## **BLACK SWAMP BIRD OBSERVATORY**

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Teaming research with education to promote bird conservation

December 3, 2012

Regional Director, Attn: Rick Amidon U.S. Fish and Wildlife Service, Ecological Services 5600 American Blvd. West, Suite 990 Bloomington, MN 55437-1458

Sent via e-mail to: midwestwindhcp@fws.gov.

### Draft Midwest Wind Energy Multi-Species Habitat Conservation Plan Within Eight-State Planning Area [FWS-R3-ES-2012-N179; FXES11120300000F2-123-FF03E00000]

Dear Sir,

On behalf of the Board of Directors, Staff and the thousands of members and supporters of Black Swamp Bird Observatory (BSBO), I am submitting the following comments and information in response to the U.S. Fish and Wildlife Service (hereinafter "USFWS" or "the Service") request for public comment on the *Draft Midwest Wind Energy Multi-Species Habitat Conservation Plan*, announced in the *Federal Register* on August 30, 2012 in <u>FR Doc. 2012-21498</u> (77 Fed. Reg. 52754) (with the comment period being extended by a subsequent notice published in the Federal Register).

#### **BSBO Supports Bird-Smart Renewable Energy**

We want to be clear: BSBO is not opposed to renewable energy. We understand the need for renewable energy resources to reduce CO2 emissions and help reduce our dependency on the fossil fuels that have pushed our planet to the brink. Wind power can be an important part of the nation's energy portfolio, but wind energy facilities can also kill birds—including eagles, songbirds, and endangered species—through collisions with turbines and power lines, as well as creating collateral damage through loss of habitat as a result of displacement and avoidance. By 2030, there will likely be more than 100,000 wind turbines in the U.S., and these are expected to be killing at least one million birds each year—probably significantly more. Wind energy facilities are also expected to impact almost 20,000 square miles of terrestrial habitat, and over 4,000 square miles of marine habitat by 2030, some of it critical to threatened species. We agree with the American Bird Conservancy's principles of bird-smart wind power, which employs careful siting, operation mitigation, monitoring, and compensation, to reduce and redress any unavoidable bird mortality and habitat loss from wind energy development.

We share in the Service's goal of pursuing adequate, peer-reviewed research *before* finalizing decisions to build wind turbines on or near wildlife sensitive areas, especially on or near critical habitats, such as Important Bird Areas. The contemplated Multi-Species Habitat Conservation Plan (MSHCP) should incorporate a standard, minimum of three (3) year pre-construction study duration to account for annual and seasonal variations in moderate risk areas and should exclude high risk areas from any definition of "covered lands" until adequate research has been completed and analyzed. By excluding high risk areas from the "covered lands" of the MSHCP, the Service would create a level playing field and incentives for everyone to work with the Service to conserve, protect, and enhance fish, wildlife, plants, and their habitats for the continuing benefit of the American people.

#### **About Black Swamp Bird Observatory**

Located in the remnants of the once vast Great Black Swamp region of Northwest Ohio, Black Swamp Bird Observatory (BSBO) is a 501(c)(3) nonprofit dedicated to inspiring the appreciation, enjoyment, and conservation of birds and their habitats through research, education, and outreach. BSBO teams research with education to promote bird conservation.

The Observatory's long-term research projects have shed much light on the mysteries and complexities of the migration of songbirds, raptors, shorebirds, and rails. BSBO data has been used to assist both private and governmental land owners in better managing their properties for migratory bird species. We are fortunate to have many dedicated individuals and businesses that help us to carry out our mission. For example, our Research Director, Mark Shieldcastle, has over 35 years of experience as a Wildlife Biologist. Mr. Shieldcastle has coauthored and contributed to several wildlife management and conservation plans such as the *Beneficial Use Impairments for Wildlife and Wildlife Habitat* section of the *Lake Erie Management Plan*; *The Great Lakes-Upper Mississippi River Regional Plans* for the *National Shorebird Plan* and the *North American Waterbird Plan* and several *Partners-in-Flight* regional plans. More recently, because of his experience in managing and conserving wildlife, and specifically Bald Eagles, Mr. Shieldcastle participated as a Member of the Peer Review Team for the Service's Draft Eagle Conservation Plan Guidance.

BSBO is a vital link in connecting people with nature. We provide opportunities to make a meaningful difference for the environment through our many Citizen Scientist projects, working together to safeguard our natural world for future generations. The Observatory research staff and volunteers have banded more than 500,000 birds in Northwest Ohio and Southeast Michigan, making it the largest operation of its kind in North America. The Observatory's youth education programs are recognized on a national scale. (www.ohioyoungbirders.org). Our Black Swamp Birds & Business Alliance program promotes local businesses to thousands of birders that travel here every year for the spectacular bird watching, raises awareness of the economic value of conserving habitat, and engages business owners in bird conservation issues. Black Swamp Bird Observatory is also the lead organization hosting THE BIGGEST WEEK IN AMERICAN BIRDING ®, an 11-day birding festival that annually has drawn more than 50,000 birders to this area from around the world.

#### Most Important Issue of Concern: Protect Critical Migratory Bird Stopover Habitat

Every spring and fall, many millions of songbirds migrate long distances between nesting grounds in Canada or the northern United States and wintering grounds in the southern U.S. or the tropics. These birds mostly fly at night and spend the days resting and feeding within stopover habitats. In addition to songbirds, many other groups of birds, such as shorebirds, raptors - including a large number of breeding Bald Eagles - waterbirds, and waterfowl, utilize this region. Within North America a few areas of major stopover habitat are critically important to the survival of large numbers of migratory birds. One such region involves a series of sites along the south shore of Lake Erie, in the northwestern part of Ohio known as the Lake Erie Marsh Region, recognized as globally important for migratory birds. (http://www.abcbirds.org/abcprograms/domestic/iba/index.html).

While some research has been done on the effects of wind turbines on migratory birds, most of these studies have been conducted in areas where birds are in active migration, generally flying at heights above the reach of the turbines. Stopover habitat changes the entire equation because birds are dropping in and taking off in these areas. In other words, just because a commercial jetliner's cruising altitude is 30,000 feet, no one would think to put obstructions like wind turbines at the edge of the runway or landing strip. Moreover, the birds are generally arriving and departing during predawn or dusk, when visibility is poor and obstacles present the greatest threat.

To better understand the impacts of wind energy development on migratory stopover habitat, Black Swamp Bird Observatory has been initiating dialogue and participating with diverse stakeholder groups to develop habitat management guides, conservation plans, and monitoring protocols to help landowners make well-reasoned decisions, especially in areas of importance for migratory and nesting birds. Examples include Lake Erie Marsh Stopover Migration Group, *Managing Habitats for Migrating Birds in the Western Lake Erie Basin: A Landowners Guide to Landscaping and Land Management*; Ohio Bird Conservation Initiative, and *All-Bird Conservation Plan for Ohio*. BSBO has also hosted collaborative meetings and provided dozens of presentations about wind energy impacts to wildlife for relevant stakeholders over the past two years.

Degradation of the Lake Erie Marshes and similar habitats is not only a local or regional matter of concern, but decisions about wind energy development are also issues of national importance because of the national and international scope of migratory birds. If for no other reason, the interstate and international scope of migratory birds and other wildlife means that the same regulatory standards must apply to all wind energy projects and be enforced consistently throughout the Region and the United States. Human mistakes, even well-intentioned, at even one small stop along the migration route of millions of birds could lead to rapid declines in the populations of many species of birds and other wildlife.

It would be irresponsible and contrary to the regulatory mandates of the Service to consider any documented stopover habitat as "covered lands" for purposes of any habitat conservation plan given the present level of knowledge of habitat use, habitat needs, ascent and descent, and affects on bird energetics and survival during migration. Recent studies have indicated as much as eighty (80) percent of avian mortality occurs in migration and having secure stopover habitats is indispensable for survival during lengthy migrations. It is time that along with wetlands, woodlands, and grasslands that the air column is recognized as a principle habitat of birds and bats and protected and conserved as such. Stopover habitats are documented in a wide variety of existing conservation initiatives. National, regional, and state avian conservation plans address these types of issues. The Important Bird Area programs of Partners-in-Flight and the National Audubon Society document critical habitats and many states indicate high risk Avian Concern Zones in relation to wind power issues. Areas designated as high risk and/or high importance by any of these initiatives should be excluded from MSHCP "covered lands". A loss of even one stopover site, could result in a domino effect that could take considerable time and money to identify and recover -- if even possible.

From our experiences in Ohio, it took decades of time, effort and money for the recovery of the Bald Eagle from short-sighted and accelerated actions to develop land used by the eagles. For multiple reasons, the Lake Erie Marsh region -- perhaps the greatest and most important stopover habitat in the entire Great Lakes region -- warrants removal from any blanket permitting process. These reasons include, but are not limited to: the only consistent documented stopover site for Kirtland's Warbler; the largest shorebird concentration in the Great Lakes; extensive raptor migration; unparalleled waterfowl concentrations including the American Black Duck and Tundra Swan; and a concentration of nocturnal migrating landbirds of untold millions as demonstrated by bird banding data and bird watcher numbers to the region.

#### The Service Should Incorporate Biological Maps When Designating "Covered Lands"

One way the Service could implement the Midwest MSHCP in a cost-effective manner to all wind energy developers and users, including small-scale turbine operators, would be to utilize Federal or State wildlife data maps that show areas of low, moderate, and high risk to wildlife. Broadly publicizing maps showing developers and the public where Important Bird Areas and other wildlife sensitive areas are located would be a simple way for the public and the Service to quickly identify areas where small-scale turbine projects should be avoided. This is consistent with the Defenders of Wildlife recommended approach that wind energy projects should be "smart from the start" by first pursuing the development of disturbed or degraded lands such as brownfields and former industrial sites and avoiding wilderness quality lands, sensitive wildlife habitat and important natural and cultural resources. Various States may also have more detailed maps. For instance, Ohio has delineated "Avian Concern Zones." *See* Ohio Department of Natural Resources, Division of Wildlife, *Recommendations on Wildlife Surveys for Proposed Wind Energy Facilities*, (Updated 29 March 2011) ("Extensive" wildlife surveying recommended in "those areas within proximity to migratory corridors, staging areas, Audubon Important Bird Areas (IBAs), or the Lake Erie shoreline (3-mile buffer)."): <<u>http://www.dnr.state.oh.us/LinkClick.aspx?fileticket=iJUadEzMbE4%3d&tabid=21467</u>>; Ohio Department of Natural Resources (ODNR), Division of Wildlife, *On-Shore Bird and Bat Preand Post-Construction Monitoring Protocol for Commercial Wind Energy Facilities in Ohio* (May 2009), (http://www.dnr.state.oh.us/LinkClick.aspx?fileticket=loJTSEwL2uE%3d&tabid=21467).

The Service could design and implement the Midwest MSHCP in a cost-effective manner to all wind energy developers and operators, including small-scale turbine projects by utilizing Federal and State wildlife data maps that show areas of low, moderate, and high risk to wildlife. In addition to the pragmatic solutions offered by the Nature Conservancy, the Service may be able to incorporate another wildlife database resulting from another Department of Interior initiative. The Protected Areas Database of the United States (PAD-US)<sup>1</sup> – could be used to show zones of "last resort" for wind energy development. By using tools like this, many stakeholders in the next few years might spend less time and money trying to unsuccessfully develop wind energy projects on "Protected Areas" (or lands not covered by a Habitat Conservation Plan) -- lands dedicated to the preservation of biological diversity and to other natural, recreation and cultural uses, and managed for these purposes through legal or other effective means.

Maps with detailed data on wildlife are also currently being developed by conservation groups, such as American Bird Conservancy (ABC), for use by the wind industry. *See* ABC Wind Development Bird Risk Map, available at: <<u>http://www.abcbirds.org/extra/index\_wind.html</u>>. Pre-construction assessments should always be conducted to confirm whether a particular site presents an especially high risk to birds. Some areas are not going to be suitable for wind development.

As we will discuss further in our comments, conservative designations of "covered lands" for the purposes of the MSHCP for all wind energy projects in the Midwest will minimize the likelihood of irreversible mistakes being made before the impacts of further disturbance to protected species and their shrinking migratory stopover habitats can be adequately assessed. Again, we are in support of alternative energy sources – however, we believe that the Service and the renewable energy industry should proceed with careful consideration of our valuable avian and other wildlife resources.

#### When Making any Initial Designation of "Covered Lands" for the Midwest MSHCP, the Service Should Incorporate Other Pragmatic Approaches to Conserve and Promote Important Habitat

We would prefer to see the Service use many of the principles suggested by organizations such as the Defenders of Wildlife in their "Smart from the Start" approach for renewable energy projects. In the alternative, the Service could adopt an approach that incorporated maps showing areas where wind energy development would pose a high risk to wildlife (e.g., Ohio's Avian Concern Zones) and therefore it would be very reasonable, and probably not wise from a business standpoint to invest time and monetary resources into even considering such a site. *See also* Kiesecker JM, Evans JS, Fargione J, Doherty K, Foresman KR, et al., *Win-Win for Wind and Wildlife: A Vision to Facilitate Sustainable Development*, PLoS ONE, Volume 6, Issue 4, p. e17566 (6 April 2011), available at:

<sup>&</sup>lt;sup>1</sup> "PAD-US will give the American people a full accounting of all of our investments in protected areas — this comprehensive inventory of wilderness, parks and open space is essential for more effective conservation plans, land management and recreational access. Guided by a public-private partnership, PAD-US will collaborate with states, federal agencies, land trusts, local governments, private businesses and other groups to maintain a comprehensive record of America's land conservation accomplishments." — *Ken Salazar, Secretary, U.S. Department of the Interior.* 

<<u>http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0017566</u>> ("the identification of large areas of disturbed lands that are suitable for wind energy development and the targeting of wind energy and transmission line construction in these areas offer the potential to dramatically reduce the wildlife impacts associated with increased wind energy generation.").

The Nature Conservancy, a well respected organization that pursues non-confrontational, pragmatic solutions to conservation challenges by partnering with, among others, businesses and governments, released Great Lakes specific guidelines for the siting and operation of wind energy systems in the Great Lakes region, which were developed in the context of the specific species and systems of the Great Lakes region. Ewert, D.N., J.B. Cole, and E. Grman. 2011. *Wind energy: Great Lakes regional guidelines*. The Nature Conservancy, Lansing, Michigan (hereinafter "Great Lakes Guidelines"), at <<u>http://conserveonline.org/library/wind-energy-great-lakes-regional-guidelines/view.html</u>>.

Before pursuing any wind energy development along the Western Lake Erie Basin, the Observatory and other organizations, including many local business owners, have been calling for a three year moratorium on wind turbine placement within three miles of Lake Erie in Lucas, Ottawa, Sandusky, and Erie Counties until adequate radar studies can be conducted on the potential impacts on birds and bats in our globally significant area. This amount of time should allow for radar and other studies to be conducted and the true risk to birds from turbines in this important migratory stopover location to be evaluated.

The suggestion for a three mile buffer had been based on "Avian Concern Zones" established by Ohio's Department of Natural Resources in conjunction with voluntary guidelines for commercial wind energy developers. Scientific research and analysis of available data by The Nature Conservancy in Ohio and Michigan led to recently completed Great Lakes specific guidelines recommending against commercial wind energy development within five (5) miles of Great Lakes shorelines until further studies can be conducted. The common scientific rationale for both sets of guidance is the fact that many of North America's most critical stopover habitats, and Important Bird Areas designated by National Audubon Society and American Bird Conservancy, are along Great Lakes coasts.

The Nature Conservancy provides specific rationale for recommending against commercial wind energy development within five (5) miles of Great Lakes shorelines. *See e.g.*, Great Lakes Guidelines, p. 1, Table 1 (Siting Recommendations) ("Placing wind turbines, or other large structures, where relatively large numbers of birds occur increases the risk of collision and may have both local and cumulative consequences for bird populations. IBAs are sites with rare and/or threatened bird species, significant species assemblages, and high concentrations of migratory birds.").

Among other things, the Great Lakes Guidelines provide a list of "*Sites That May Be Suitable for Siting of Wind Turbines*." Suitable areas for wind energy development may include:

- Tilled agricultural lands distant ( $\geq$  5 mi) from the Great Lakes waters with no known or suspected species migration stopover sites.
- Industrial lands, especially those distant (> 5 mi) from the Great Lakes waters.
- Brownfields, abandoned or underused industrial and commercial facilities and land available for re-use, especially those distant (> 5 mi) from the Great Lakes waters where birds are less likely to be concentrated.

By clearly designating "covered lands" away from lands which pose a moderate and high risk to birds, wildlife and their habitats, the Service can streamline the process for responsible projects. This approach would also encourage development on lands which will yield the most cost-effective potential. In short, projects sought in low-risk areas should need minimal pre-construction studies, whereas proposed project sites in moderate to high risk areas should always require more serious or

extensive planning -- and therefore not receive the benefits of a streamlined process, which could later be viewed by a court as a failure of the Service to fulfill its duties and responsibilities under laws such as the Migratory Bird Treaty Act (MBTA) and Endangered Species Act (ESA).

# The Service Should Not Even Consider Including Migratory Stopover Habitat in "Covered Lands" Under the Midwest MSHCP Until Well After Adequate, Peer-reviewed Research Can Be Conducted and Properly Analyzed

Black Swamp Bird Observatory (BSBO) hosted a meeting in February of this year to expand a local and regional partnership of agencies, universities, and organizations investigating bird migration and the ramifications of operating wind power turbines near critical stopovers for migratory birds like the marshes, woods, and fields along western Lake Erie. Scientists, wildlife agencies and organizations like BSBO are concerned about the impact of poorly sited wind turbines on northwest Ohio's large population of Bald Eagles, the thousands of swans and other waterfowl that live and feed in the marshes, and the millions of small songbirds that rely on the Lake Erie Marsh region as a "rest stop" before and after crossing our Great Lake during their international travels.

Not enough is known yet about the typical angle of descent and ascent of birds that stop to rest and feed along our shores during migration. While some research has been done on the effects of wind turbines on migratory birds, most of these studies have been conducted in areas where birds are in active migration, with some portion of the population flying at heights above the reach of the turbines. Migration into and away from stopover habitat is more challenging to study because most songbirds are nocturnal migrants landing and taking off during nighttime hours when visibility is poor for the songbirds – and for biologists trying to study them. Adding to the complexities of researching bird behavior, flights into and out of migratory stopovers can be highly variable and affected by environmental factors such as storms. Many wildlife biologists have assumed that if wind turbines were placed too closely to stopover habitat, countless migrating birds would drop in or rise up through the risk zone of turbine blades and associated infrastructure such as transmission lines.

Therefore, the Observatory's Research Director, Mark Shieldcastle, organized and facilitated the meeting of scientists to build on recent studies by individual biologists. The group of experts participating at the meeting at Black Swamp Bird Observatory's office included representatives from U.S. Fish and Wildlife Service, U.S. Geological Survey, Bowling Green State University, University of Toledo, Ohio State University, The Nature Conservancy, Pelee Island Bird Observatory, Winous Point Marsh Conservancy, and Old Bird Inc., a nonprofit organization specializing in acoustic monitoring of avian flight calls.

Many of the participants updated the group on various projects they have been working on in the Great Lakes region. The group then discussed the most effective ways of incorporating additional radar units into a comprehensive migration monitoring program that also includes less expensive research methods such as banding, point counts, and acoustic monitoring. The concerted efforts will help scientists and policy makers to better understand how and where birds and bats are using the airspace along the shores of Lake Erie during their nocturnal migration.

Because so many migratory birds stop along the Lake Erie Shores and Islands Region, nearly 64,000 birdwatchers were estimated to have visited northwest Ohio last Spring alone. Based on post-event data from the 2011 "Biggest Week in American Birding" festival, and a recent Ohio Sea Grant survey, bird-related tourism was estimated to have contributed between 25 to 30 million dollars to the local economy last year. Ultimately the scientific work to be done this year by the diverse group of scientists who met in Oak Harbor earlier this year will begin to answer whether the recommended buffers along Lake Erie are enough to prevent irreparable harm to the recent increase in the area's ecotourism – an economic engine that relies on the continued well being of the large numbers of migratory songbirds, waterfowl, and eagles who also love to visit and live by Ohio's Great Lake.

#### **Additional Information and Comment**

We wish to express our sincere appreciation for the U.S. Fish and Wildlife Service effort in the development of this habitat conservation plan. An issue such as this—politically charged as well as biologically significant—creates a situation that is at once, urgent and of long-term consequences. This issue represents a clear and present danger to federal trust species of migratory birds and bats. As noted in last year's State of the Birds report, "Bird- and wildlife-friendly guidelines and *safeguards* for wind and solar energy, natural gas drilling, and other energy development are *urgently needed to minimize large-scale degradation and fragmentation of habitats and to prevent direct mortality from structures, including transmission lines.*" 2011 State of the Birds, p. 28 (emphasis added).

The Service has recognized the problem and is the appropriate entity to assume the lead in assessing and developing responsible solutions for the people of the United States that these natural resources are held in trust for. The Service should recognize that it would be irresponsible not to act in defense of its regulatory responsibility concerning migratory birds, bats, and other wildlife and their habitats. When designing a streamlined administrative process, the Service should not disregard its congressionally mandated statutory obligations. Doing so would create a serious set of extremely negative consequences to external parties whether it is developers or consumers (not to mention the birds, bats, and other wildlife impacted).

Black Swamp Bird Observatory (BSBO) opposes the addition of any rationale to the MSHCP suggesting the impact of greenhouse gases and climate change should justify disregarding federal laws such as the Migratory Bird Treaty Act, Bald and Golden Eagle Protection Act, and Endangered Species Act. In other words, the Service should ensure its administrative process, and any rationale for implementing the MSHCP, do not effectively create de facto exemptions to statutory prohibitions and penalties – lest the Service risk tarnishing its reputation as a premier wildlife agency.

Along with the concerns and recommendations in this letter, we are also providing the Service with more detailed additional information and comment on certain issues framed by the Service in its Federal Register Notices on this matter. *See* Enclosure (1).

#### **Teaming Research with Education to Promote Bird Conservation**

Thank you for the opportunity to provide comments for consideration by the Service as it finalizes its draft documents, including an environmental impact statement, for the Midwest MSHCP. Black Swamp Bird Observatory shares in the collective goal of developing sources of renewable energy and we offer our commitment to helping relevant stakeholders achieve the right balance of expanding wind energy production and maintaining and protecting the Midwest's wildlife and their habitats - especially those along the coasts of the Great Lakes.

Please contact me via the staff at BSBO or via e-mail (<u>MarkSkolnicki@bsbo.org</u>) if you have any questions. We look forward to working together in the future on similar initiatives.

Sincerely,

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Mark W. Skolnicki, Esq. Board Member

Enclosure