitats/

Clarke, C. 2014. It's time for independent monitoring of wildlife kills at renewable energy sites. KCET: <u>https://www.kcet.org/redefine/its-time-for-independent-monitoring-of-wildlife-kills-at-renewable-energy-sites</u>

Environmental review Tribunal 2016. August 03, 2016 decision on Winlectric, Inc.'s plans to build the Amherst island Wind Energy project.

Erickson , W.P., Wolfe, M.M., Bay, K.J., Johnson, D.H., and Gehring, J.L. 2014. A comprehensive analysis of small-passerine fatalities from collision with turbines at wind energy facilities. Plos One: <u>http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0107491</u>

Ferrer, M., de Lucas, M., Janss, G.F., Casado, E., Munoz, A.R., Bechard, M.J., and Calaqbuig, C.P. 2011. Weak relationship between risk assessment studies and recorded mortality in wind farms. Journal of Applied Ecology 49: 38-46.

FWS. 2016. Draft Programmatic Environmental Impact Statement for the Eagle Rule Revision. Washington, DC: U.S. Fish and Wildlife Service.

Horton, R., Rathbun, N., Bowden, T., Nolfi, D., Olson, E., Larson, D.J., and Gosse, J.C. 2016. Great lakes Radar technical Report Lake Erie Shoreline: Erie County, Ohio and Erie County, Pennsylvania, Spring 2012. U.S. Department of the Interior, Fish and Wildlife service, Biological technical Publication FWS/BTP-R3012-2016. Howard, B.C. 2016. River revives after largest dam removal in U.S. history. National Geographic.com: <u>http://news.nationalgeographic.com/2016/06/largest-dam-removal-elwha-river-restoration-</u> <u>environment/?utm\_source=Facebook&utm\_medium=Social&utm\_content=link\_fb20160602news-</u> <u>elwhariver&utm\_campaign=Content&sf27752028=1</u>

Hutchins, M., Parr, M. and Schroeder, D. 2016. ABC's bird smart wind energy campaign: protecting birds from poorly sited wind energy development. Human Wildlife interactions 10 (1): 71-80. <a href="http://www.berrymaninstitute.org/files/uploads/pdf/journal/spring2016/ABCsBird-SmartHutchinsEtal.pdf">http://www.berrymaninstitute.org/files/uploads/pdf/journal/spring2016/ABCsBird-SmartHutchinsEtal.pdf</a>

Jackson, T. 2016. Wind farm sues to block bird death data release. Sandusky Register: <u>http://www.sanduskyregister.com/Environment/2016/06/24/Wind-farm-sues-to-block-bird-death-data-release</u>

Kaufman, K. 2016. Economic impact: Why birds and birding matter. Toledo Chamber of Commerce: <u>http://www.toledochamber.com/blog/economic-impact-why-birds-and-birding-matter</u>

Loss, S.R., Will, T., and Marra, P.P. 2013. Estimates of bird collision mortality at wind facilities in the contiguous United States. Biological Conservation 168: 201–209.

Loss, S.R., Will, T., and Marra, P.P. 2015. Refining estimates of bird collision and electrocution mortality at power lines in the United States. PLoS ONE 9(7): e101565. doi:10.1371/journal.pone.0101565.

Maxell, S.L., Fuller, R.A., Brooks, T.M., and Watson, J.E.M/ The ravages of guns, nets and bulldozers. Nature 536: 143-145.

Minor, J. 2016. Study calls for 16-km turbine setback. The London Free press: http://www.lfpress.com/2016/08/15/study-calls-for-18-km-turbine-setback

North American Bird Conservation Initiative. 2016. State of the Birds, 2016. <u>http://www.stateofthebirds.org/2016/wp-content/uploads/2016/05/SotB\_16-04-26-ENGLISH-BEST.pdf</u>

Rathbun N. A., T. S. Bowden, R. L. Horton, D. C. Nolfi, E. C. Olson, D. J. Larson, and J. C. Gosse. 2016. Great Lakes Avian Radar Technical Report; Niagara, Genesee, Wayne, and Jefferson Counties, New York; Spring 2013. U.S. Department of Interior, Fish and Wildlife Service, Biological Technical Publication FWS/BTP-301 2016

https://www.fws.gov/radar/documents/Avian%20Radar%20Sp2013%20Ontario%20Full.pdf

Rowe, S. and Alexander, N. 2012. Ensuring Scientific Integrity: Guidelines for Managing Conflicts. International Union of Food Science and Technology Bulletin 1: http://iufost.org/iufostftp/IUF.SIB.Ensuring%20Scientific%20Integrity.pdf

Sekercioglu, C. H. 2006. Increasing awareness of avian ecological function. Trends in Ecology and Evolution 21:464–471.

Sekercioglu, C. H., D. G. Wenny, and C. G. Whelan, editors. 2016. Why birds matter: avian ecological function and ecosystem services. University of Chicago Press, Chicago, Illinois, USA.

Shaffer, J. A., and D. A. Buhl. 2015. Effects of wind energy facilities on breeding grassland bird distributions. Conservation Biology 30:59–471.

Smallwood, S.K. 2013. Comparing bird and bat fatality rate estimates among North American windenergy projects. Wildlife Society Bulletin 37 (1): 19–33.

Smallwood, K. S. and Thelander, C. G. 2008. Bird mortality in Altamont Pass Wind Resource Area California. J. Wildl. Manage.72: 215–223.

Stevens, T. K., Hale, A.M., Karsten, K.B. and Bennett, V. J. 2013. An analysis of displacement from wind turbines in a wintering grassland bird community. Biodiversity and Conservation 22:1755–1767.

Yaggi, M. 2016. Removal of 4 dams to reopen 420 miles of historic salmon habitat on Klamath River. EcoWatch: <u>http://ecowatch.com/2016/04/07/dam-removal-klamath-river/</u>

Wrightman, E. 2016. The right to know: Releasing wind turbine bird & bat death data. <u>http://ontario-wind-resistance.org/2016/08/04/the-right-to-know-releasing-wind-turbine-bird-bat-death-data/</u>