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South Carolina	Georgia	Florida	Puerto Rico	Virgin Islands		

July 24, 2015

Public Comments Processing
Attention: FWS-HQ-MB- 2014-0067
Division of Policy and Directives Management
U.S. Fish and Wildlife Service
5275 Leesburg Pike, MS-PPM
Falls Church, VA 22041- 3803

Submitted via regulations.gov

Regarding: Incidental Take of Migratory Birds
Docket No. FWS-HQ-MB-2014-0067

The Atlantic Flyway Council (Council) is a coalition of 17 states, Puerto Rico, 1 territory, and 6 Canadian provinces that works in conjunction with their respective federal governments to manage migratory birds and their habitats in eastern North America. Council members, cooperating with various federal agencies and non-governmental partners, deliver many of the conservation programs for migratory birds over a significant portion of the eastern seaboard of North America. The Council shares the concern of the U.S. Fish and Wildlife Service (Service) with increasing impacts of human-caused mortality of migratory birds and applauds any effort to proactively address potential sources of incidental take.

The Atlantic Flyway Council would like to provide the following comments, concerns and recommendations regarding the Notice of Intent to prepare a Programmatic Environmental Impact Statement (PEIS) and the specific regulations or policies that may be developed to address the incidental take of bird species protected under the Migratory Bird Treaty Act (MBTA).

Capacity: State fish and wildlife agencies vary greatly in their regulatory and enforcement authorities and responsibilities, in particular with regards to the MBTA. Some state agencies do not have the authority at the state level to issue incidental take permits and, in many of these instances, legislative action would be required to obtain additional authority. Any permitting process put into place has the potential to push the issuance, administration, and enforcement of permits down to the state level. This would place an undue burden on state agencies to issue, monitor, and enforce incidental take permits at a time when most state agencies are already experiencing staffing capacity issues. This effect on state agency capacity should be considered when developing approaches to permitting actions or alternative pathways.

Lack of Information for Permitting and Mitigation Decisions: Population data and trends for species of interest may need to be considered as part of a strategy to address incidental take, including mitigation. This information may not be available or may not be current for many species, and it will be important to consider data in a biologically meaningful geographic context. As part of this process, information needs should be clearly identified along with a strategy to address those needs. Data will need to be collected, managed, and made available in order to improve the process through adaptive management.

Consideration of Local/Regional Populations and Protection Status: Any limits on incidental take or required mitigation and compensatory measures should be specific to biogeographical units such as Bird Conservation Regions (BCR) so that they reflect the population status and trends of all species that occur in the BCR across the seasons. A decision framework for alternatives to minimize incidental take should include consideration for the conservation status of a species or group of species, such as Birds of Conservation Concern and those species with state legal protections. Strategies may be limited by state regulations related to threatened and endangered species and their habitats.

Coordination with States: Due to the factors listed above, it is imperative that the Service coordinate closely with state agencies during the development of the PEIS. Close coordination between the Service and state agencies is crucial to ensure that state agency roles, responsibilities, and regulatory limitations are considered in any proposed incidental take permitting process, whether it is regarding general or individual permitting, Memoranda of Understanding, or development of voluntary guidance. State agencies should also be involved in the discussion of the scope of mitigation options (including permit fees) to ensure that state requirements are met.

Thank you for your attention and for considering our comments and requests. We look forward to working with the Service to address impacts of incidental take on migratory birds as the PEIS process moves forward.

Sincerely,



Diane Eggeman, Chair
Atlantic Flyway Council



July 27, 2015

Michael J. Bean
Principal Deputy Assistant Secretary for Fish Wildlife and Parks
U.S. Department of the Interior

Public Comments Processing
FWS-HQ-MB-2014-0067
Division of Policy and Directives Management
U.S. Fish and Wildlife Service
5275 Leesburg Pike, MS-PPM
Falls Church, VA 22041-3803

Dear Principal Deputy Bean,

American Bird Conservancy commends the U.S. Fish and Wildlife Service (FWS) for announcing its intention to prepare a programmatic environmental impact statement to evaluate the effects of creating a permitting system to reduce the incidental take of migratory birds. There have been great advances in our knowledge for conserving birds, and this proposed process can put that information to work and make best management practices, standard practices.

ABC petitioned FWS in 2011 and again in February 2015 for wind industry regulatory action that would reduce the 1.4-2 million bird deaths expected to be caused by the industry when it reaches projected 2030 build out levels at 20% of electrical generation. This could be even higher, perhaps reaching 5 million if the projection goes to 35% by 2050.

A key provision of the ABC petition urged FWS to establish a permitting process that would significantly improve the protection of birds covered by the MBTA and would afford the wind industry a degree of regulatory and legal certainty that cannot be provided in the absence of such a process. The petition is included as part of our comment.

The Notice of Intent includes potential options to establish incidental take authority including permitting sectors and projects that have known impacts to migratory birds such as oil and gas, communications towers, and power lines and towers. For each of these examples included in the notice, there are already available technologies and proven methods that can reduce bird mortality. We are generally supportive of these approaches and will include

recommendations on how to establish an effective and fair permitting system for sectors and projects.

ABC believes that permitting should be applied only to industrial infrastructure that creates a direct but solvable hazard for birds. A key challenge for FWS staff will be to develop and verify mitigation techniques and best management practices, and to develop siting requirements to ensure projects are not constructed in inappropriate areas. Additional industries can be added later as more information becomes available on impact and effective mitigation.

Several other proposed incidental take authorizations are more problematic and deserve careful consideration. The first of these would grant other federal agencies take authority for their management activities. We believe the current system of FWS oversight provides for expert and independent review of wildlife and habitat impacts and is best suited to make take determinations.

The last type of take authorization would rely on development of voluntary guidance for specific industry sectors. The U.S. Fish and Wildlife Service's Land-Based Wind Energy Guidelines are an existing example of this approach, and to date, it has been largely ineffective at mitigating bird mortality or ensuring proper siting of new developments. ABC recently released [a study](#) finding that tens of thousands of turbines have already be sited in sensitive bird habitats.

In a recent Federal Register report, the FWS itself recently recognized this weakness, stating that the current guidelines, in some cases, have "...not been successful in preventing wind energy facilities from being constructed in areas of high risk to wildlife." They further stated that, "we are currently in the process of evaluating the efficacy and use of the Guidelines and the Service is considering regulatory options."

Appropriate siting is the most effective known form of mitigation for wind energy development. Areas that should be avoided include core breeding areas, migratory bottlenecks and sensitive habitats, such as wetlands. ABC hopes that FWS moves forward with the modifications necessary to protect our ecologically-important birds and bats, which are already under tremendous pressure from other anthropogenic factors, including introduced predators and diseases.

Sector Specific Permits

Sector specific permitting may be suitable for some types of static infrastructure, such as pipelines, transmission lines, and communications towers, by specifying national design and operational standards and parameters for mitigation that would be tailored by region for weather, siting, affected species and other considerations. These permits should be limited to projects not only of a certain sector type, but also to a certain size and footprint, with an

Environmental Assessment at minimum required for those which exceed the parameters. Projects proposed for ultra-sensitive areas might require an EIS.

This permit could be used to specify potentially affected species and permitted take, not including species of conservation concern in each region, unless additional analysis is prepared addressing those species. A key challenge for agency scientists will be to assess cumulative take, and to determine a maximum take threshold that would trigger additional environmental review for the permit. Reporting of take should be required, along with a separate on-line system set up for citizen reporting of potential take or violations of best management practices.

Oil and Gas permit authorizations would be appropriate for routine activities, such as managing waste pits and heater/treaters, with adequate design and operation standards.

Communications Towers would be an appropriate sector to permit with standards based on existing communication tower guidelines to avoid use of guy wires that cause collisions and to use lighting that does not attract birds. Existing towers should be permitted to require the installation of new lighting systems which prevent collisions, and save electricity, within a reasonable time period of five years.

Power line and tower permits may be appropriate for local installations outside of critical habitats for species of conservation concern, but large-scale transmission projects should be required to apply for an individual permit with separate NEPA review.

Other forms of infrastructure such as buildings, industrial-scale solar arrays, oil rigs and other large lighted structures such as LNG terminals onshore may be worth analyzing for possible inclusion in a general permitting system to reduce incidental take. This is a class of infrastructure that could be efficiently regulated by specifying appropriate materials, design, and lighting to make structures safer for birds. The guidelines for the permits could be tailored by geography and potentially affected species, and limited to structures of a certain size, height, type (e.g. bridges, oil rigs) and or location, and only to new construction or major renovations/retrofitting.

Project Specific Permits, Siting and Mitigation

Individual permits need site/project specific NEPA review that builds on the Programmatic Review and should be required for all activities of a “non-static” nature (e.g. wind energy) and for “static” infrastructure that exceeds certain parameters of size/footprint/impact or geographic location (e.g. inter-state transmission lines). Permits should be subject to full NEPA review (EA/EIS), establish take thresholds, have appropriate design or operational requirements, and specify what form necessary mitigation and/or compensation will take.

Mandatory project development guidelines subject to NEPA review can be developed with specific project siting, development and operational standards, and mitigation requirements. Given the financial commitment necessary to develop large-scale wind energy projects, and importance of legal certainty for investors, wind energy developers can be asked to pay a reasonable permit processing fees which would reimburse the agency for its time and expertise as well as make compensatory payments to mitigate for losses of migratory birds from take that cannot be avoided.

Authorizing Other Federal Agencies to Have Take Authority

We are concerned about granting other federal agencies take authority for their management activities and believe FWS should retain take authority and evaluate effectiveness of best management practices. FWS staff need to establish a baseline for current take to adequately evaluate proposals for additional take by other federal agencies.

Of particular concern are analyses of cumulative take on a local, regional and national basis. Evaluating on a project-by-project basis is simply not sufficient as the combined losses from numerous projects of various kinds is cumulative, and could easily result in population-level impacts.

Long-line fisheries permits issued by National Marine Fisheries Service, require conservation measures to avoid incidental take of migratory birds. This requirement was proposed by NMFS and approved by FWS. Similarly, operating permits issued by other federal agencies for a variety of activities that may result in accidental take, could require best management practices approved by FWS.

Voluntary Guidelines

We do not see how a take permitting system can be based on voluntary standards that may or may not be complied with. Like the bad idea of voluntary stop signs, even 90% adherence is not enough.

Compliance with the voluntary Land-based Wind Energy Guidelines has not yet been documented or systematically analyzed for its effectiveness in informing siting or in reducing bird kill. There are plenty of examples of developers not following the guidelines or projects being built in defiance of FWS recommendations (e.g., Camp Perry, Lake Erie Business Park, Garden Corners), especially when located on private land. Being located on private land does not, however, excuse developers from their responsibility to avoid harming federally-protected wildlife.

Compensatory Mitigation

To achieve desired population levels of migratory bird species affected by incidental take, compensatory mitigation should be considered to fund conservation programs such as the

Neotropical Migratory Bird Conservation Act. Such efforts have proven effective at protecting and restoring key habitat for migratory birds. A key challenge will be developing a fair formula to assess a cost for take losses weighed to give species of conservation concern, and endangered species increased compensation. For example, the state of Nebraska has developed a quantitative model to calculate compensation for birds and bats lost at wind energy facilities.

Thank you for considering these comments. We look forward to working with the Service to reduce the incidental take of migratory birds.

Sincerely,

A handwritten signature in cursive script, reading "George H. Fenwick". The signature is written in dark ink and is positioned above the printed name and title.

George H. Fenwick
President
American Bird Conservancy

Responses to Questions

(1) The approaches we are considering for authorizing incidental take;

Please see our comments above.

For information about the ineffectiveness of voluntary guidelines for wind energy development please see the attached Updated Rulemaking Petition to the U.S. Fish & Wildlife Service for Regulating the Impacts of Wind Energy Projects on Migratory Birds, pages 51 to 58.

For information on the potential benefits of permitting wind energy development is available in the attached Updated Rulemaking Petition to the U.S. Fish & Wildlife Service for Regulating the Impacts of Wind Energy Projects on Migratory Birds, pages 73 to 96.

(2) The specific types of hazards to birds associated with particular industry sectors that could be covered under general permits;

For information on wind energy hazards to birds, please see the attached Updated Rulemaking Petition to the U.S. Fish & Wildlife Service for Regulating the Impacts of Wind Energy Projects on Migratory Birds, pages 10 to 51.

The American Bird Conservancy Guide to Bird Conservation has information on bird collisions with buildings and glass, communications towers, and wind turbines, pages 316 to 320, and oil on pages 338-339.

(3) Potential approaches to mitigate and compensate for the take of migratory birds;

To achieve desired population levels of migratory bird species affected by incidental take, compensatory mitigation should be considered to fund conservation programs such as the Neotropical Migratory Bird Conservation Act. Such efforts have proven effective at protecting and restoring key habitat for migratory birds. A key challenge will be developing a fair formula to assess a cost for take losses weighed to give species of conservation concern, and endangered species increased compensation. For example, the state of Nebraska has developed a quantitative model to calculate compensation for birds and bats lost at wind energy facilities.

(5) Specific requirements for NEPA analyses related to these actions;

Individual permits with site/project specific NEPA review that build on the Programmatic Review where appropriate should be required for all activities of a “non-static” nature (e.g. wind energy) and for “static” infrastructure that exceeds

certain parameters of size/footprint/impact or geographical location (e.g. Inter-state transmission lines). Permits should be subject to full NEPA review (EA/EIS), establish take thresholds, have appropriate design or operational requirements, and specify what form necessary mitigation and/or compensation will take.

Mandatory project development guidelines subject to NEPA review can be developed with specific project siting, development and operational standards, and mitigation requirements. Given the financial commitment necessary to develop large-scale wind energy projects, and importance of legal certainty for investors, wind energy developers can be asked to pay a reasonable permit processing fees which would reimburse the agency for its time and expertise as well as make compensatory payments to mitigate for losses of migratory birds from take that cannot be avoided.

Of particular concern are analyses of cumulative take on a local, regional and national basis. Evaluating on a project-by-project basis is simply not sufficient as the combined losses from numerous projects of various kinds is cumulative, and could easily result in population-level impacts.

A sample wind permitting system is available in the attached Updated Rulemaking Petition to the U.S. Fish & Wildlife Service for Regulating the Impacts of Wind Energy Projects on Migratory Birds, pages 101 to 107.

(6) Whether the actions we consider should distinguish between existing and new industry facilities and activities;

Where feasible, ABC urges that existing sources of incidental take be modified or retrofitted to reduce the loss in a reasonable period of time. Lighting on communications towers and other large structures is one area where new options exist that can both reduce bird mortality, and reduce energy consumption.

(7) Considerations for evaluating the significance of impacts to migratory birds and to other affected resources, such as cultural resources;

Given the decline of many migratory bird species as documented in State of the Birds and other reports, it is necessary to eliminate, reduce and mitigate sources of incidental mortality as part of a broader conservation strategy. As our comments indicate, we believe it is necessary for the agency to assess cumulative impacts.

“Of particular concern are analyses of cumulative take on a local, regional and national basis. Evaluating on a project-by-project basis is simply not sufficient as the combined losses from numerous projects of various kinds is cumulative, and could easily result in population-level impacts.”

(8) Information regarding natural resources that may be affected by the proposal;

For information on natural resources impacts, please see the attached Updated Rulemaking Petition to the U.S. Fish & Wildlife Service for Regulating the Impacts of Wind Energy Projects on Migratory Birds, pages 10 to 51.

(10) The benefits provided by current Federal programs to conserve migratory birds and the additional benefits that would be provided by a program to authorize incidental take;

Federal programs such as the Neotropical Migratory Bird Conservation Act (NMBCA), the Joint Venture Partnerships, State Wildlife Grants, and The North American Wetlands Conservation Act all are important to advance bird conservation. The NMBCA in particular could play a more significant role in regard to potential mitigation. Securing habitat in wintering grounds and key stop over areas is one strategy to consider when trying to compensate for population losses from incidental take.



Shaping the future for birds

The Honorable Sally Jewell
Secretary
U.S. Department of the Interior
1849 C Street, N.W.
Washington, D.C. 20240

February 12, 2015

Dear Secretary Jewell:

American Bird Conservancy (ABC) is respectfully submitting this updated Petition for Rulemaking on “Regulating the Impact of Wind Energy Development on Migratory Birds”, including new information that is directly-relevant to our original request. More specifically, we have added examples of new science and prototype regulatory mechanisms that add further credence and justification for our original proposal to advance the protection of migratory birds under the Migratory Bird Treaty Act.

In the Services’ March 22, 2013 letter responding to our original request, it was noted that the Service would “compile information from wind industry facilities that are implementing” the voluntary Wind Energy Guidelines, and that this would provide “...data in order to better assess the potential impact of wind energy facilities on migratory bird populations.” It also states that the Service hopes “that ABC will continue to provide its valuable input into these efforts.” This updated petition is intended to continue that process.

In preparing the petition, ABC was assisted by Meyer Glitzenstein & Crystal, a Washington D.C.-based public interest law firm specializing in environmental and wildlife laws. In this Petition, ABC urges FWS to promulgate regulations establishing a mandatory permitting system for siting, constructing, and operating wind energy projects and mitigating of their impacts on migratory birds.

The Petition first sets forth the factual basis establishing the need for such a system, i.e., the rapid proliferation of wind energy projects and the significant adverse effects this development is having and will increasingly have on migratory birds, particularly those of conservation concern. Then the Petition describes the legal framework under which FWS has more than sufficient authority to promulgate MBTA regulations specifically aimed at encouraging the development of wind power in a manner that ameliorates, to the extent practicable, the adverse effects on migratory birds. Further, the Petition examines in detail the several benefits of the proposed permitting system. Finally, ABC offers specific regulatory language that would accomplish the objectives identified in this Petition.

The Fish and Wildlife Service’s principal reason for rejecting the original petition was that the Wind Energy Guidelines had just been issued and the Service wanted to see how they would work. We now have had sufficient experience to know that they are not adequate to address the growing problem of bird and bat mortality.



Shaping the future for birds

Thank you for your consideration. We hope to hear from you soon.
Sincerely,

A handwritten signature in black ink, which appears to read "Michael Hutchins". The signature is fluid and cursive, with a long horizontal stroke at the end.

Michael Hutchins, Ph.D.
National Coordinator, Bird Smart Wind Energy Campaign

Cc: D. Ashe

**Updated Rulemaking Petition to the U.S. Fish & Wildlife Service for
Regulating the Impacts of Wind Energy Projects on Migratory Birds**



Petitioner: AMERICAN BIRD CONSERVANCY

February 12, 2015

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GLOSSARY

ABC	American Bird Conservancy
ABPP	Avian and Bat Protection Plan
APA	Administrative Procedure Act, 5 U.S.C. § 500 <u>et seq.</u>
AWEA	American Wind Energy Association
AWWI	American Wind Wildlife Institute
BCC	Birds of Conservation Concern
BGEPA	Bald and Golden Eagle Protection Act, 16 U.S.C. §§ 668-668c
BMPs	Best Management Practices
BOEM	U.S. Bureau of Ocean Energy Management
BLM	U.S. Bureau of Land Management
DOE	U.S. Department of Energy
DOI	U.S. Department of Interior
ESA	Endangered Species Act, 16 U.S.C. § 1531 <u>et seq.</u>
FAA	Federal Aviation Administration
FACA	Federal Advisory Committee Act, 5 U.S.C. App. 2 §§1-16
FOIA	Freedom of Information Act, 5 U.S.C. § 552
FWS or Service	U.S. Fish and Wildlife Service
GAO	U.S. Government Accountability Office
GW	Gigawatt
HCP	Habitat Conservation Plan
ITP	Incidental Take Permit
MBTA	Migratory Bird Treaty Act, 16 U.S.C. § 703 <u>et seq.</u>
MOU	Memorandum of Understanding
MW	Megawatt
OCS	Outer Continental Shelf
Corps	U.S. Army Corps of Engineers

EXECUTIVE SUMMARY

ABC is respectfully submitting this updated Petition for Rulemaking on “Regulating the Impact of Wind Energy Development on Migratory Birds”, including new information that is directly-relevant to our original request. More specifically, we have added examples of new science and prototype regulatory mechanisms that add further credence and justification for our original proposal. In the Services’ March 22 letter responding to our request, it was noted that the Service would “compile information from wind industry facilities that are implementing the WEG,” and that this would provide “...data in order to better assess the potential impact of wind energy facilities on migratory bird populations.” It also states that the Service hopes “that ABC will continue to provide its valuable input into these efforts.” This updated, strengthened petition is intended to continue that process.

Pursuant to the Administrative Procedure Act (“APA”), 5 U.S.C. § 553(e), and the implementing regulations of the U.S. Department of the Interior (“DOI”), 43 C.F.R. Pt. 14, American Bird Conservancy (“ABC”), hereby submits this Petition for Rulemaking to the U.S. Fish and Wildlife Service (“FWS” or “Service”), requesting the agency to promulgate regulations governing the impacts of wind energy projects on migratory birds. In particular, ABC petitions FWS to establish a permitting scheme that would regulate the impacts of wind power projects on migratory birds. As discussed in this Petition, such a scheme is clearly authorized by the Migratory Bird Treaty Act (“MBTA”), 16 U.S.C. § 703 et seq., would significantly improve the protection of birds covered by the MBTA, and would afford the wind power industry a degree of regulatory and legal certainty that cannot be provided in the absence of such a scheme.

ABC recognizes that properly sited and operated wind energy projects may be an important part of the solution to climate change, a phenomenon that indisputably poses a rapidly growing threat to species and ecosystems. However, such projects also pose a serious threat to various species of birds, including large birds of prey and raptors such as the Bald Eagle, Golden Eagle, Ferruginous Hawk, Swainson’s Hawk, American Peregrine Falcon, Short-eared Owl, and Flammulated Owl; endangered and threatened species such as the California Condor, Whooping Crane, Snail Kite, Marbled Murrelet, Hawaiian Goose, and Hawaiian Petrel; and other species of special conservation concern such as the Bicknell’s Thrush, Sprague’s Pipit, Cerulean Warbler, Oak Titmouse, Lewis’s Woodpecker, Brewer’s Sparrow, Long-billed Curlew, Bay-breasted Warbler, and Blue-winged Warbler. These species are impacted by existing wind energy projects and threatened by potential projects primarily through collision with wind turbines and associated power lines, and through loss or modification of essential habitat.

Based on the operation of approximately 22,000 turbines, FWS estimated in 2009 that at least 440,000 birds were killed each year by wind turbines. However, since then additional peer-reviewed studies (Smallwood, 2012) have expanded that estimate to 573,000. By 2030, there are expected to a ten-fold increase in the number of wind turbines in the United States and these are expected to kill at

least 1.4 million birds each year (Loss et al., 2012), a number that ABC believes will be exceeded significantly, especially because these estimates do not include mortality at associated power lines and towers, which are also undergoing massive expansion. Further, wind energy projects are also expected to impact almost 20,000 square miles of terrestrial habitat, and another 4,000 square miles of marine habitat.

The MBTA, Endangered Species Act (“ESA”), 16 U.S.C. § 1531 *et seq.*, and the Bald and Golden Eagle Protection Act (“BGEPA”), 16 U.S.C. §§ 668-668c, prohibit “take” of migratory birds, endangered and threatened species, and Bald and Golden Eagles. 50 C.F.R. § 10.12 (implementing regulations defining the term “take” to include to wound or kill, or to attempt to wound or kill). Bald and Golden Eagles are protected under both MBTA and BGEPA, and many species listed under the ESA are also protected under the MBTA, such as Whooping Cranes, California Condors, Least Terns, Kirtland’s Warblers, Northern Aplomado Falcons, Roseate Terns, and Piping Plovers. While the ESA and BGEPA provide mechanisms for FWS to regulate, and in some instances authorize, take of endangered and threatened species and Bald and Golden Eagles respectively, at present no such comparable mechanism exists under the MBTA to authorize incidental take by wind power projects.

This reality is particularly significant for the wind industry because wind energy projects will inevitably take birds protected under the MBTA. In fact, because it is virtually impossible to operate a wind energy project without killing or injuring at least some migratory birds, most wind energy projects that are already in operation are in ongoing violation of the take prohibition of the MBTA. In addition, FWS itself is aware of other projects that are being planned that will also take migratory birds in violation of federal law, many of which are located in or near Important Bird Areas (IBSs) or in major migratory bottlenecks, such as the south shore of Lake Erie.

FWS has prepared “voluntary” Guidelines in an attempt to address the impacts of wind energy projects on migratory birds instead of imposing mandatory regulatory obligations on wind energy projects to anticipate and avoid such impacts before they occur. By allowing the industry itself to make siting decisions in this manner, FWS has permitted widespread disregard for legal mandates the Service is entrusted to enforce. Further, while the Guidelines essentially treat the agency as a quasi-permitting authority requiring it to evaluate extensive information and provide advice to the developers, unlike a formal permitting system, FWS neither obtains appropriate permit fees (which typically provide some amount of resources and revenue to the agency), nor does the wind industry obtain unequivocal regulatory certainty for incidental take of migratory birds.

A recent study contracted by ABC and conducted by Mississippi State University has shown the extent of this disregard (http://www.abcbirds.org/abcprograms/policy/collisions/wind_siting.html; Weingert et al. In prep, *Wildlife Society Bulletin*). The study overlaid the ABC Wind Risk Assessment Map, which

identifies important bird conservation areas, such as wildlife refuges, IBAs, major migratory routes and other important habitats (e.g., Whooping Crane migratory corridor, critical sage grouse habitat) with the USGS and FAA maps showing existing and planned wind turbines, respectively. Nearly 30,000 wind turbines have already been installed within areas identified as being of high importance to federally-protected birds in the United States, with more than 50,000 additional turbines planned for construction in similar areas. These include more than 18,000 in the migration corridor of the Whooping Crane-one of the nation's rarest and most spectacular birds, 1,800 in Greater Sage-Grouse breeding strongholds, and nearly 1,400 in locations deemed to be of the most critical importance to conserving the nation's birdlife. This clearly indicates that the voluntary guidelines are not working to protect our public trust resources, especially since proper siting is probably the best and most effective form of mitigation.

Thus, as explained in this Petition, ABC supports "Bird-Smart" wind energy that employs careful siting, operation, construction, effective mitigation, transparent and standardized bird death monitoring, and compensation criteria, designed to reduce and redress any unavoidable bird mortality and habitat loss. ABC recognizes the need for renewable energy development and will support the wind industry in its efforts to extend the federal tax grant and production tax credit for wind energy production, if FWS puts in place a system that ensures ongoing compliance with the MBTA along with other wildlife protection laws.

In this Petition, ABC urges FWS to promulgate regulations establishing a mandatory permitting system for siting, constructing, and operating wind energy projects and mitigating of their impacts on migratory birds. The Petition first sets forth the factual basis establishing the need for such a system, i.e., the proliferation of wind energy projects and the significant adverse effects this development is having and will increasingly have on migratory birds, particularly those of conservation concern. Then the Petition describes the legal framework under which FWS has more than sufficient authority to promulgate MBTA regulations specifically aimed at encouraging the development of wind power in a manner that ameliorates, to the extent practicable, the adverse effects on migratory birds. Further, the Petition examines in detail the several benefits of the proposed permitting system. Finally, ABC offers specific regulatory language that would accomplish the objectives identified in this Petition.

A. PETITIONER: AMERICAN BIRD CONSERVANCY

This Petition for Rulemaking is being submitted by ABC. In preparing the petition, ABC was assisted by Meyer Glitzenstein & Crystal, a Washington D.C.-based public interest law firm specializing in environmental and wildlife laws.¹

¹ More information about Meyer Glitzenstein & Crystal is available at <http://www.meyerglitz.com/>.

Petitioner ABC is a 501(c)(3) non-profit organization whose mission is to conserve native birds and their habitats throughout the Americas. It achieves this by safeguarding the rarest bird species, restoring habitats, and reducing threats to bird species. ABC is the only U.S.-based group with a major focus on bird habitat conservation throughout the entire Americas. ABC has more than 8,000 individual members and 30,000 constituents. ABC's members, supporters, and activists enjoy viewing, studying, and photographing migratory birds. Some of its members and activists routinely observe migratory birds in states such as California, New York, Texas, Pennsylvania, Washington and Oregon, where rapid wind energy development poses a serious threat to such birds.

ABC is a leading organization working to reduce threats to birds from habitat destruction; from collisions with buildings, towers, and wind turbines; and from toxins such as hazardous pesticides and lead. ABC uses a variety of mechanisms to achieve these objectives including scientific research and analysis; advocating for bird conservation at the local, state, regional, and federal levels; forming bird conservation partnerships; and pressing for meaningful regulatory changes to address such threats effectively through various means, including rulemaking petitions and litigation. See, e.g., ABC v Fed. Commc'ns Comm'n, 516 F.3d 1027 (D.C. Cir. 2008) (in response to ABC's review petition seeking protection of migratory birds from collisions with communications towers, the court vacated a part of the order for violation of the National Environmental Policy Act ("NEPA"), 42 U.S.C. § 4321 *et seq.*). ABC's staff includes more than 20 scientists with expertise in migratory birds, over a dozen of whom have doctoral degrees. ABC's scientists have published in many reputed journals.²

ABC launched its "Bird-Smart Wind Program" to address the threats to birds and their habitats from wind energy development. ABC's Wind Program works to eliminate threats to birds and conserve habitat through the implementation of "Bird-Smart Wind Principles."³ These Principles recognize that "bird-smart" wind energy is an important part of the solution to climate change. Bird-smart wind energy employs careful siting, operation, construction, mitigation, bird monitoring, and compensation criteria, designed to reduce and redress any unavoidable bird

² These journals include the Antarctic Journal of the United States, The Auk, Biodiversity Conservation, Biological Invasions, Biological Sciences, Bird Conservation International, Boletín SAO, Canadian Field Naturalist, Chelonian Research Monographs, Colonial Waterbirds, Condor, Cotinga, Ecological Applications, Ecology, Emu, Florida Field Naturalist, International Zoo Yearbook, Journal of Avian Medicine and Surgery, Journal of Field Ornithology, Journal of Raptor Research, Journal of Wildlife Diseases, Journal of Wildlife Management, Molecular Ecology, Neotropical Birding, North American Bird Bander, Oecologia, Ornitología Columbiana, Ornitología Neotropical, Oryx, Pacific Conservation Biology, Proceedings of the National Academy of Science, Proceedings of the Western Foundation of Vertebrate Zoology, Wilson Bulletin, Wilson Journal of Ornithology, and Zoo Biology.

³ ABC's "Bird-smart Wind Principles" are available at http://www.abcbirds.org/abcprograms/policy/collisions/wind_policy.html

mortality and habitat loss. A key element of ABC's Bird-Smart Wind Principles is to work with FWS and others to establish appropriate mandatory federal standards for the siting, construction and operation of wind facilities. Thus, ABC believes that birds and wind power can co-exist, and that wind power can be "bird-smart," if the wind industry is held to mandatory standards that protect birds. More than 60 conservation groups, scientific societies, and businesses have endorsed ABC's Bird-Smart Wind Principles.⁴

ABC's experts have been extensively involved in studying and analyzing the impacts of wind energy, and its involvement in this issue predates the formation of the Wind Turbines Guidelines Federal Advisory Committee ("Wind FAC" or "Committee") established by DOI in 2007. For example, in 2005 ABC submitted comments on the Interim Guidance on Avoiding and Minimizing Impacts from Wind Energy prepared by FWS. In 2007, ABC's former Director of Conservation Advocacy, Dr. Michael Fry, testified before a Congressional subcommittee on the wildlife impacts of improperly sited wind energy projects.

Most recently, ABC has been actively involved in analyzing the ongoing preparation by FWS of voluntary guidelines for land-based wind energy projects. In this regard, ABC has attended every Wind FAC meeting, and has commented on each draft of the guidelines and the Wind FAC's recommendations.⁵ ABC has also submitted comments during federal regulatory processes applicable to wind energy projects, including the FWS Draft Eagle Conservation Plan Guidance and more recent Eagle Scoping Process, the Great Plains Wind Energy Habitat Conservation Plan (scoping), the Desert Renewable Energy Conservation Plan (scoping), and the Mid-Atlantic Regional Environmental Assessment for Wind Leasing Areas (Delaware, Maryland, New Jersey, Virginia). ABC has also commented on individual wind projects, such as Mill Creek (MO), Choke Cherry-Sierra Madre (WY), Shiloh IV (CA), Great Bay (MD), Garden Peninsula (MI), Mill Creek (MO), Kaheawa Wind II (Maui, Hawaii), Kawaihoa Wind (Oahu, Hawaii), Icebreaker (offshore Lake Erie, OH), Lake Erie Business Park (OH), Camp Perry (OH), and Baryonyx (offshore Texas).⁶

ABC submits this Petition for Rulemaking to FWS pursuant to the APA, 5 U.S.C. § 553(e), and implementing regulations of the DOI, 43 C.F.R. Pt. 14, requesting the agency to expeditiously promulgate regulations establishing a permitting scheme for proper siting, construction, and operation of wind energy projects to reduce and redress bird mortality and habitat loss. Pursuant to

⁴ A list of these organizations is available at http://www.abcbirds.org/abcprograms/policy/collisions/wind_letters.html

⁵ ABC's comments on all iterations of the Wind Guidelines and the Eagle Guidance are available here: http://www.abcbirds.org/abcprograms/policy/collisions/wind_letters.html

⁶ ABC's comment letters are available here: http://www.abcbirds.org/abcprograms/policy/collisions/wind_letters.html

43 C.F.R. § 14.2, this Petition for Rulemaking provides the text of the proposed rule as well as detailed reasons in support of the Petition. ABC requests that the Petition be given prompt consideration as required by applicable regulations. 43 C.F.R. § 14.3. As an initial step, ABC requests that notice of this Petition be published in the Federal Register for public comment. 43 C.F.R. § 14.4.

B. SPECIES INFORMATION

Migratory birds protected under the MBTA, 16 U.S.C. § 703 et seq., are facing serious threats and many are in rapid decline. About 30% of the birds protected by the MBTA are officially recognized by FWS as being in need of particular protection, including approximately 75 endangered and threatened species, and more than 240 species that are listed by FWS as Birds of Conservation Concern (“BCC”). See FWS, Birds of Conservation Concern (2008);⁷ see also FWS, Summary of Listed Species Listed Populations and Recovery Plans (Nov. 21, 2011).⁸ FWS is statutorily required to designate and maintain the BCC list pursuant to a 1998 amendment to the Fish and Wildlife Conservation Act of 1980, 16 U.S.C. § 2901 et seq., which requires the agency to “identify species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act of 1973.” Id. § 2912(a)(3). Only a handful of birds designated as BCC are not protected by the MBTA. Thus, nearly 1/3 of the birds protected by the MBTA are either listed under the ESA, 16 U.S.C. § 1531 et seq., or designated as in danger of being listed if action to prevent listing is not taken.

Further, some common migratory birds that have not been officially designated as being of conservation concern are experiencing sharp population declines. According to the National Audubon Society, “[s]ince 1967 the average population of the common birds in steepest decline has fallen by 68 percent; some individual species nose-dived as much as 80 percent. All 20 birds on the national Common Birds in Decline list lost at least half their populations in just four decades.” Nat’l Audubon Soc’y, Common Birds in Decline.⁹ These declines indicate that birds in the United States are facing serious threats and potential extinction. For example, the fate of the Passenger Pigeon – once the most abundant bird in North America, with a population estimated in the billions, which

⁷ Available at <http://www.fws.gov/migratorybirds/NewReportsPublications/SpecialTopics/BCC2008/BCC2008.pdf>. (last visited Nov. 20, 2011).

⁸ Available at http://ecos.fws.gov/tess_public/pub/boxScore.jsp. (last visited Nov. 20, 2011).

⁹ Available at <http://web4.audubon.org/bird/stateofthebirds/cbid/> (last visited Nov. 20, 2011).

was driven to extinction in fewer than 100 years – illustrates that even common birds can become extinct. T. D. Rich et al., Partners in Flight North American Landbird Conservation Plan: Part 1 The Continental Plan 4 (2004) (“N.A. Landbird Conservation Plan Part 1”).¹⁰

Migratory birds face many threats including habitat loss, degradation and fragmentation; excessive logging and inappropriately managed forests; inappropriately or inadequately managed fires; hydrologic change to wetlands; exotic and invasive species; resource extraction and energy industry operations; overgrazing; climate change; contaminants and pesticides; prey resource depredation; human disturbance; long line and gill net fisheries; collisions with human-created structures; and intentional illegal killing. T. D. Rich et al., Partners in Flight North American Landbird Conservation Plan: Part 2 Conservation Issues 39 (2004) (“N.A. Landbird Conservation Plan Part 2”);¹¹ see also Stephen Brown et al., United States Shorebird Conservation Plan 5 (2001) (“2001 U.S. Shorebird Conservation Plan”);¹² Waterbird Conservation for the Americas, Waterbirds at Risk (Mar. 20, 2007).¹³ Because there are serious threats to birds and such threats cumulatively pose even larger risks to their survival and conservation, it is important that action be taken to reduce each one.

ABC believes that threats to birds from wind energy development pose particular concern, especially because the industry is growing rapidly and projects are being frequently sited in important bird habitats. Furthermore existing mitigation methods for wind energy development are largely untested. In fact, in 2014, the Department of Energy recognized this weakness when it made the following statement: “...technologies to minimize impacts at operational facilities for most species are either in early stages of development or simply do not exist.” ABC has, in fact been saying this for some time, while the wind industry and its trade organization, the American Wind Energy Association (AWEA), has been incorrectly touting the industry’s current ability to effectively mitigate the impact of wind energy on birds and bats, at the same time that hundreds of thousands of birds and bats are being killed annually, many of them federally-protected species. Wind energy is also recognized as a serious bird conservation issue in the North American Landbird Conservation Plan, which is an important conservation plan that has wide support throughout the bird conservation community. N.A. Landbird Conservation Plan Part 2 at 39, 62. The plan was created by Partners in Flight, an international coalition of government agencies (including FWS), conservation groups, and scientific researchers. It identifies two types of native birds that are of high

¹⁰ Available at http://www.pwrc.usgs.gov/pif/cont_plan/PIF2_Part1WEB.pdf (last visited Nov. 25, 2011).

¹¹ Available at http://www.pwrc.usgs.gov/pif/cont_plan/PIF3_Part2WEB.pdf (last visited Nov. 20, 2011).

¹² Available at <http://www.fws.gov/shorebirdplan/USShorebird/PlanDocuments.htm> (last visited Nov. 20, 2011).

¹³ Available at <http://www.waterbirdconservation.org/atrisk.html> (last visited Nov. 20, 2011).

conservation importance, “those that show some combination of population declines, small ranges, or distinct threats to habitat, and those that are restricted to distinct geographical areas, but otherwise not currently at risk.” N.A. Landbird Conservation Plan Part 1 at 5. Inclusion of the impacts of wind energy as a conservation issue in the plan indicates that there is widespread recognition among major bird conservation groups, government agencies, and scientists of the grave threats posed by wind energy projects to migratory birds. In addition, wind energy is described as a form of energy development that can have significant negative impacts on birds in the 2009 State of the Birds report, which is a document collectively drafted by government agencies (including FWS), bird conservation coalitions, conservation groups, and scientific researchers. N. Am. Bird Conservation Initiative, U.S. Comm., The State of the Birds, United States of America (2009) 9, 30, 31 (“2009 State of the Birds Report”).¹⁴

Set out below is a brief discussion of certain bird species that are facing risks from wind energy development. The list of birds discussed below is merely illustrative and not a complete or exhaustive listing of birds that ABC believes are at serious risk due to wind energy development.¹⁵

Hawaiian birds

Hawaiian birds face special risks from wind energy. Unfortunately, Hawaii is now cited as “the bird extinction capital of the world,” where more bird species are vulnerable to extinction than anywhere else in the world. 2009 State of the Birds Report at 26. Almost any imaginable site for a wind energy project in Hawaii has the potential to impact federally listed threatened and endangered species, as well as other birds of conservation concern. The state has adopted an aggressive mandate to produce 40% of its electricity from renewable energy by 2030, and consequently several wind energy projects are being developed at sites that seriously impact species of conservation concern. See Am. Wind Energy Ass’n (“AWEA”), Wind Energy Facts: Hawaii (Aug. 2011).¹⁶

Bird species of conservation concern that have already been killed at one Hawaiian wind project include the Hawaiian Goose (federally endangered, Red WatchList), Hawaiian Petrel

¹⁴ Available at http://www.stateofthebirds.org/2009/pdf_files/State_of_the_Birds_2009.pdf (last visited Nov. 25, 2011).

¹⁵ It is pertinent to note that some of the birds discussed in this Section are also listed by the American Wind Wildlife Institute (“AWWI”) (which includes wind industry members) as potentially being adversely impacted by wind energy development. AWWI, Wind and Wildlife Landscape Assessment Tool: Wind and Wildlife Species List (2011), <http://wind.tnc.org/awwi/#app=515d&7843-selectedIndex=0&fefa-selectedIndex=3> (last visited Dec. 7, 2011). This list includes many, but not all, of the birds ABC has identified as being at special risk from wind energy development (for example, the AWWI list is mainland focused and thus misses many Hawaiian birds. Another species not identified by AWWI’s list is the Ferruginous Hawk, which has demonstrated mortality at U.S. wind projects.).

¹⁶ Available at <http://www.awea.org/learnabout/publications/upload/Hawaii.pdf> (last visited Nov. 20, 2011).

(federally endangered, Red WatchList) and (Hawaiian) Short-eared Owl (BCC, Yellow WatchList).¹⁷ See Kaheawa Wind Power II, LLC, Kaheawa Wind Power II Draft Habitat Conservation Plan 52 (2010).¹⁸ Other imperiled birds present in Hawaii where wind energy development and its associated infrastructure currently exist, or are in the process of development, include the Newell's Shearwater (federally threatened, Red WatchList), Hawaiian Common Moorhen (federally endangered), Hawaiian Coot (federally endangered, Red WatchList), Hawaiian Duck (federally endangered, Red WatchList), Hawaiian Hawk (federally endangered, Red WatchList), Hawaiian Stilt (federally endangered), Band-rumped Storm-Petrel (BCC, Red WatchList), and Pacific Golden-Plover (U.S. Shorebird Conservation Plan, high concern).¹⁹ See 2001 U.S. Shorebird Conservation Plan at 57.²⁰ Also of concern are MBTA-protected birds that have not yet been listed as endangered or threatened, such as frigatebirds, shearwaters, boobies, terns, noddies, and albatrosses.

Although in recent years certain wind energy developers have applied under the ESA for incidental take permits ("ITPs") for federally listed birds at proposed Hawaiian wind projects, see 16 U.S.C. § 1539 (authorizing FWS to issue ITPs allowing limited take of endangered and threatened species if prescribed criteria are satisfied), such applications have not been filed by all developers and some existing projects that may impact federally listed birds continue to operate without an ITP. Further, such ITPs do not apply to BCC species (which by definition are not federally listed under the ESA), unless the developer agrees to include them in a Habitat Conservation Plan ("HCP").²¹

¹⁷ The United States WatchList, a joint project between ABC and the National Audubon Society, reflects a comprehensive scientific survey and study of all the bird species in the United States. It identifies those bird species in greatest need of immediate conservation attention. Red WatchList species are those of greatest conservation concern. Yellow WatchList species are still of concern but not to as extreme a degree as Red WatchList species.

¹⁸ Available at <http://www.fws.gov/pacificislands/Publications/DRAFT%20KWP%20II%20HCP.pdf> (last visited Nov. 27, 2011).

¹⁹ As of November 17, 2011, draft or final incidental take permits issued under the ESA have already been prepared for various federally listed species, including, Hawaiian Common Moorhen, Hawaiian Coot, Hawaiian Duck, Hawaiian Goose, Hawaiian Petrel, Hawaiian Stilt, and Newell's Shearwater.

²⁰ The U.S. Shorebird Conservation Plan is a partnership effort of state and federal agencies (including FWS), non-governmental conservation organizations, academic institutions, and individuals from across the country committed to restoring and maintaining stable and self-sustaining populations of shorebirds in the United States and throughout the Western Hemisphere. The plan provides a scientific framework to determine species, sites, and habitats that most urgently need conservation action. Available at <http://www.fws.gov/shorebirdplan/USShorebird/downloads/USShorebirdPlan2Ed.pdf> (last visited Nov. 27, 2011).

²¹ For example, the Hawaiian Short-eared Owl, which is not ESA-listed, will receive some protection under the proposed HCP for the Kaheawa Wind II facility. This happened because a conservation group worked to

Grassland birds

The birds of America's grasslands are also in trouble, and unless properly regulated, wind energy development will add to the impacts that are already causing these birds' numbers to dwindle. "Grassland birds are among the fastest and most consistently declining birds in North America." 2009 State of the Birds Report at 4. Of the 46 grassland-breeding bird species, 48% are of particular conservation concern and 55% are declining significantly. Four are already federally listed as endangered. Id. at 8. MBTA-protected birds such as the Mountain Plover (BCC, Red WatchList), Sprague's Pipit (federal listing candidate, Yellow WatchList), Lark Bunting (BCC, Yellow WatchList), Baird's Sparrow (BCC, Red WatchList), Chestnut-collared Longspur (BCC, Yellow WatchList), and McCown's Longspur (BCC) show steep population declines of 68–91%. Id. at 8.

All the above-mentioned birds (except the Baird's Sparrow) engage in aerial displays – a behavior that makes them more vulnerable to turbine strikes. During aerial displays, males may not be paying attention fully to the structures around them. Grassland birds that engage in aerial displays during courtship, such as the Long-billed Curlew, Upland Sandpiper, Vesper Sparrow, Horned Lark, Chestnut-collared Longspur, and McCown's Longspur, have a greater risk of colliding with wind turbine rotor blades that occur within a male's territory. See Wyo. Game and Fish Dep't, Wildlife Protection Recommendations for Wind Energy Development in Wyoming 5 (Apr. 23, 2010).²² Thus, birds that engage in aerial displays face a greater threat from wind energy turbines as they are particularly prone to collisions. Other grassland species of conservation concern that are especially vulnerable to harm from wind energy development include the Long-billed Curlew (BCC, Yellow WatchList), Grasshopper Sparrow, and Lesser Prairie-Chicken (federal listing candidate, BCC, Red WatchList).

Sprague's Pipit is protected under the MBTA and is an ESA candidate species. It is also a BCC species and on the Yellow WatchList. The species is typically found in open plains, especially shortgrass prairies. Sprague's Pipit is one of the few species endemic to the North American grasslands. Like many grassland species, Sprague's Pipits are semi-nomadic, seeking suitable grassland conditions within their range for nesting in any particular year. They are associated with unbroken tracts of native grassland. In addition to the potential of losing additional habitat to wind

have protections for the species included in the HCP. Thus, it should not be assumed that all BCC species will be covered by HCPs for federally listed species at Hawaiian wind projects.

²² Available at

<http://gf.state.wy.us/downloads/pdf/April%2023%202010%20Commission%20Approved%20Wind%20Recommendations.pdf> (last visited Nov. 26, 2011).

energy development, Sprague's Pipit faces extra risk of being killed by collision with wind turbines because its behavior includes the longest periods of aerial display of any passerine species, and its display heights place the Pipit within the rotor-swept zone of modern wind turbines. Aerial displays lasting as long as three hours at display heights of 50 meters to over 100 meters above the ground have been documented. Mark B. Robbins, Display Behavior of Male Sprague's Pipits, 110 Wilson Bull. of Ornithology 435-438, 435 (1998).²³ The Government of Alberta identifies Sprague's Pipit as a species with potential for collisions with wind turbines due to its aerial display behavior. Gov't of Alta., Wildlife Guidelines for Wind Energy Projects 3 (Sept. 19, 2011) ("Alberta Wildlife Guidelines").²⁴ In addition, wind farms can cause Sprague's Pipits, like other grassland birds, to abandon otherwise suitable habitats. There is no reliable population estimate for Sprague's Pipit – according to the FWS Sprague's Pipit Conservation Plan, the global species population has been estimated at 870,000, but the plan also cautions that that number relies on standard assumptions and calculations that are "unverified with the existing data." FWS, Sprague's Pipit (*Anthus spragueii*) Conservation Plan 15 (2010).²⁵ The plan describes the estimate as a "rough" estimate with "unknown, but potentially large, error." Id.

Chestnut-collared Longspur is a shortgrass prairie species that is protected under the MBTA and has also been designated by FWS as a BCC species. It is on the Yellow WatchList. "The primary factor suspected to be limiting nesting populations of this species is the availability of native grasslands as they will not nest in croplands. Conversion of native grasslands to croplands and habitat loss to urbanization and industrialization have caused a contraction in this species' breeding range and range wide population declines." Wyo. Game and Fish Dep't, Chestnut-Collared Longspur 1 (2010).²⁶ In addition, "[w]ind power development in nesting areas can be problematic due to the courtship displays this species exhibits during the breeding season." Id. at 20. The 2004 N.A. Landbird Conservation Plan estimated the U.S and Canadian population of the Chestnut-collared Longspur at 5,600,000. N.A. Landbird Conservation Plan Part 1 at 21.

McCown's Longspur is a rare grassland bird which is protected under the MBTA and is also on the FWS BCC list. This species has suffered dramatic declines in the northern part of its range. Habitat loss and fragmentation due to loss of native prairie and conversion to agriculture are major

²³ Available at <http://elibrary.unm.edu/sora/Wilson/v110n03/p0435-p0438.pdf> (last visited Nov. 20, 2011).

²⁴ Available at <http://srd.alberta.ca/FishWildlife/WildlifeLandUseGuidelines/documents/WildlifeGuidelines-AlbertaWindEnergyProjects-Sep19-2011.pdf> (last visited Nov. 20, 2011).

²⁵ Available at <http://www.fws.gov/mountain-prairie/species/birds/spraguespipit/SpraguesJS2010r4.pdf>. (last visited Nov. 20, 2011).

²⁶ Available at <http://gf.state.wy.us/downloads/pdf/swap/birds/ChestnutcollarLongspur.pdf> (last visited Nov. 20, 2011).

threats to McCown's Longspur. If the ongoing population declines continue, McCown's Longspur could be petitioned for listing as a federally endangered species. The species engages in aerial display, putting the birds at heightened risk of collision with wind turbines. In addition, wind energy development in the plains will likely further decrease habitat availability for McCown's Longspur, potentially accelerating the population decline. The 2004 North American Landbird Conservation Plan estimated the U.S and Canadian population of the Chestnut-collared Longspur at 1,100,000. U.S. Landbird Conservation Plan Part 1 at 19.

The Long-billed Curlew is the largest North American shorebird. It is protected under the MBTA and is also listed as a FWS BCC species, a Species of Special Concern in Canada, and Highly Imperiled in both the U.S. and Canadian shorebird conservation plans. Additionally, it is listed on the Yellow WatchList. Its population has been estimated at only 20,000 birds. 2001 U.S. Shorebird Conservation Plan at 52. As the FWS Status Assessment and Conservation Action Plan for the Long-billed Curlew explains, "[t]he high levels of concern are due to the loss of the eastern third of their historical breeding range and apparent population declines, particularly in the shortgrass and mixed-grass prairies of the western Great Plains." FWS, Status Assessment and Conservation Action Plan for the Long-Billed Curlew (Numenius americanus) vii (2009).²⁷ The Conservation Plan further states that Long-billed Curlews are vulnerable to direct mortality due to strikes from wind power rotor blades, increased predation associated with additional wind farm structures and incursion into grasslands, disruption of aerial breeding displays, disturbance caused by increased human activity during both the development stage and during general maintenance of the wind farm, and habitat fragmentation. Id. at 12. The Long-billed Curlew relies primarily on native grasslands for nesting and overwintering. The conversion of these grasslands to agriculture is the primary ongoing threat to the species, and wind energy development will likely further decrease habitat availability. Long-billed Curlews also spend much time in flight defending their territories, thereby increasing their risk of colliding with wind turbines. The Government of Alberta identifies the Long-billed Curlew as a species with heightened potential for collisions with wind turbines due to its aerial display. Alberta Wildlife Guidelines at 3. A Long-billed Curlew fatality attributed to wind energy development has been recorded in the Pacific Northwest. See Gregory D. Johnson & Wallace P. Erickson, Avian, Bat And Habitat Cumulative Impacts Associated with Wind Energy Development in the Columbia Plateau Ecoregion of Eastern Washington and Oregon 12 (2010).²⁸

Some grassland species may avoid areas with wind turbines, leading to reduced densities of birds in locations of highest quality habitat and with potentially adverse long-term impacts.

²⁷ Available at <http://library.fws.gov/BTP/long-billedcurlew.pdf> (last visited Nov. 20, 2011).

²⁸ The wind facility where the Long-billed Curlew was killed is not identified in the report. Nor did the report indicate whether the mortality searches took place during the times of Long-billed Curlew courtship, when the risk of turbine collision would be highest. Available at <http://www.whitmancounty.org/download/App%20F%20CPE%20Cumulative%20Impacts%20Report.pdf> (last visited Nov. 26, 2011).

Research to determine which grassland bird species are most susceptible to displacement from wind power development is still in its early stages. However, preliminary research by the U.S. Geological Survey has already demonstrated that displacement occurs with Grasshopper Sparrows and Clay-colored Sparrows, which are both listed as BCC species. See Partners in Flight, Landbird Population Estimates Database (2004) (“2004 PIF Population Estimates Database”).²⁹ The North American Grasshopper Sparrow population is estimated at 14,000,000 and the North American Clay-colored Sparrow population is estimated at 23,000,000. Density of these birds decreased near wind turbines at study sites in Minnesota, North Dakota, and South Dakota. Jill A. Shaffer & Douglas H. Johnson, Displacement Effects of Wind Developments on Grassland Birds in the Northern Great Plains 51 (2010).³⁰ Some grassland birds have also been found to avoid important habitats near wind turbines and roads at other locations in Minnesota, Oregon, and Washington. Wallace Erickson et al., Protocol for Investigating Displacement Effects of Wind Facilities on Grassland Songbirds 2-3 (2007).³¹

Sagebrush-dependent songbirds

In addition to grassland songbirds, sagebrush-dependent songbirds also face threats from wind energy development in their habitat. One species known to have experienced mortality at U.S. wind energy facilities is the Brewer’s Sparrow. Although no comprehensive study of Brewer’s Sparrow mortality at wind energy facilities has been conducted, Brewer’s Sparrow fatalities have been documented in Washington and Wyoming at the Tuolumne Wind and Foote Creek Rim facilities.³² Brewer’s Sparrow is a FWS BCC species and on the Yellow WatchList. Brewer’s Sparrow breeds in sagebrush across the western United States and adjacent southern Canada, wintering from the southwestern United States to central Mexico. Threats it faces include destruction and fragmentation of sagebrush caused by agricultural expansion, over-grazing, altered fire regimes, invasive plants, and energy development. Daniel J. Lebbin et al., ABC, The North American Bird Conservancy Guide to Bird Conservation 108 (2010) (“ABC Guide to Bird Conservation”), Attachment A. Brewer’s Sparrow population was estimated in 2004 at 16,000,000.

²⁹ Available at http://rmbo.org/pif_db/laped/ (last visited Nov. 20, 2011).

³⁰ Available at https://www.nationalwind.org/assets/research_meetings/Research_Meeting_VII_Shaffer.pdf. (last visited Nov. 20, 2011).

³¹ Available at <http://digitalcommons.unl.edu/usgsnpwrc/131/> (last visited Nov. 20, 2011).

³² See, e.g., Tamara Enz & Kimberly Bay, Post-Construction Avian and Bat Fatality Monitoring Study, Tuolumne Wind Project, Klickitat County, Washington, Final Report, April 20, 2009 to April 7, 2010 19 (July 6, 2010), Attachment B; see also West, Inc., Avian and Bat Mortality Associated with the Initial Phase of the Foote Creek Rim Windpower Project, Carbon County, Wyoming November 1998 - June 2002 8 (Jan. 10, 2003), http://west-inc.com/reports/fcr_final_mortality.pdf (last visited Dec. 9, 2011).

The Landbird Conservation Plan recommends that the Brewer's Sparrow population be increased by 100% in order to protect the species. N.A. Landbird Conservation Plan Part 1 at 19.

Raptors

Many raptors are known to have been killed at U.S. wind energy facilities, with several on both the FWS BCC list and the U.S. WatchList. They include Swainson's Hawk (BCC, Yellow WatchList), American Peregrine Falcon (BCC), Ferruginous Hawk (BCC), Short-eared Owl (BCC, Yellow WatchList), Flammulated Owl (BCC, Yellow WatchList), Golden Eagle (BCC), and Bald Eagle (BCC).³³

Swainson's Hawks breed in open grassland, shrub-land and agricultural land from Alaska through the Canadian prairies, then south through the western United States to northern Mexico. The California population has declined by 90%, and declines have been observed in Canada, but populations are believed to be stable elsewhere. See ABC Guide to Bird Conservation at 44, Attachment A. In 2004, the U.S. and Canadian population of the Swainson's Hawk was estimated at 460,000. N.A. Landbird Conservation Plan Part I at 18. Swainson's Hawks migrate in flocks through Central America to winter in the grasslands of Argentina, and this migration places the species at special additional risk of collision with wind turbines. More than 90% of the global population of Swainson's Hawk passes through the south of the Isthmus of Tehuantepec, where wind energy is being developed rapidly. According to Friends of the Swainson's Hawk, a California conservation group, 5,000 wind turbines are planned in the Isthmus of Tehuantepec. See Friends of the Swainson's Hawk, Energy Projects Challenge Wildlife and Habitat.³⁴ These proposed Mexican projects will add to the cumulative effects of wind energy development in the United States that Swainson's Hawks face.

The American Peregrine Falcon was removed from the federal endangered species list in 1999 but will continue to be monitored by FWS through 2015. See FWS, Proposed Information Collection; Monitoring Recovered Species After Delisting-American Peregrine Falcon, 76 Fed. Reg.

³³ Examples of wind energy facilities and regions where these raptors are known to have been killed include Shiloh I Wind, CA (Swainson's Hawk); Tehachapi Pass Wind Resource Area, CA (Flammulated Owl); Jersey-Atlantic Wind Farm, NJ (Peregrine Falcon); Stateline Wind Energy Center, OR-WA (Swainson's Hawk); Juniper Canyon Wind, WA (Ferruginous Hawk); Nine Canyon Wind, WA (Short-eared Owl); Big Horn Wind, WA (Short-eared Owl, Ferruginous Hawk); Harvest Wind, WA (Swainson's Hawk); and Foote Creek Rim Wind, WY (Short-Eared Owl). It should be noted that these examples are a fragmentary sampling of actual mortality, not a full accounting. Mortality data is not collected at all U.S. wind energy facilities, and even when data is collected, it is not collected during all operating hours, nor is it usually collected for all wind turbines in a facility. In addition, mortality data is very often not made publicly available.

³⁴ Available at <http://www.swainsonshawk.org/story2.html> (last visited Nov. 27, 2011).

17147, 17148 (Mar. 28, 2011). Peregrine Falcons are most associated with mountain ranges, river valleys, and coastlines. FWS estimated their population in 2003 at 3,000 breeding pairs in Mexico, the United States, and Canada. Although the species has made a remarkable recovery, the pesticide best known for the falcon's decline, DDT, is still found in some parts of its environment within and outside the United States. See FWS, Peregrine Falcon (Falco peregrinus) Fact sheet (2006).³⁵ Wind energy development in Peregrine Falcon habitat adds to the cumulative impacts the species faces.

Another species potentially at risk from wind energy development is the Ferruginous Hawk, designated by FWS as a BCC species. The Ferruginous Hawk is the largest hawk in North America, inhabiting arid and open grassland, shrub steppe, and desert in the United States, Canada, and Mexico. It was petitioned for but denied endangered species status in the early 1990s. The 2004 estimate of the Ferruginous Hawk population was only 20,000. 2004 PIF Population Estimates Database. Ferruginous Hawks are known to have been killed at U.S. wind energy facilities in the West, for instance at the Big Horn Wind Energy Project in Washington. See, e.g., K. Shawn Smallwood, Avian and Bat Mortality at the Big Horn Wind Energy Project, Klickitat County, Washington 6 (Oct. 18, 2008).³⁶ Risk to Ferruginous Hawks from wind energy development has been acknowledged by FWS itself. See Patricia Y. Sweanor, FWS, Best Management Practices for Wind Energy in Areas with Golden Eagles (Aquila chrysaetos) in Wyoming 58 (abstract of paper submitted at the 2010 Raptor Research Foundation Conference).³⁷

The Short-eared Owl nests in open habitats (tundra, grasslands, marshes, agricultural lands, and coastal dunes) throughout Eurasia and North America, with a Hawaiian subspecies that is also known to have been killed at a wind energy facility. In addition to the threat of collision with wind turbines and habitat loss and fragmentation posed by wind energy development, the Short-eared Owl also is threatened by loss and fragmentation of grassland, marsh, and coastal habitats due to agriculture, over-grazing and urban and coastal development, as well as invasive predators, potentially West Nile Virus, and pesticides. See ABC Guide to Bird Conservation at 74, Attachment A. In 2004, the U.S. and Canadian population of Short-eared Owls was estimated at 710,000. N.A. Landbird Conservation Plan Part 1 at 18.

The Flammulated Owl nests in cavities of dead and dying trees in open, montane ponderosa pine forest and is patchily distributed from southern British Columbia through the western United States to central Mexico. In addition to the threat of collision with wind turbines and habitat loss

³⁵ Available at <http://library.fws.gov/ES/peregrine06.pdf> (last visited Nov. 27, 2011).

³⁶ Available at <http://www.efsec.wa.gov/Whistling%20Ridge/Adjudication/Intervenor's%20pre-filed%20testimony/Ex%2022.03.pdf> (last visited Dec. 12, 2011).

³⁷ Available at http://www.rmrp.info/pdf/2010_printed_program-9_091210_LAK.pdf (last visited Nov. 20, 2011).

and degradation posed by wind energy development, the Flammulated Owl is threatened by degradation and loss of habitat, reduction of cavities available for nesting due to cutting of dead trees, declines in populations of woodpeckers that create the cavities in which the owls nest, and reductions in insect prey due to pesticide use in forests. Its global population is estimated at only 37,000. See ABC Guide to Bird Conservation at 73, Attachment A. In 2004, the Flammulated Owl population was estimated at only 29,000 in the United States and Canada. See N.A. Landbird Conservation Plan Part 1 at 19.

The American birds most emblematic of the need to properly regulate the wildlife impacts of wind energy are probably the Golden Eagle and Bald Eagle, both of which are protected under the MBTA. The Golden Eagle is a FWS BCC species; its population is difficult to state with certainty due to limited data. In 2011, FWS estimated the Golden Eagle population at perhaps only 30,000 in the United States. See FWS, Golden Eagles Status Fact Sheet (2011).³⁸ The 2004 Partners in Flight estimate of Golden Eagle population in North America was 80,000. 2004 PIF Population Estimates Database. Golden Eagles occur across much of the United States, utilizing habitats that include tundra, grasslands, forested habitat, woodlands, brush lands, and deserts. This broad range of habitats exposes Golden Eagles to a multitude of threats such as habitat loss, electrocution by and collision with energy infrastructure (including power lines and wind turbines), lead and rodenticide poisoning, human disturbance, climate change, disease, stock tank drowning, vehicle collisions, and illegal intentional killing. FWS, Minutes and Notes from the North American Golden Eagle Science Meeting (Sept. 21, 2010).³⁹ Scientific experts have ranked wind energy as the third greatest direct mortality threat to Golden Eagles (behind electric infrastructure, *i.e.*, electrocutions from and collisions with power lines, which will also be expected from wind power expansion, and lead poisoning). Id. at 22.

The risk that wind power facilities pose to Golden Eagles has been known for some time due to the well-documented fatalities at Altamont Pass in California, where a 2010 study estimated that 55-94 Golden Eagles annually were killed by wind turbines since 1998. K. Shawn Smallwood, Fatality Rates in the Altamont Pass Wind Resource Area 1998-2009 (2010) at 25.⁴⁰ In fact, Altamont Pass has not only been a death trap for the species, but has also been found to be a population sink, where turbine blade strikes kill more eagles than are produced within the area surveyed, thereby demanding a flow of recruits from outside the area to fill breeding vacancies as

³⁸ Available at http://www.fws.gov/habitatconservation/Golden_Eagle_Status_Fact_Sheet.pdf (last visited Nov. 20, 2011).

³⁹ Available at <http://www.dfg.ca.gov/wildlife/nongame/raptors/goldeneagle/docs/NAGoldenEagleScienceMeeting-2010-09-21.pdf> (last visited Nov. 20, 2011).

⁴⁰ Available at http://altamontsrc.org/alt_doc/p145_smallwood_fatality_monitoring_results_12_31_09.pdf. (last visited Nov. 20, 2011).

they occur. See Grainger Hunt & Teresa Hunt, The Trend of Golden Eagle Territory Occupancy in the Vicinity of the Altamont Pass Wind Resource Area: 2005 Survey 2 (2006).⁴¹

Further, FWS has been lax in providing information to the public regarding Golden Eagle deaths at wind energy projects through the Freedom of Information Act (“FOIA”), 5 U.S.C. § 552, or other mechanisms.⁴² Indeed, the fragmentary picture of Golden Eagle mortality at wind farms that does emerge from the scattered bits of information made public is not encouraging.

For example, in 2011, the Los Angeles Times reported that at least six Golden Eagles had been killed at the Pine Tree wind project in California. Louis Sahagun, Federal Officials Investigate Eagle Deaths At DWP Wind Farm (L.A. Times, Aug. 3, 2011).⁴³ The Associated Press wrote about the death of a Golden Eagle at the Goodnoe Hills Wind Project in Washington in 2009. Associated Press, Golden Eagle killed by Wash. Wind turbines (Aug. 15, 2009).⁴⁴ In addition, Golden Eagle mortality at wind projects in Wyoming also appears serious. See Sophie Osborn, Wyo. Outdoor Council, Wind turbines killing more golden eagles in Wyoming than expected (June 21, 2011) (discussing Golden Eagle mortality at wind projects in Wyoming based on FWS data).⁴⁵ According to a FWS staff paper submitted at a 2010 conference of scientific experts specializing in raptor conservation, at one geographic region in Wyoming the mortality rate is one Golden Eagle death per 13 wind turbines per year; at another it is one Golden Eagle death per 39 wind turbines per year. Patricia Y. Sweanor, FWS, Best Management Practices for Wind Energy in Areas with Golden Eagles (*Aquila chrysaetos*) in Wyoming 58 (abstract of paper submitted at the 2010 Raptor Research Foundation Conference).

This means there are likely to be equivalents of the Pine Tree facility, or possibly worse, in Wyoming, where FWS staff has stated approximately 1,000 wind turbines were operating by September 2010 and another 1,000 are expected to be constructed in the following two years. Id.

⁴¹ Available at <http://www.energy.ca.gov/2006publications/CEC-500-2006-056/CEC-500-2006-056.PDF> (last visited Dec. 11, 2011).

⁴² It should be noted that information concerning wildlife fatalities, particularly Golden Eagle mortalities, at wind energy facilities is often known to FWS but such information is not easily accessible to the public, in part due to the increasingly long time that it takes the agency to respond to FOIA requests for wind project mortality data, typically extending well beyond the statutorily prescribed durations. For example, as of the beginning of December 2011, ABC is still waiting for FWS to send complete wind farm mortality data in response to a FOIA request that was made in April 2011.

⁴³ Available at <http://articles.latimes.com/2011/aug/03/local/la-me-wind-eagles-20110803> (last visited Nov. 16, 2011).

⁴⁴ Available at <http://www.nwcn.com/archive/62395757.html> (last visited Nov. 16, 2011).

⁴⁵ Available at <http://wyomingoutdoorcouncil.org/blog/2011/06/21/wind-turbines-killing-more-golden-eagles-in-wyoming-than-expected/> (last visited Nov. 16, 2011).

Unless steps are taken to better address these impacts – such as those proposed in this Petition – the number of Golden Eagles killed at wind power facilities will become even worse over time and will likely result in efforts to list the species as endangered or threatened under the ESA.

The Bald Eagle is another iconic American bird species that illustrates the need for effective regulation of wildlife impacts to wind energy. The FWS National Bald Eagle Management Guidelines state that there are breeding populations of Bald Eagles in each of the lower 48 states. The Guidelines also assert that, “[t]he largest North American breeding populations are in Alaska and Canada, but there are also significant bald eagle populations in Florida, the Pacific Northwest, the Greater Yellowstone area, the Great Lakes states, and the Chesapeake Bay region.” FWS, National Bald Eagle Management Guidelines 3 (2007).⁴⁶ The Bald Eagle was removed from the endangered species list in 2007, but remains a FWS BCC species, and is undergoing post-delisting monitoring. The 2004 North American Landbird Conservation Plan estimated 330,000 Bald Eagles in the United States and Canada. N.A. Landbird Conservation Plan Part 1 at 20. At delisting, FWS estimated 9,789 Bald Eagle breeding pairs in the lower 48 states. FWS, Endangered and Threatened Wildlife and Plants; Removing the Bald Eagle in the Lower 48 States From the List of Endangered and Threatened Wildlife, 42 Fed. Reg. 37346, 37350 50 CFR Pt. 17 (July 9, 2007). Threats to the Bald Eagle include collisions with power lines, vehicles, and other obstacles; electrocution; disease; lead and pesticide poisoning; and shooting. See FWS, Post-delisting Monitoring Plan for the Bald Eagle (Haliaeetus leucocephalus) in the Contiguous 48 States 18 (2010).⁴⁷

Wind energy development in Bald Eagle habitat is expanding and therefore Bald Eagles will over time have greater potential for collisions with wind turbines. A 2004 Bald Eagle species assessment prepared for the U.S. Bureau of Land Management (“BLM”) states, “[i]t is assumed that an increase in the number and type of wind-power turbines will generally increase the number of bald eagle deaths by aerial collisions, especially if such turbines are positioned with little consideration of bald eagle habitat.” Amber Travsky & Gary P. Beauvais, Species Assessment for Bald Eagle (Haliaeetus Leucocephalus) in Wyoming (prepared for BLM, 2004) at 25.⁴⁸ In fact, Bald Eagle deaths at wind facilities in Wyoming and Ontario, Canada have been reported in scattered outlets. DecorahNews.com, Ask Mr. Answer Person about the Luther Wind Turbine (Nov. 16,

⁴⁶ Available at <http://www.fws.gov/pacific/eagle/NationalBaldEagleManagementGuidelines.pdf> (last visited Nov. 20, 2011).

⁴⁷ Available at http://www.fws.gov/midwest/eagle/protect/FINAL_BEPDM11May2010.pdf (last visited Nov. 20, 2011).

⁴⁸ Available at <http://www.blm.gov/pgdata/etc/medialib/blm/wy/wildlife/animal-assessmnts.Par.41209.File.dat/BaldEagle.pdf> (last visited Dec. 6, 2011).

2011);⁴⁹ see also U.S. Dep't of Energy ("DOE"), South Dakota PrairieWinds Project, Final Environmental Impact Statement 180 (2010).⁵⁰

While publicly reported Bald Eagle mortality at wind projects so far appears low, Bald Eagle mortality is also likely to increase as more wind facilities are built in Bald Eagle habitat, especially if those projects are inappropriately sited. The Great Bay Wind Project in Somerset County, MD, for example, will be sited within 10 miles of 60 active Bald Eagle nests, and has been highly controversial. There has been some speculation that Bald Eagles might be more likely than Golden Eagles to avoid wind turbines. Lynn Sharp, Comparison of Pre- and Post-construction Bald Eagle Use at the Pillar Mountain Wind Project, Kodiak, Alaska, Spring 2007 & 2010 66-68 (2010).⁵¹

Eastern forest and woodland birds

Although raptors such as eagles have been known for some time to be at risk from wind energy development on western ridgelines, as the industry spreads into new habitats the impacts of wind power on new groups of birds, such as Eastern forest and woodland birds, need to be addressed. These include the Bicknell's Thrush, Cerulean Warbler, Bay-breasted Warbler, and Blue-winged Warbler.

The Bicknell's Thrush is a rare forest bird with a fragmented and limited breeding range in montane and maritime forest habitats in the Catskills and Adirondacks of New York and the higher peaks of northern New England and Quebec, New Brunswick, and Nova Scotia. Wind energy has already been developed in Bicknell's Thrush habitat in New Hampshire, was proposed in Bicknell's Thrush habitat in Maine, and more projects are likely in its U.S. range, which could lead to further habitat loss and fragmentation. Bicknell's Thrush is an ESA candidate species, FWS BCC species and on the Red WatchList. The 2004 estimate of the Bicknell's Thrush population was only 40,000 in the United States and Canada; the International Bicknell's Thrush Conservation Group estimated 95,000 to 126,000 globally. U.S. Landbird Conservation Plan Part 1 at 18.

Another eastern forest bird of great concern is the Cerulean Warbler. It is protected under the MBTA, listed as a FWS BCC species and has been petitioned for ESA listing. (The listing petition was rejected in 2006). It is also on the Yellow WatchList, and is a Species of Continental

⁴⁹ Available at <http://www.decorahnews.com/news-stories/2011/11/1237.html> (last visited Nov. 20, 2011).

⁵⁰ Available at http://www.rurdev.usda.gov/SupportDocuments/DOE-EIS-0418_Ch8_Use-Productivity.pdf (last visited Nov. 20, 2011).

⁵¹ Available at http://www.nationalwind.org/assets/research_meetings/Research_Meeting_VIII_Proceedings1.pdf. (last visited Nov. 20, 2011).

Importance in the North American Landbird Conservation Plan. It has had the steepest rate of decline of any North American warbler that is monitored by North American Breeding Bird Surveys; Cerulean Warbler populations have been declining at more than 3% annually for the last 40 years. FWS, A Conservation Action Plan for the Cerulean Warbler (*Dendroica cerulea*) 3-4 (2007).⁵² According to FWS, factors that limit the bird's population are not well understood, "[h]owever, it is widely assumed that loss of habitat quantity and degradation of habitat quality on the non-breeding and breeding habitats are critical factors that have contributed to the observed declines." Id. at 4. The Cerulean Warbler's U.S. breeding habitat is located in mature deciduous forests in the East, much of it in the Appalachian region, where wind power is developing rapidly. Id. at 3. Threats to the species' habitat include mountaintop removal coal mining and unregulated wind energy development. No comprehensive study of Cerulean Warbler mortality at wind facilities has been conducted, but a Cerulean Warbler mortality was reported in a one-year mortality study at a wind project in Tennessee. See J. K. Fiedler et al., Results of Bat and Bird Mortality Monitoring at the Expanded Buffalo Mountain Windfarm, 2005 21 (June 28, 2007), Attachment C.

The Bay-breasted Warbler migrates through the eastern United States and winters in forested habitats and shade coffee plantations in Central and South America; 90% of the population breeds in mature boreal forest in Canada. ABC Guide to Bird Conservation at 102, Attachment A. The Bay-breasted Warbler is a FWS BCC species and on the Yellow WatchList. Its population was estimated at 3,100,000 in 2004. N.A. Landbird Conservation Plan Part 1 at 18. It is threatened by forestry practices that favor young even-aged forests or trees resistant to budworm over older forests, as well as pesticide spraying for budworms, winter habitat loss and collisions during migration. ABC Guide to Bird Conservation supra at 102. No comprehensive study of Bay-breasted Warbler mortality at wind facilities has been conducted, but Bay-breasted Warbler fatalities were reported in 2011 at the NedPower Mt. Storm wind power project in West Virginia. David P. Young, Jr. & Zapata Courage, Avian/Bat Monitoring September 25, 2011 Memo 2 (Sept. 30, 2011), Attachment D.

The Blue-winged Warbler breeds in early successional habitats, ranging from the Midwest, east to New England and the Appalachians, and north to Ontario, Canada. It winters in tropical forests from Mexico to Panama. It is threatened by loss of breeding and wintering habitat; hybridization with Golden-winged Warblers; predation by feral cats; nest parasitism; and collisions with manmade structures. ABC Guide to Bird Conservation supra at 97. The Blue-winged Warbler is a FWS BCC species and on the Yellow WatchList. Its population was estimated in 2004 at 390,000 in the United States and Canada. N.A. Landbird Conservation Plan Part 1 at 19. No comprehensive study of Blue-winged Warbler mortality at wind facilities has been conducted, but Blue-winged Warbler fatality was reported between 2007 and 2009 at an unidentified Pennsylvania

⁵² Available at

<http://www.fws.gov/migratorybirds/CurrentBirdIssues/Management/FocalSpecies/Plans/CeruleanWarbler.pdf> (last visited Nov. 20, 2011).

wind energy facility or facilities. Tracey Librandi Mumma & William Capouillez, Pa. Game Comm'n, Wind Energy Voluntary Cooperation Agreement: Second Summary Report 31 (rev. Mar. 16, 2011).⁵³

Western forest and woodland birds

The Oak Titmouse nests in oak and pine-oak woodlands from southern Oregon south through California to Baja California, Mexico. It is threatened by loss and degradation of habitat for urban development, pasture, and agriculture, as well as fire suppression, over-grazing, fuel-wood harvesting, and West Nile virus. ABC Guide to Bird Conservation at 89, Attachment A. It is a FWS BCC species and on the Yellow WatchList. Its population was estimated in 2004 at 900,000 in the United States and Canada. N.A. Landbird Conservation Plan Part 1 at 18. No comprehensive study of Oak Titmouse mortality at wind facilities has been conducted, but an Oak Titmouse mortality was reported in 2010 at the Pine Tree wind project in California. BioResource Consultants Inc., 2009/2010 Annual Report Bird and Bat Mortality Monitoring, Pine Tree Wind Farm, Kern County, California 8 (Oct. 14, 2010), Attachment E.

Lewis's Woodpeckers occur locally in the western United States and southern British Columbia, Canada, breeding mainly in open ponderosa pine forests in mountains (especially burned forests), but also using open cottonwoods, aspen and oak woodlands, and pinyon-juniper forest. Northern populations migrate south during winter, sometimes as far as northern Baja California, Mexico. Lewis's Woodpecker is threatened by habitat loss and degradation, over-grazing, and pesticides. ABC Guide to Bird Conservation *supra* at 78. It is a FWS BCC species and on the Red WatchList (highest concern). Its population was estimated in 2004 at 130,000 in the United States and Canada. No comprehensive study of Lewis's Woodpecker mortality at wind facilities has been conducted, but Lewis's Woodpecker fatality was reported as early as 1999 at the Vansycle Wind, Oregon wind facility. Wallace P. Erickson et al., Avian and Bat Mortality Associated with the Vansycle Wind Project, Umatilla County, Oregon 1999 Study Year 9 (Feb. 7, 2000).⁵⁴

Birds at risk from offshore wind development

With the development of the U.S. offshore wind industry in the oceans and the Great Lakes, additional birds of conservation concern protected under the MBTA are at risk of collision with turbines or displacement from important habitat, such as traditional feeding areas. Because offshore

⁵³ The Pennsylvania Game Commission publishes wind energy mortality data in summary form, without the exact date or name of facility where it occurred. Available at <http://www.scribd.com/doc/52395539/Wind-Energy-Voluntary-Cooperation-Agreement-Second-Summary-Report> (last visited Nov. 27, 2011).

⁵⁴ Available at <http://www.west-inc.com/reports/vansyclereportnet.pdf> (last visited Nov. 27, 2011).

wind power is not currently installed in the United States, there is no existing U.S. track record to indicate which species will likely be killed. In addition, knowledge of offshore bird presence and migration routes is not as well developed as for birds onshore, so there may be species at risk from offshore wind development that have not yet been flagged as such.

Government agencies, academics, and conservation groups have already identified a number of birds of conservation concern believed to be at risk from offshore wind development in the United States. A sampling of these species includes federally threatened and endangered species such as the Piping Plover (also Red WatchList), Roseate Tern (also Yellow WatchList), Whooping Crane (also Red WatchList), and Kirtland's Warbler (also Red WatchList); candidate species for ESA listing such as the Red Knot (BCC, Yellow WatchList); and others such as the Black-Capped Petrel (BCC, Yellow WatchList), Wilson's Plover (BCC, Yellow WatchList), Gull-billed Tern (BCC, Yellow WatchList) and Audubon's Shearwater (BCC, Yellow WatchList), and landbirds that can fly through nearshore areas such as Bald and Golden Eagles (both BCC) and Peregrine Falcons (BCC). See, e.g., Doug Forsell, FWS, Waterbirds and Offshore Wind Energy Development, A Biologists [sic] Perspective On Regulation 2 (2010);⁵⁵ see also Sarah M. Karpanty, Virginia Tech, Virginia Coastal Energy Research Consortium: Potential Effects of Virginia Offshore Wind Power on Birds 4 (2011) ("Virginia Coastal Energy Research");⁵⁶ David N. Ewert et al., The Nature Conservancy, Wind Energy: Great Lakes Regional Guidelines 11 (2011).⁵⁷

Other birds potentially at risk from U.S. offshore wind development include sea ducks (such as Long-tailed Ducks, mergansers, scoters, eiders), Redheads, loons, gannets, shorebirds, terns, and migratory songbirds. See Virginia Coastal Energy Research at 4; see also Albert Manville, FWS, Presentation on Shoreline, Near-shore, and Offshore Wind Energy Development in Texas State Waters: Tools to Help Avoid or Minimize "Take" of Waterbirds and Other Avifauna 14 (2011), Attachment F.

In sum, more than one-third of the migratory birds protected under the MBTA are facing several serious threats that are leading to declines in or uncertainty about their population numbers. In the absence of any regulations for avoiding and minimizing the impacts of wind energy projects through an appropriate permitting scheme – such as those proposed in this Petition – rapid wind energy development poses a grave threat to many migratory birds protected under the MBTA. As

⁵⁵ Available at http://web2.uconn.edu/seagrantnybight/documents/Energy%20Docs/Forsell_NY%20Bight%20Energy%20Oct%207%202010_Seabirds.pdf (last visited Nov. 27, 2011).

⁵⁶ Available at <http://vasierraclub.org/Karpanty.pdf> (last visited Nov. 27, 2011).

⁵⁷ Available at <http://www.glc.org/energy/wind/pdf/TNC-Great-Lakes-Regional-Guidelines.pdf> (last visited Nov. 27, 2011).

described infra, see Section C.3, FWS’s approach to these impacts, i.e., through voluntary inadequate guidelines in lieu of mandatory regulations, will likely exacerbate the decline of many species protected under the MBTA, potentially leading to the need to list such species as endangered or threatened under the ESA.⁵⁸

C. FACTUAL BACKGROUND

C.1. Thousands of wind turbines are already in operation and thousands more are being planned.

Growth in the wind industry

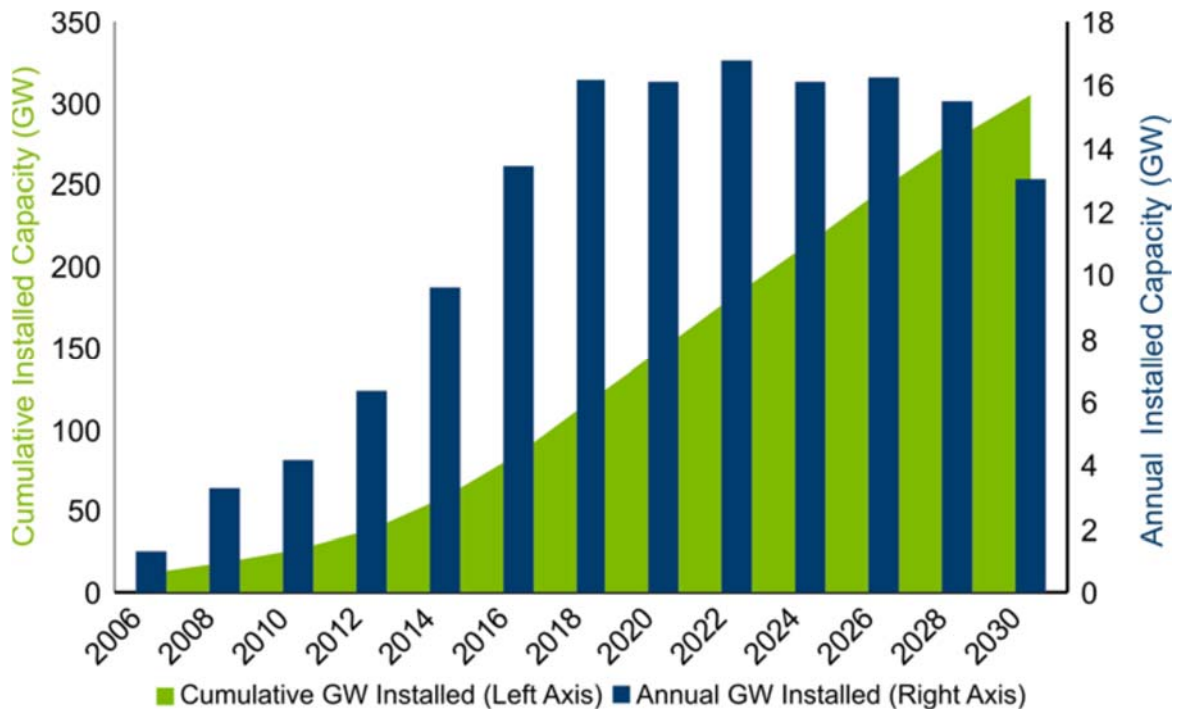
“[T]he U.S. wind industry is growing rapidly,” driven by several policy incentives such as federal production tax credits, and renewable portfolio standards in roughly 50% of the states. See DOE, 20% Wind Energy by 2030: Increasing Wind Energy’s Contribution to U.S. Electricity Supply 1 (July 2008) (“DOE 20% Wind Report”).⁵⁹ The DOE has announced a collaborative effort in which wind power is expected to provide 20% of U.S. electricity by 2030. Id. The 20% wind U.S. scenario would require an installation rate of 16 GW per year after 2018. See Figure 1: Cumulative and Annual Wind Installations By 2030.

Put in most recent data from USGS and FAA (Mike?)

⁵⁸ An upsurge in ESA listings will have serious consequences particularly for the industry, which will then be required to comply with comprehensive ESA requirements and may also be required to shut down projects due to potential ESA violations. For example, in response to a citizen suit, a federal court recently issued an injunction against the Beech Ridge wind energy project in West Virginia for potential take of the endangered Indiana bat without an incidental take permit. See Animal Welfare Inst. v. Beech Ridge Energy LLC, 675 F. Supp. 2d 540, 545 (D. Md. 2009). Accordingly, the industry has an enormous incentive to avoid additional ESA listings of species affected by wind power projects.

⁵⁹ Available at <http://www.nrel.gov/docs/fy08osti/41869.pdf> (last visited Dec. 11, 2011).

Figure 1: Cumulative and Annual Wind Installations By 2030⁶⁰



The number of operating wind turbines is estimated at 30,000 in 2009 and will likely increase to over 70,000 turbines by end of 2011.⁶¹ See Figure 2: Wind Turbines in the United States (2003-2011); Table: 1: Increase in Proposed and Existing Wind Turbines in the United States (2003-2011).

⁶⁰ Source: DOE 20% Wind Report at 7.

⁶¹ These figures are estimates based on the data submitted to the FAA for proposed wind projects.

Figure 2: Estimate of Wind Turbines in the United States (2003-2011)

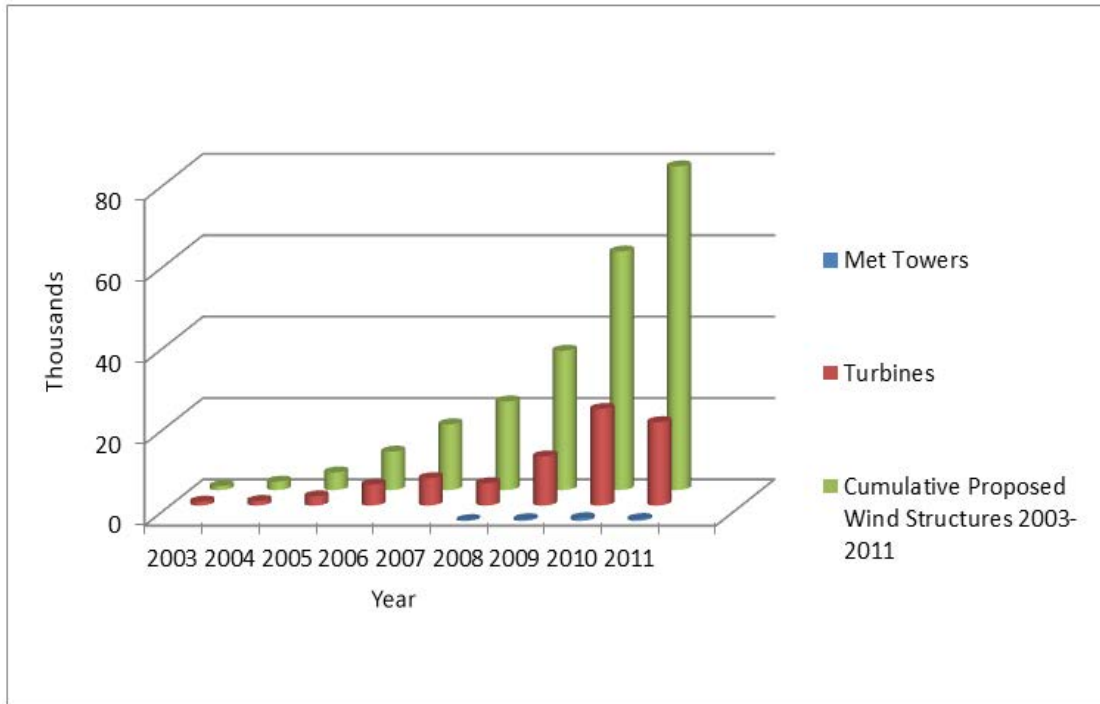


Figure 2 (above) is based on all unique wind turbines and associated meteorological tower proposals submitted to the Federal Aviation Administration/Obstruction Evaluation/Airport Airspace Analysis offices (“FAA - OE/AAA”). Wind turbines that were already proposed or existing prior to 2003 are not included in this analysis. Although meteorological towers were proposed during 2003-2007, they are not included in this data set due to data compilation and processing issues.

Table 1: Estimated Increase in Wind Turbines in the United States (2003-2011)

Year	# Wind Turbines	# Meteorological Towers ⁶²	Total Wind Related Structures	# Cumulative Proposed Wind Structures 2003-2011
2003	950	n/a	950	950
2004	1114	n/a	1114	2064
2005	2253	n/a	2253	4317
2006	5124	n/a	5124	9441
2007	6700	n/a	6700	16141
2008	5446	179	5625	21766
2009	12063	398	12461	34227

⁶² Although meteorological towers were proposed during 2003-2007, they are not included in this data set due to data compilation and processing issues.

Year	# Wind Turbines	# Meteorological Towers⁶²	Total Wind Related Structures	# Cumulative Proposed Wind Structures 2003-2011
2010	23714	661	24375	58602
2011 (through 11-1-11)	20460	451	20911	79513

The cumulative wind power capacity in the United States grew by a healthy 15% in 2010. DOE, 2010 Wind Technologies Market Report 1 (June 2011) (“2010 DOE Wind Market Report”).⁶³ In fact, according to AWEA’s most recent third quarter report published in October 2011, the wind industry had more than 1,200 MW installed in the third quarter, and more than 8,400 MW under construction – the most in any quarter since 2008. AWEA, U.S. Wind Industry Third Quarter Market Report (Oct. 2011) (“AWEA Third Quarter Report”);⁶⁴ see also Meg Cichon, Meanwhile, Wind Industry Sees Big Gains – Will it Last? (RenewableEnergyWorld.com Nov. 17, 2011).⁶⁵

Further, around 50% of U.S. states have adopted binding “renewable portfolio standards,” i.e., state policies that require electricity providers to obtain a minimum percentage of their power from renewable energy resources by a certain date. See Table 2: State Renewable Portfolio Standards.

⁶³ Available at <http://eetd.lbl.gov/ea/ems/reports/lbnl-4820e.pdf> (last visited Nov. 17, 2011).

⁶⁴ Available at <http://www.awea.org/learnabout/publications/reports/upload/3Q-2011-AWEA-Market-Report-for-Public-2.pdf> (last visited Nov. 14, 2011).

⁶⁵ Available at <http://www.renewableenergyworld.com/rea/news/article/2011/11/meanwhile-wind-industry-sees-big-gains-will-it-last> (last visited Nov. 17, 2011).

Table 2: State Renewable Portfolio Standards⁶⁶

	State	Renewable Energy Amount	Year
1.	Arizona	15%	2025
2.	California	33%	2030
3.	Colorado	20%	2020
4.	Connecticut	23%	2020
5.	District of Columbia	20%	2020
6.	Delaware	20%	2019
7.	Hawaii	20%	2020
8.	Iowa	105 MW	-
9.	Illinois	25%	2025
10.	Massachusetts	15%	2020
11.	Maryland	20%	2022
12.	Maine	40%	2017
13.	Michigan	10%	2015
14.	Minnesota	25%	2025
15.	Missouri	15%	2021
16.	Montana	15%	2015
17.	New Hampshire	23.8%	2025
18.	New Jersey	22.5%	2021
19.	New Mexico	20%	2020
20.	Nevada	20%	2015
21.	New York	24%	2013
22.	North Carolina	12.5%	2021
23.	North Dakota*	10%	2015
24.	Oregon	25%	2025
25.	Pennsylvania	8%	2020
26.	Rhode Island	16%	2019
27.	South Dakota*	10%	2015
28.	Texas	5,880 MW	2015
29.	Utah*	20%	2025
30.	Vermont*	10%	2013
31.	Virginia*	12%	2022
32.	Washington	15%	2020
33.	Wisconsin	10%	2015

⁶⁶ Source: DOE, State Renewable Portfolio Standards,

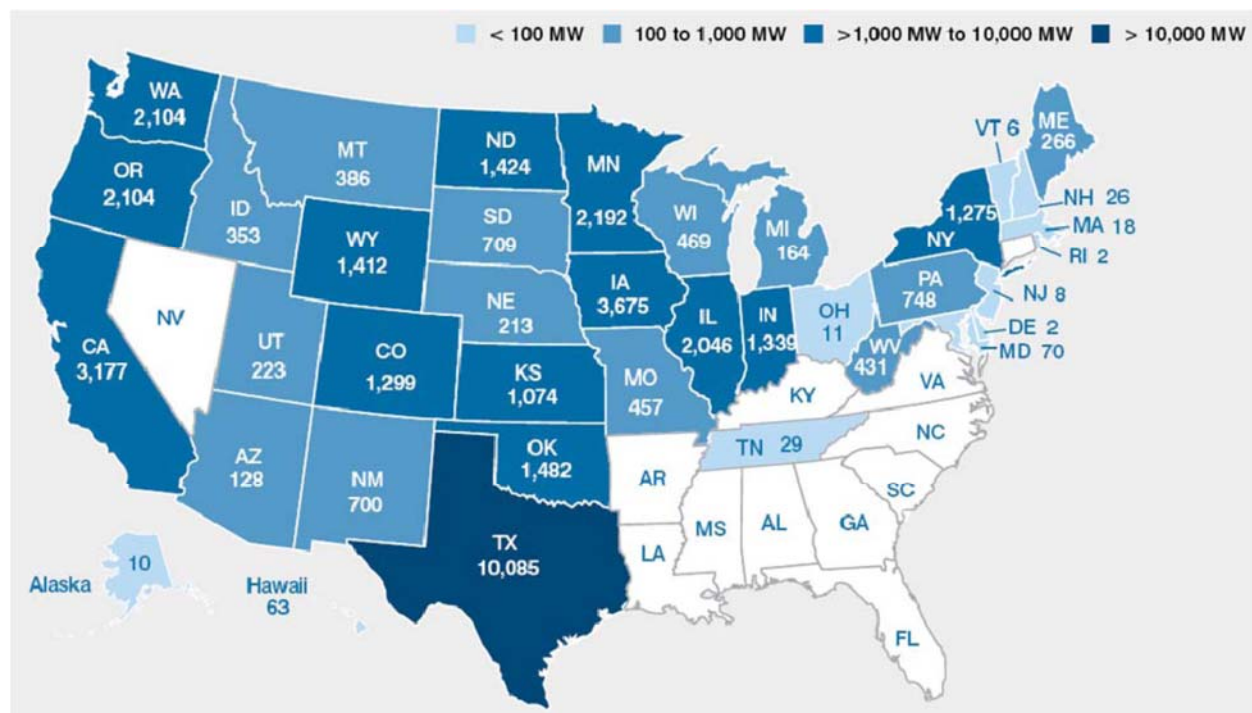
http://apps1.eere.energy.gov/states/maps/renewable_portfolio_states.cfm (last visited Nov. 17, 2011).

Percentages refer to a portion of electricity sales and megawatts (MW) to absolute capacity requirements.

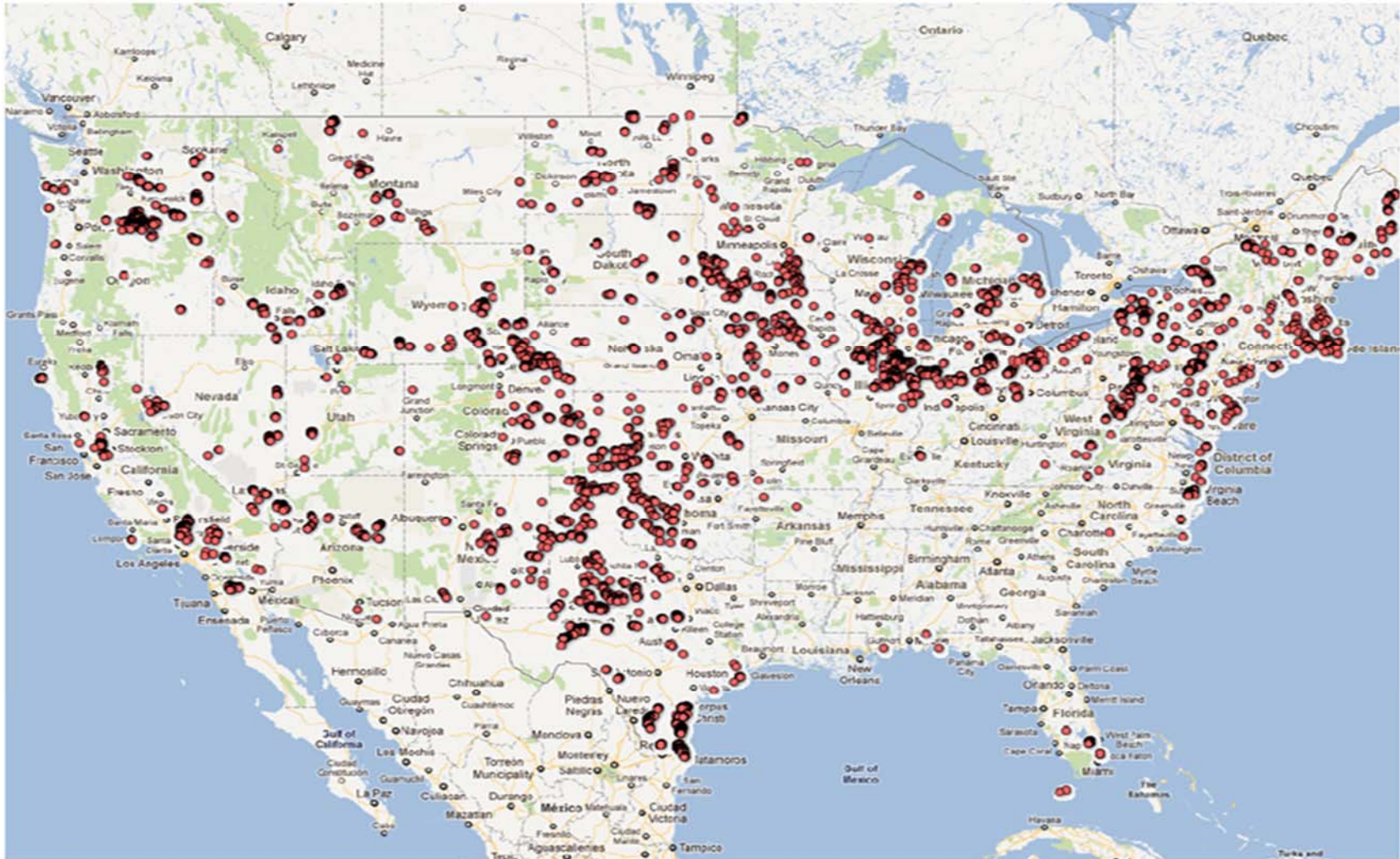
*Five states, North Dakota, South Dakota, Utah, Virginia, and Vermont, have set voluntary goals for adopting renewable energy instead of portfolio standards with binding targets.

Thirty-eight states have utility-scale wind installations. See Figure 3: 2010 State Wind Installed Capacity. Texas has the largest installed wind capacity followed by Iowa and California. AWEA, Wind Energy Facts: California (Aug. 2011).⁶⁷ Seven of the nation's ten largest wind farms are in Texas, including all of the top five. AWEA, Wind Energy Facts: Texas (Aug. 2011).⁶⁸

Figure 3: 2010 State Wind Installed Capacity⁶⁹



MAP 1.1: Estimated Wind Turbines in the Lower 48 States (2003 – 2011)⁷⁰



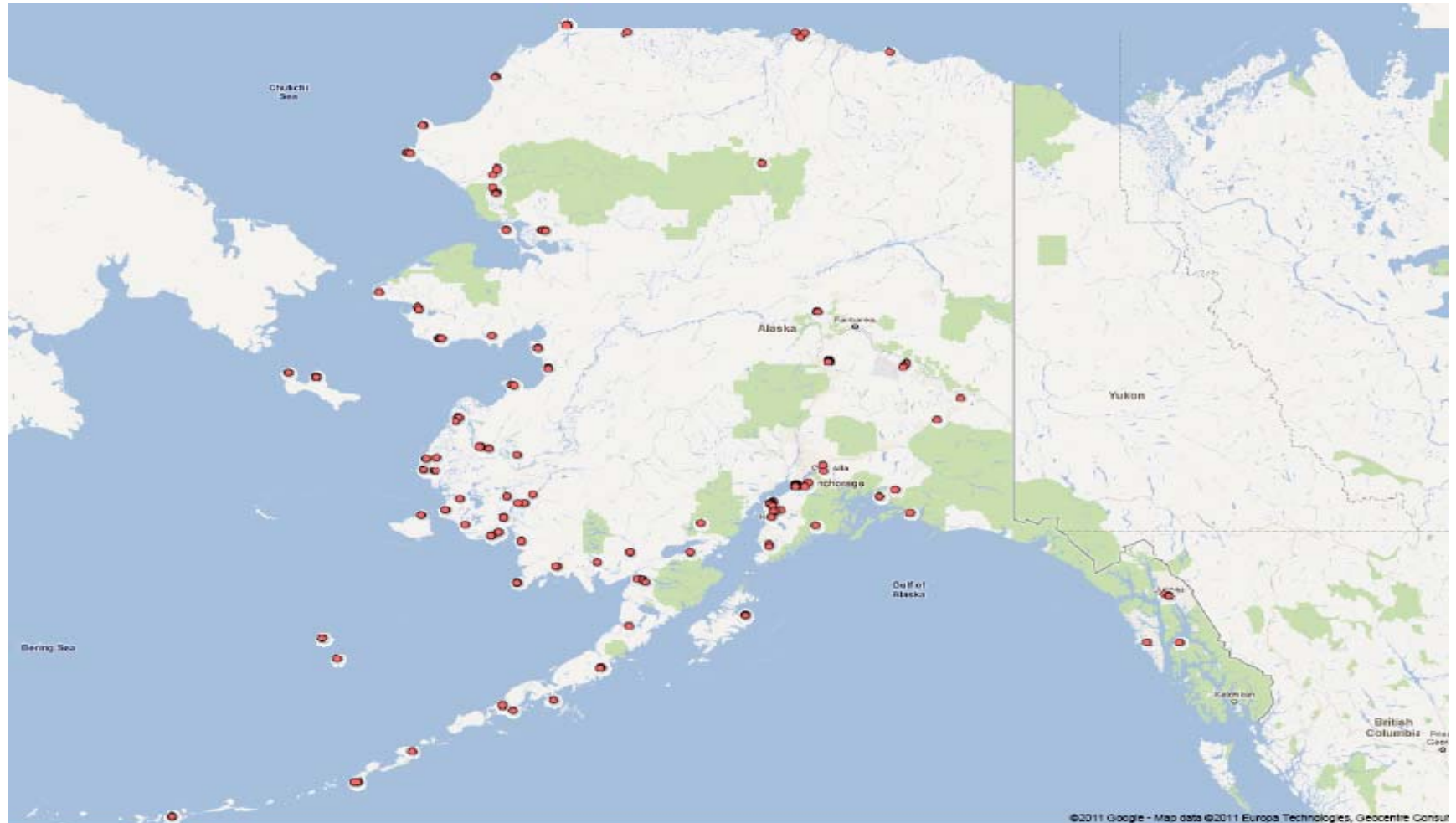
⁷⁰ Point map illustrating the location of wind turbines in 48 states in the United States that were logged with the FAA between 2003 and 2011. These are a mix of both existing and proposed wind turbines, as well as meteorological towers. Meteorological towers make up 2.12% of the logged structures on the overall U.S. map. All maps provided in this Petition are based on data available on the FAA website.

MAP 1.2: Estimated Wind Turbines in Hawaii (2003 – 2011)⁷¹



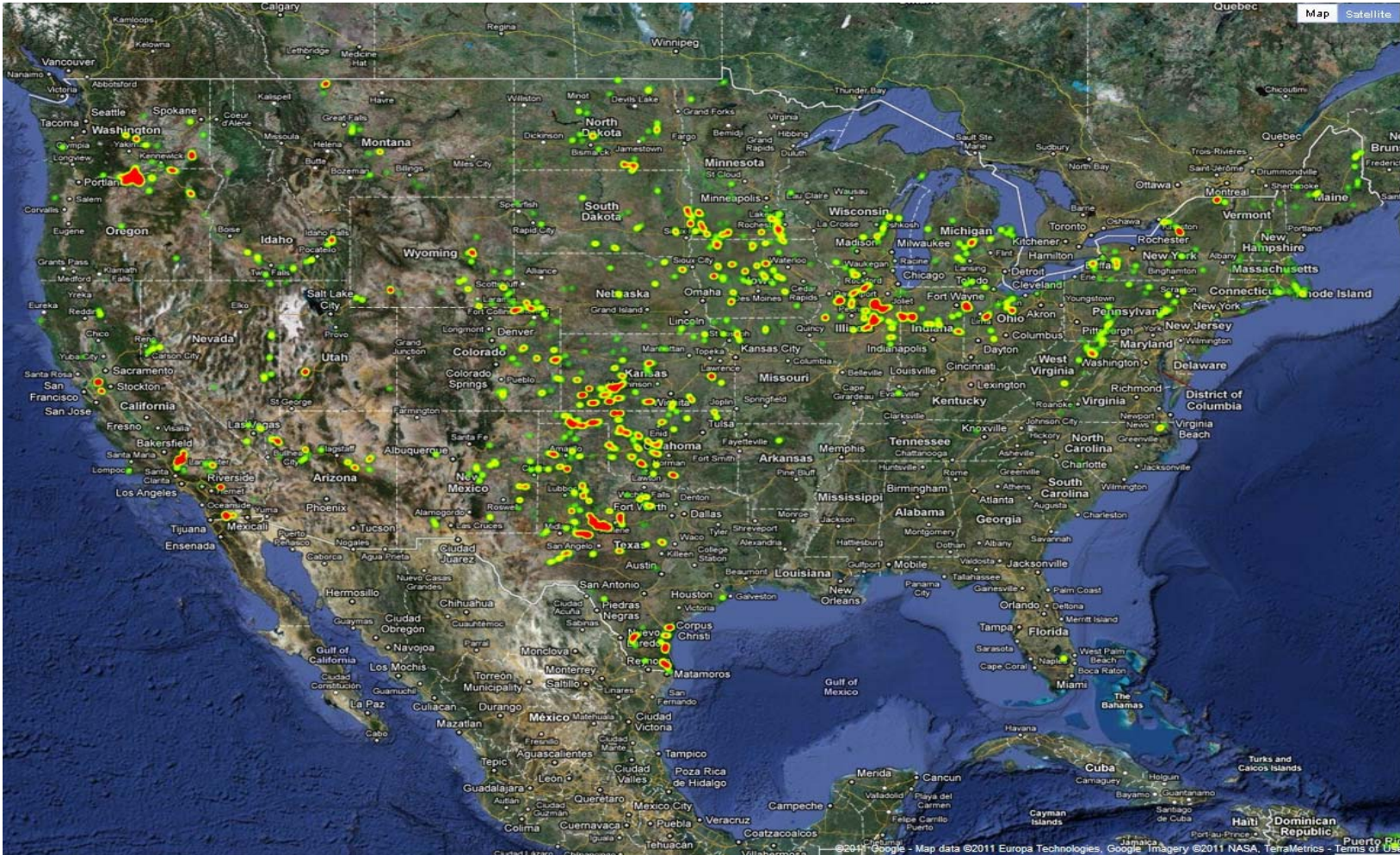
⁷¹ Point map illustrating the location of wind turbines in Hawaii that were logged with the FAA between 2003 and 2011. These are a mix of both existing and proposed wind turbines, as well as meteorological towers. Meteorological towers make up 2.12% of the logged structures on the overall U.S. map. All maps provided in this Petition are based on data available on the FAA website.

MAP 1.3: Estimated Wind Turbines in Alaska (2003 – 2011)⁷²



⁷² Point map illustrating the location of wind turbines in Alaska that were logged with the FAA between 2003 and 2011. These are a mix of both existing and proposed wind turbines, as well as meteorological towers. Meteorological towers make up 2.12% of the logged structures on the overall U.S. map. All maps provided in this Petition are based on data available on the FAA website.

MAP 2.1: Estimated Wind Turbines in the Lower 48 States (2003 – 2011)⁷³



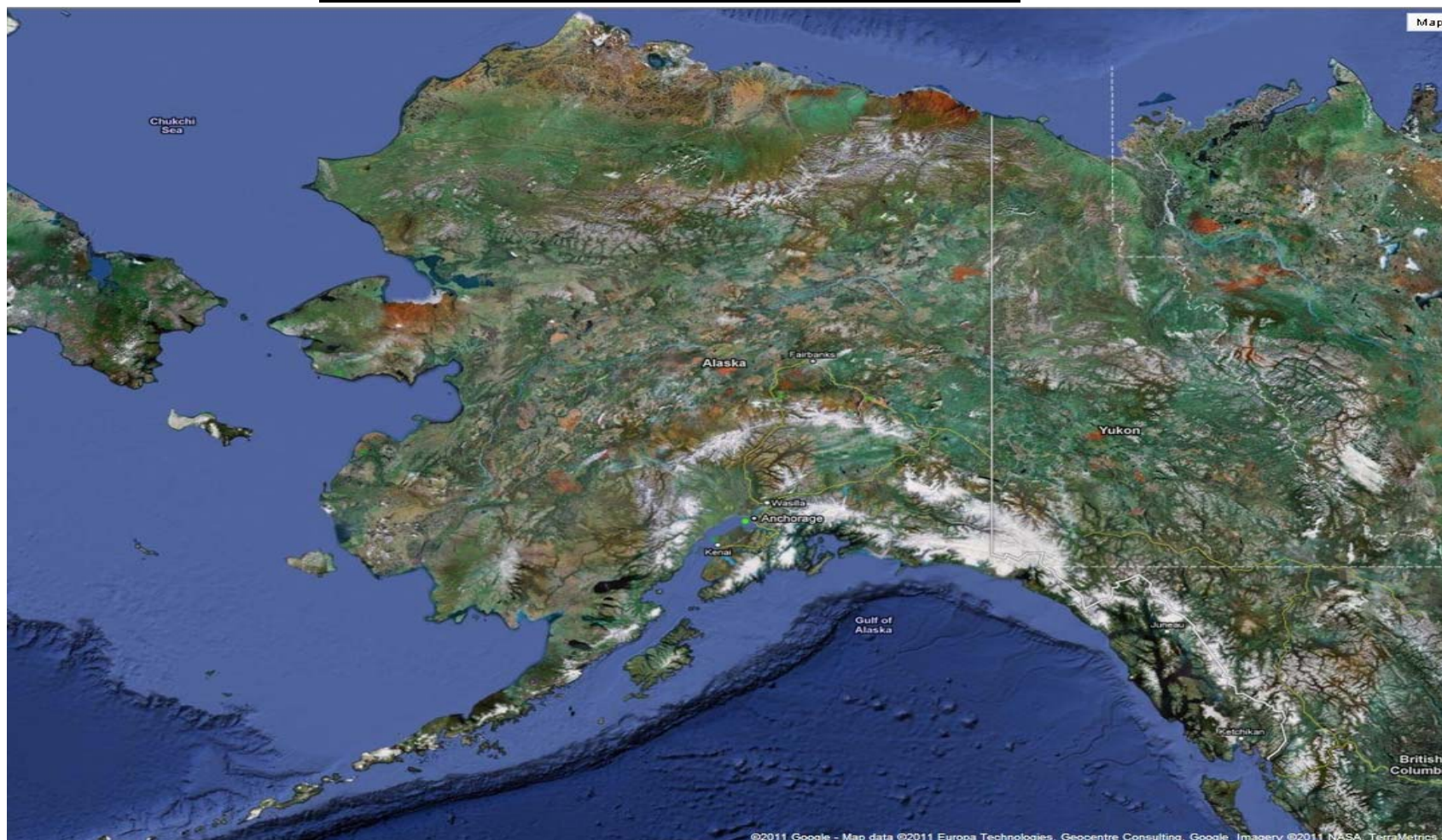
⁷³ Heat map indicating location of wind turbines in 48 states in the United States that were logged with the FAA between 2003 and 2011. These are a mix of both existing and proposed wind turbines, as well as meteorological towers. Meteorological towers make up 2.12% of the logged structures on the overall U.S. map. The darker orange and red dots represent areas with a relatively higher density of proposed wind structures than areas with green, yellow or no color dots. All maps provided in this Petition are based on data available on the FAA website.

MAP 2.2: Estimated Wind Turbines in Hawaii (2003 – 2011)⁷⁴



⁷⁴ Heat map indicating location of wind turbines in Hawaii that were logged with the FAA between 2003 and 2011. These are a mix of both existing and proposed wind turbines, as well as meteorological towers. Meteorological towers make up 2.12% of the logged structures on the overall U.S. map. The darker orange and red dots represent areas with a relatively higher density of proposed wind structures than areas with green, yellow or no color dots. All maps provided in this Petition are based on data available on the FAA website.

MAP 2.3: Estimated Wind Turbines in Alaska (2003 – 2011)⁷⁵



⁷⁵ Heat map indicating location of wind turbines in Alaska that were logged with the FAA between 2003 and 2011. These are a mix of both existing and proposed wind turbines, as well as meteorological towers. Meteorological towers make up 2.12% of the logged structures on the overall U.S. map. Because there are relatively few wind turbines in Alaska, they appear as small, light green dots on the map and might not be visible to some readers without magnification. All maps provided in this Petition are based on data available on the FAA website.

In addition to projects that have completed construction, there are over 90 separate projects totaling 8,400 MW of capacity currently under construction in 29 states. AWEA Third Quarter Report.

Along with land-based wind development, offshore wind energy is also poised to develop rapidly. See, e.g., DOI Press Release, Salazar, Chu Announce Major Offshore Wind Initiatives (Feb. 7, 2011)⁷⁶ (unveiling a coordinated strategic plan which pursues the deployment of 10 GW of offshore wind capacity by 2020 and 54 GW by 2030 and announcing \$50.5 million in funding for offshore wind energy deployment). The Energy Policy Act of 2005 authorized the Secretary of the Interior to grant leases on the Outer Continental Shelf (“OCS”) for alternative energy projects, including offshore wind energy projects. Pub. L. No. 109-58, 119 Stat. 594, § 388. The Secretary delegated this authority to the Director of the U.S. Bureau of Ocean Energy Management (“BOEM”), which subsequently approved the nation’s first commercial offshore wind energy project with around 130 turbines – the Cape Wind project – in federal waters off the coast of Massachusetts. Many other projects are being planned for construction in federal waters off the coast of Delaware, New Jersey, Florida and Georgia. See BOEM, Offshore Renewable Energy: Interim Policy Projects.⁷⁷ In addition, several projects are also being planned for state waters, such as Baryonyx Corporation’s proposal to construct 500 wind turbines off the Texas Gulf Coast. DOI has also announced a ‘Smart from the Start Initiative’ to facilitate siting, leasing and construction of new projects in the Atlantic Outer Continental Shelf. See DOI Press Release, Salazar Launches ‘Smart from the Start’ Initiative to Speed Offshore Wind Energy Development off the Atlantic Coast (Nov. 23, 2010).⁷⁸

The leading wind energy developers in the United States include developers that have extensive past experience with renewable energy sources, such as Iberdrola Renewables and Horizon Wind Energy, as well as subsidiaries of large oil companies such as BP and Shell. See, e.g., BP Alternative Energy, Our Business: Wind Power;⁷⁹ Shell, Wind Energy Operations.⁸⁰

⁷⁶ Available at <http://www.doi.gov/news/pressreleases/Salazar-Chu-Announce-Major-Offshore-Wind-Initiatives.cfm> (last visited Nov. 15, 2011)

⁷⁷ Available at <http://www.boemre.gov/offshore/RenewableEnergy/Projects.htm> (last visited Nov. 15, 2010).

⁷⁸ Available at <http://www.doi.gov/news/pressreleases/Salazar-Launches-Smart-from-the-Start-Initiative-to-Speed-Offshore-Wind-Energy-Development-off-the-Atlantic-Coast.cfm> (last visited Nov. 15, 2010).

⁷⁹ Available at <http://www.bp.com/sectiongenericarticle.do?categoryId=9024940&contentId=7046497> (last visited Nov. 11, 2011)

⁸⁰ Available at <http://www.shell.us/home/content/usa/innovation/wind/projects/> (last visited Nov. 17, 2011).

Siting:

A recent study contracted by ABC and conducted by Mississippi State University has shown the extent of this disregard. The study overlaid the ABC Wind Risk Assessment Map, which identifies important bird conservation areas, such as wildlife refuges, IBAs, major migratory routes and other important habitats (e.g., Whooping Crane migratory corridor, critical sage grouse habitat) with the USGS and FAA maps showing existing and planned turbines, respectively. Nearly 30,000 wind turbines have already been installed within areas identified as being of high importance to federally-protected birds in the United States, with more than 50,000 additional turbines planned for construction in similar areas. These include more than 18,000 in the migration corridor of the Whooping Crane—one of the nation’s rarest and most spectacular birds, 1,800 in Greater Sage-Grouse breeding strongholds, and nearly 1,400 in locations deemed to be of the most critical importance to conserving the nation’s birdlife. This clearly indicates that the voluntary guidelines are not working to protect our public trust resources, especially since proper siting is probably the best and most effective form of mitigation.

Increase in size of wind turbines in order to produce more energy

The growth in the industry has been paralleled by an expansion in the size of the turbines. “Modern wind turbines are giant structures” and may vary from 200 to 400 short tons in weight. AWEA et al., Winds of Change: A Manufacturing Blueprint for the Wind Industry (June 2010) at 6, 20. The blade tip speed of the turbines is typically around 180 mph. See Albert Manville, FWS, Presentation on Framing the Issues Dealing with Migratory Birds, Commercial Land-based Wind Energy Development, USFWS, and the MBTA (Oct. 21, 2011) 5 (“FWS 2011 MBTA Conference Presentation”) (explaining that the combination of large turbine blades and high speed increases the potential for bird collisions), Attachment G. Further, offshore wind energy projects use turbines much larger than those typically installed onshore. *Id.* at 16. The hypothesis that larger, taller wind turbines are even more dangerous to birds was confirmed by Loss et al (2012), who found a direct correlation between turbine height and the number of birds killed.

Larger turbines produce more energy. See DOE, Wind Power Today (May 2007) (“DOE Wind Power Today”)⁸¹ (explaining that DOE has been working with the wind industry to develop larger machines that are more efficient and that capture more energy from the wind). To meet the growing demand, in 2006 alone, average turbine size increased by more than 11% over the 2005 level. See DOE 20% Wind Report at 5; see also Global Energy Concepts, Wind Turbine Technology: Overview (Oct. 2005)⁸² (“The rotor diameters and rated capacities of wind turbines

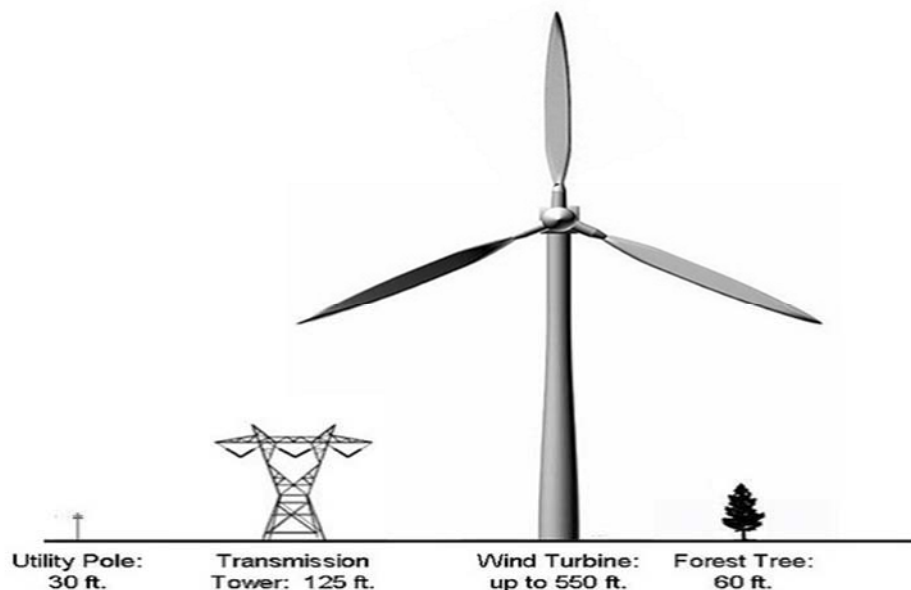
⁸¹ Available at <http://www.nrel.gov/docs/fy07osti/41330.pdf> (last visited Nov. 16, 2011).

⁸² Available at http://www.powernaturally.org/programs/wind/toolkit/9_windturbine_tech.pdf (last visited Nov. 16, 2011).

have continually increased in the past 10 years”). The average turbine installed in 2006 (at 1.5 MW) was almost as tall as the Statue of Liberty and had a rotor large enough to sweep a football field. DOE Wind Power Today at 2. By 2010, the size of wind turbines had increased with the rotor diameter of the blades exceeding 364 feet (111 meters) (a space that could provide parking for 24 average-sized cars end to end across the diameter of its rotor). Id. at 3.

Significant increase in the size of wind turbines is expected in the near term. By 2015, the average turbine size is expected to exceed 700 feet (213 meters) in height. DOE Wind Power Today at 3; see also Figure 4: Comparison Of The Height Of A Large Wind Turbine With Other Tall Structures. A recent DOE study on trends in the wind industry found that: “[a]verage hub heights and rotor diameters have also scaled with time, to 79.8 and 84.3 meters, respectively, in 2010. Since 1998-99, the average turbine hub height has increased by 43%, while the average rotor diameter has increased by 76%. Industry expectations as well new turbine announcements (especially to serve lower-wind-speed sites) suggest that significant further scaling, especially in rotor diameter, is anticipated in the near term.” 2010 DOE Wind Market Report at v; DOE Wind Power Today at 29-31.

Figure 4: Comparison Of The Height Of A Large Wind Turbine With Other Tall Structures⁸³



In sum, the wind industry has developed rapidly over this decade and has great potential to continue to grow. Further, larger and more efficient turbines are generating greater amounts of wind power at lower costs. However, the industry has been concerned about the expiration of a federal

⁸³ Source: Virginia Wind, Turbine Size, <http://www.vawind.org/#javascript> (last visited Nov. 17, 2011).

production tax credit by the end of 2012. ABC recognizes the need for renewable energy development and will support the industry in its efforts to extend the tax credit for wind energy production, if FWS puts in place a system that ensures ongoing compliance with the MBTA along with other wildlife protection laws.

C.2. Unregulated wind energy projects pose a serious threat to migratory birds protected under federal wildlife laws.

Rapid development of the wind industry and proliferation of massive wind turbines pose a serious threat to migratory bird species if they take place without meaningful regulation and appropriate mandatory federal standards. Indeed, the wind power industry has two essential attributes that render it particularly suitable to development of a permitting system for regulating take of migratory birds.

First, it is an industry that is inherently risky to birds because it entails placing huge turbines and associated power lines and other infrastructure in areas where killing of migratory birds (and hence violations of the MBTA) are virtually inevitable. See Letter from Laury Zicari, FWS to Jennifer McCarthy, U.S. Army Corps of Engineers (“Corps”) (May 11, 2011), Attachment H (in providing recommendations in relation to the wildlife impacts of the Saddleback Ridge wind project, FWS observed that, “[a]ll wind power projects will take birds and bats.”); Nat’l Wind Coordinating Collaborative, Wind Wildlife Research Meeting VIII: Presentation and Poster Abstracts 45-46 (Oct. 2010)⁸⁴ (“The rapid development of the wind industry in the US has resulted in situations in which wind sites without environmental constraints are becoming increasingly rare. Therefore, more sites with potential conflicts with endangered species and their habitats are under consideration for development... Locations with threatened or endangered species issues are becoming more common as the industry becomes more competitive. Although the species may differ, consistent problems with special status species exist nationwide.”).

Indeed, most birds impacted by wind energy projects are protected under the MBTA. See, e.g., Thomas Kunz et al., Assessing Impacts of Wind-Energy Development on Nocturnally Active Birds and Bats: A Guidance Document, 71(8) J. Wildlife Mgmt. 2449, 2450 (2007)⁸⁵ (“In a review of bird collisions reported from 31 studies at utility-scale wind energy facilities in the United States, Erickson et al. (2001) showed that 78% of carcasses found at wind-energy facilities outside of California were songbirds protected by the Migratory Bird Treaty Act.”).⁸⁶

⁸⁴ Available at http://www.nationalwind.org/assets/research_meetings/Research_Meeting_VIII_Abstracts.pdf (last visited Nov. 16, 2011).

⁸⁵ Available at http://www.batsandwind.org/pdf/jwm_m&m.pdf (last visited Nov. 16, 2011).

⁸⁶ Poorly sited and operated wind power projects may also have very detrimental effects on other wildlife, particularly bats. As discussed infra, see Section E.4, although this Petition is directed at migratory bird impacts, the permitting scheme that it advocates would have collateral benefits for other wildlife as well.

Second, the environmentally responsible development of wind power is generally recognized to be of benefit to society, particularly because it may be able to play a long-term role in alleviating the effects of climate change on ecosystems. A permitting system – such as that proposed in this Petition – is essential to such development.

Collision with wind turbines and related infrastructure

Wind energy projects adversely impact migratory birds in multiple ways. First, migratory birds are routinely killed by collisions with wind turbines or the infrastructure needed to support wind energy facilities. FWS estimated in 2009 that 440,000 birds were being killed annually by wind turbines in the United States. This mortality estimate is likely an underestimate based on the operation of approximately 22,000 turbines in 2009. See Albert Manville, FWS, Towers, Turbines, Power Lines, and Buildings – Steps Being Taken By the U.S. Fish and Wildlife Service to Avoid or Minimize Take of Migratory Birds at These Structures 6 (July 17 2009) (“Manville 2009 Paper”), Attachment I. By 2020, more than 100,000 turbines are projected to be operating, and it is expected that such an exponential increase of wind turbines will kill at least one million birds each year, and it is likely that the actual mortality will significantly exceed this estimate. See ABC Bird-Smart Wind Principles.

Further, while there are no well-established estimates for the numbers of birds killed by wind energy infrastructure (other than turbines) such as power lines, substations, and meteorological towers, three examples demonstrate why this infrastructure is also of serious concern. See Manville 2009 Paper at 7.

First, power lines are known to be the greatest source of anthropogenic mortality for fledged Whooping Cranes, whose Aransas-Wood Buffalo migration corridor traverses the Great Plains, where a large build out of wind power is expected. See FWS Regions 2 and 6, Whooping Cranes and Wind Development – an Issue Paper 2-3 (2009).⁸⁷ Golden Eagle and hawk mortality at power lines are also well documented.

Second, substations associated with wind energy facilities can be another source of mortality, especially when steady-burning lights are left on in low-visibility conditions during migration, as happened during October 1-2, 2011 at the Laurel Mountain wind project and around May 23, 2003 at the Mountaineer wind facility, both in West Virginia. See Memo from Stantec Consulting (consultants for developer) to Laura Hill, FWS, Bird Mortality at Laurel Mountain Substation Memo

⁸⁷ Available at
ftp://wiley.kars.ku.edu/windresource/Whooping_Crane_and_Wind_Development_FWS_%20April%202009.pdf
(last visited Nov. 17, 2011).

(Oct. 25, 2011) at 1, Attachment J; Curry & Kerlinger, LLC, A Study of Bird and Bat Collision Fatalities at the Mountaineer Wind Energy Center, Tucker County, West Virginia: Annual Report for 2003 (Feb. 14, 2004) at 5.⁸⁸ 484 birds killed by the Laurel Mountain wind energy project, mostly MBTA-protected songbirds, were found at a substation and battery energy storage station on the site; at Mountaineer, 33 birds were found dead at a substation and three wind turbines.

Third, meteorological towers are documented to kill birds. For example, at the Shiloh II Wind Power Project in California, more than 52 birds were found dead at ten meteorological towers over a two-year period (these are unadjusted mortality numbers and actual mortality at the sites would have been higher). See Curry & Kerlinger LLC, Meteorological Tower Fatality Study at the Shiloh II Wind Project, Solano County, California (Apr. 2008) at 6.⁸⁹ According to the Shiloh II study, 85% of the dead birds were legally protected.⁹⁰ Id. at 14.

Habitat loss and degradation

Development of wind energy projects can harm birds through long-term habitat loss, alteration, degradation, and fragmentation. Wind energy projects are expected to impact almost 20,000 square miles of terrestrial habitat, and another 4,000 square miles of marine habitat. See DOE 20% Wind Report at 110-11. A U.S. Government Accountability Office (“GAO”) report on wind energy found that, “[a]ccording to FWS, the loss of habitat quantity and quality is the primary cause of declines in most assessed bird populations and many other wildlife species.” GAO, Wind Power: Impacts on Wildlife and Government Responsibilities for Regulating Development and Protecting Wildlife 15 (2005) (“GAO Wind Power Report”);⁹¹ see also Ill. Dep’t of Natural Res., The Possible Effects of Wind Energy on Illinois Birds and Bats 2 (2007).⁹²

FWS itself has raised concerns about both direct and indirect effects of various wind energy projects. See, e.g., Letter from FWS to Amber Zuhlke, Wind Capital Group, Big Lake Wind Facility in Palm Beach, Florida (July 1, 2011), Attachment K (regarding construction of a project in the Everglades Agricultural Area, FWS stated that the site “supports a host of sensitive trust resources

⁸⁸ Available at <http://www.wvhighlands.org/Birds/MountaineerFinalAvianRpt-%203-15-04PKJK.pdf> (last visited Nov. 17, 2011).

⁸⁹ Available at <http://www.co.solano.ca.us/civicax/filebank/blobdload.aspx?blobid=8916> (last visited Nov. 17, 2011).

⁹⁰ The study states that 15% of the dead birds found at the met towers were legally unprotected. It is likely that the remaining 85% of the birds killed by the project were protected under the MBTA because almost all of the species that were listed as fatalities found during the study were those protected under the MBTA.

⁹¹ Available at <http://www.gao.gov/new.items/d05906.pdf> (last visited Dec. 11, 2011).

⁹² Available at <http://dnr.state.il.us/publications/pdf/00000544.pdf> (last visited Dec. 11, 2011).

including federally protected migratory birds... The Service has significant concerns on the effects of the proposed project on our trust resources and their habitats. These include both the direct effects of “take” (*i.e.*, mortality and injury through collision) and the indirect effects of habitat fragmentation, site avoidance, disturbance, habitat degradation, barriers, and creation of marginal/suboptimal adjacent wetlands habitats, among others.”).

Wind energy facilities require not only wind turbines but also access roads and other infrastructure such as power lines, substations, and outbuildings, resulting in habitat impacts. Furthermore, another form of habitat that is lost due to wind energy development is the airspace that birds formerly used in flight, which can disrupt migrations and other essential behavioral patterns. See FWS 2011 MBTA Conference Presentation at 2.

In addition to the habitat lost to the cumulative footprint of wind facilities, habitat that remains but is fragmented by the facility can lose its value for some bird species. Examples of species sensitive to habitat fragmentation include the Lesser Prairie-Chicken and Grasshopper Sparrow. See Lesser Prairie-Chicken Interstate Working Group, Assessment and Conservation Strategy for the Lesser Prairie-Chicken (*Tympanuchus pallidicinctus*) 10 (1999).⁹³ For instance, the Grasshopper Sparrow has been found by the U.S. Geological Survey to avoid habitat near wind turbines. See Jill A. Shaffer & Douglas H. Johnson, U.S. Geological Survey, Displacement Effects of Wind Developments on Grassland Birds in the Northern Great Plains 51 (2010).⁹⁴

Habitat fragmentation results in an increase of “edges” – areas where habitat is interrupted by human-created features such as access roads and substations. According to FWS, “an increase in edge may result in greater nest parasitism and nest predation.” FWS, Revised Draft Land-Based Wind Energy Guidelines 86 (Sept. 13, 2011) (“Wind Guidelines Third Draft”).⁹⁵ Moreover, some bird species are sensitive to tall structures and will abandon important habitat when tall structures are added. For example, Greater Sage-Grouse abandoned key habitat at an Idaho site after meteorological towers for wind testing were installed. See Biodiversity Conservation Alliance, Wind Power in Wyoming: Doing It Smart from the Start 21 (2008).

Barrier effects

In addition to collision with wind turbines and displacement from habitat, there are other serious threats posed by wind energy development to migratory birds. “Barrier effects,” *i.e.*, the energetic impacts to birds of avoiding wind energy facilities rather than flying through them, will

⁹³ Available at <http://bsi.montana.edu/prairiemap/files/LesserChicken.pdf> (last visited Dec. 11, 2011).

⁹⁴ Available at https://www.nationalwind.org/assets/research_meetings/Research_Meeting_VII_Shaffer.pdf (last visited Dec. 12, 2011).

⁹⁵ Available at <http://www.fws.gov/windenergy/> (last visited Dec. 11, 2011).

become of increasing importance as the size of wind facilities increases and as migration pathways or regional use areas fill with wind turbines. See FWS, *Barrier Effect* (2011) (providing an overview of barrier effects).⁹⁶

For example, more than 2,000 wind turbines have been proposed at a project in the Whooping Crane's Aransas-Wood Buffalo migration corridor in South Dakota (Titan Wind project). Clipper Wind Power, Clipper Windpower And BP Alternative Energy Form Joint Venture To Develop Up To 5,050 MW: Project to be World's Largest (2008).⁹⁷ Further, 1,000 wind turbines have been proposed for a project in Golden Eagle use areas in Wyoming (Chokecherry-Sierra Madre project). See BLM, *Chokecherry and Sierra Madre Draft Environmental Impact Statement* (2011).⁹⁸

According to FWS, barrier effects have been observed at both land-based and offshore wind projects. In addition, FWS has said that energetic impacts caused by birds avoiding wind turbines may lead to population impacts over time. *Barrier Effect supra* (2011).

Noise effects

The effects of noise produced by wind turbines can also have adverse impacts on bird species. For instance, utility-scale wind turbines have been demonstrated to produce noise within the range that can reduce densities in some grassland and woodland birds. Noise can also mask the calls birds use to communicate. See FWS, *The Effects of Noise on Wildlife* (2011) (providing an overview of noise impacts).⁹⁹

Mapping of Estimated Wind Turbines in Key Bird Use Areas

The maps provided below, see Maps 3.1 – 3.3, demonstrate that many wind energy projects have already likely been constructed in areas that are extremely important for birds. These maps have been created by ABC based on data submitted to the FAA - OE/AAA between 2003 (the year when voluntary guidelines were established for wind energy projects by FWS) to 2011. They include all unique wind turbine and associated meteorological tower proposals submitted to the FAA during that time. Wind turbines that were already proposed or existing prior to 2003 are not shown. Meteorological towers represent 2.12% of the structures on the map. These FAA-documented

⁹⁶ Available at http://www.fws.gov/windenergy/docs/Barrier_Effect.pdf. (last visited Nov. 15, 2011).

⁹⁷ Available at http://www.clipperwind.com/pr_073008.html (last visited Nov. 15, 2011).

⁹⁸ Available at <http://www.blm.gov/wy/st/en/info/NEPA/documents/rfo/Chokecherry.html> (last visited Nov. 15, 2011).

⁹⁹ Available at <http://www.fws.gov/windenergy/docs/Noise.pdf> (last visited Nov. 15, 2011).

proposed wind turbines and metrological towers are overlaid on the ABC Wind Development Bird Risk Map.¹⁰⁰

On the maps provided below, red indicates critically important areas for birds where wind energy should not be developed. These areas include important habitat for endangered birds, for concentrations of 500,000 or more migratory birds, for concentrations of the rarest WatchList bird, or those that have special habitat requirements and/or are especially likely to be vulnerable to wind-related mortality or habitat impacts and the very highest importance bottleneck areas for migrant birds.

Orange indicates areas that are highly important to birds. Wind development might sometimes be possible in orange locations but will require especially careful siting and operation. Wind power should also only be developed after thorough pre-construction assessments can prove there is not a significant bird problem for a particular planned turbine configuration, or can identify ways that micro-siting or operational mitigation can effectively address any identified problem. Such areas include: Globally Important Bird Areas, important habitat for high-priority WatchList birds, and areas where migratory birds can be expected to be significantly affected. Monitoring and compensatory mitigation will be needed to redress the loss of any birds or habitat unavoidably harmed.

Areas shown in a tint of orange are either (a) Key Migration Corridors where risk to birds will differ from season to season, and may also differ from year to year between specific locations within the corridor, or (b) Key Habitat Areas for specific at-risk species where the species may not be present all year round, and birds are likely to be most at risk from wind development where their optimal habitat is found within the tinted area.

Areas that are not colored orange or red can generally be developed for wind energy if well-conducted pre-construction assessments do not indicate an unexpected or previously unknown bird impact or habitat problem, and so long as appropriate construction and operational mitigation, monitoring, and compensatory mitigation are implemented.

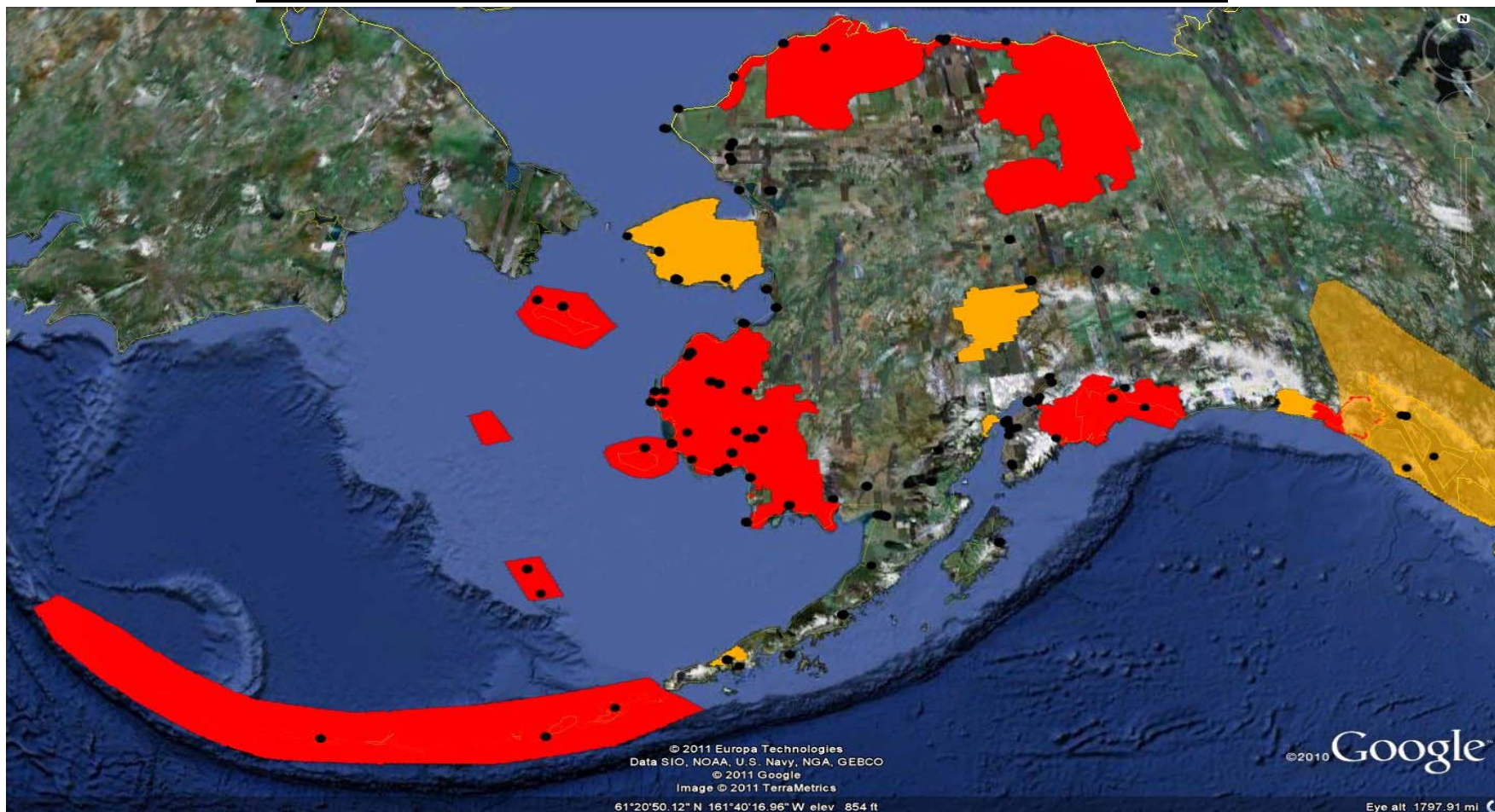
The maps are based on the best data available to ABC as of early December 2011 and ABC will update the maps over time.

¹⁰⁰ The data presented on the maps provided below are derived from a variety of sources. Examples of primary sources include ABC's list of the 500 most Important Bird Areas in the United States, data on Sage-Grouse core areas from the BLM, and data on the migration corridor of the Whooping Crane from The Nature Conservancy/AWWI. Boundaries of sites are either provided by existing federal or other Geographic Information System layers, or produced by ABC using the best available maps and expert staff opinion. The boundaries of these areas are set on the map based on ABC's best expert judgment as to where the greatest concentration of birds will be present during most migration periods.

MAP 3.1: Key Bird Use Areas and Estimated Wind Turbines in the Lower 48 States (2003-2011)¹⁰¹

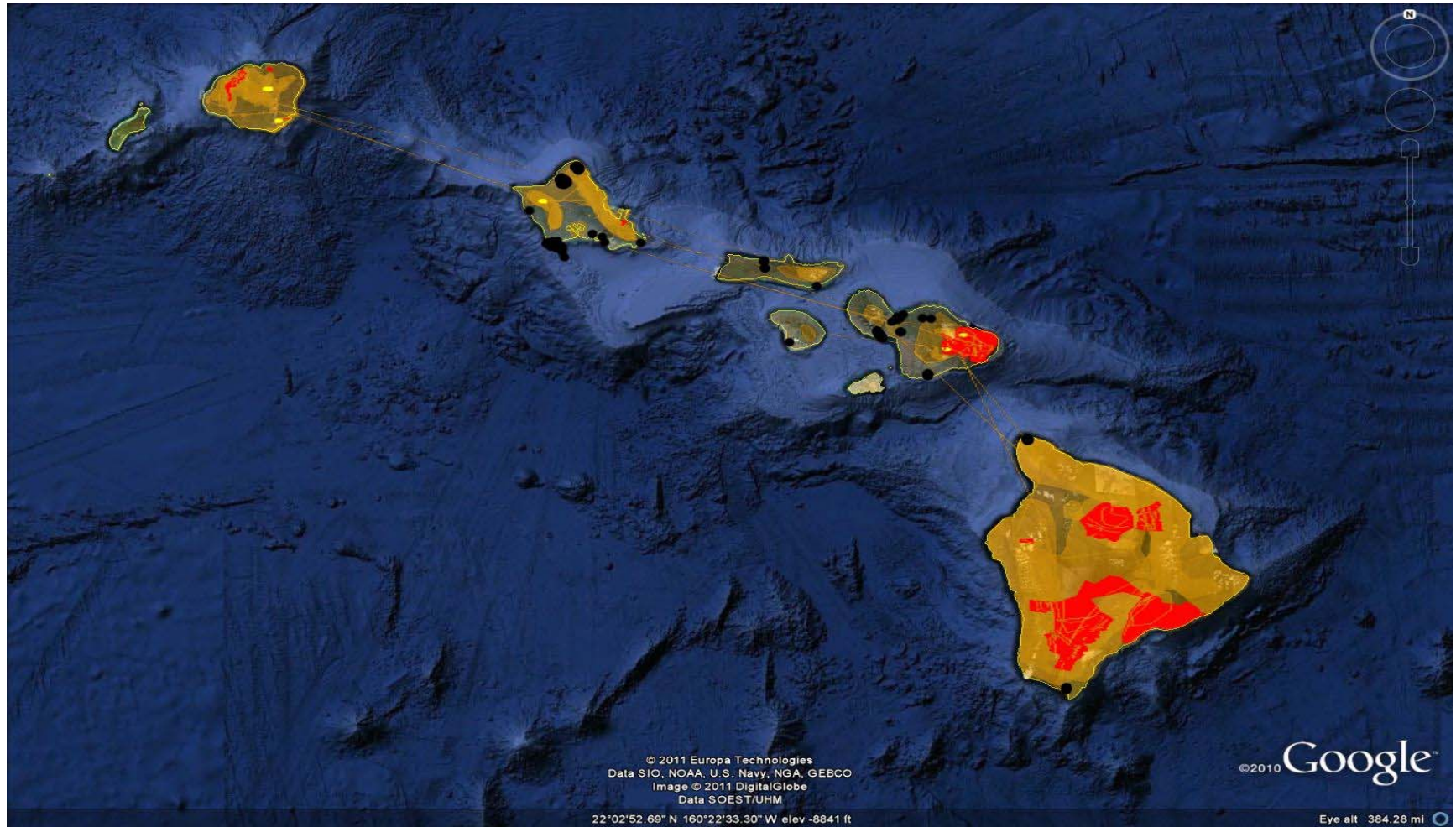
¹⁰¹ Black represents proposed wind turbines and meteorological towers logged with the FAA between 2003 and 2011 in 48 states in the United States. Red indicates critically important areas for birds where wind energy should not be developed. Wind development might sometimes be possible in orange locations but will require especially careful siting and operation. All maps provided in this Petition are based on data available on the FAA website.

MAP 3.2: Key Bird Use Areas and Estimated Wind Turbines in Alaska (2003-2011)¹⁰²



¹⁰² Black represents proposed wind turbines and meteorological towers logged with the FAA between 2003 and 2011 in Alaska. Red indicates critically important areas for birds where wind energy should not be developed. Wind development might sometimes be possible in orange locations but will require especially careful siting and operation. All maps provided in this Petition are based on data available on the FAA website.

MAP 3.3: Key Bird Use Areas and Estimated Wind Turbines in Hawaii (2003-2011)¹⁰³



¹⁰³ Black represents proposed wind turbines and meteorological towers logged with the FAA between 2003 and 2011 in Hawaii. Red indicates critically important areas for birds where wind energy should not be developed. Wind development might sometimes be possible in orange locations but will require especially careful siting and operation. All maps provided in this Petition are based on data available on the FAA website.

Cumulative impacts

Finally, wind energy development can harm birds through its addition to the cumulative impacts of all the threats that birds face. According to the GAO:

Scientists, in particular, are concerned about the potential cumulative impacts of wind power on species populations if the industry expands as expected. Such concerns may be well-founded because significant development is proposed in areas that contain large numbers of species or are believed to be migratory flyways. Concerns are compounded by the fact that the regulation of wind power varies from location-to-location and some state and local regulatory agencies we reviewed generally had little experience or expertise in addressing the environmental and wildlife impacts from wind power. In addition, given the relatively narrow regulatory scope of state and local agencies, it appears that when new wind power facilities are permitted, no one is considering the impacts of wind power on a regional or “ecosystem” scale—a scale that often spans governmental jurisdictions. FWS, in its responsibility for protecting wildlife, is the appropriate agency for such a task and in fact does monitor the status of species populations, to the extent possible.

GAO Wind Power Report at 43 (emphases added). FWS has also stated that cumulative impacts are important: “Declining bird populations are probably most often the result of combined or cumulative impacts of all mortality, thus addressing each of the contributing factors is a priority.” FWS, Migratory Bird Mortality: Many Human-Caused Threats Afflict our Bird Populations 2 (2002).¹⁰⁴

All of the impacts of wind energy projects, described above, pose a serious threat to migratory birds. This is particularly so because at present FWS does not have any mandatory standards and regulations in place for development of wind energy projects in a manner that is protective of migratory birds.

C.3. At present, for land-based wind energy projects, FWS is relying on a system of voluntary compliance with the MBTA that is empirically ineffective in protecting migratory birds and will lead to rampant violations of federal law.

The MBTA, ESA, and BGEPA, prohibit “take” of migratory birds, endangered and threatened species, and Bald and Golden Eagles. Both the ESA and the implementing regulations of BGEPA provide mechanisms for FWS to regulate take of endangered and threatened species and Bald and Golden Eagles by individual wind energy projects (typically by issuing incidental take

¹⁰⁴ Available at <http://www.fws.gov/birds/mortality-fact-sheet.pdf> (last visited Nov. 15, 2011).

permits subject to various terms and conditions). However, at present no such comparable mechanism exists under the MBTA.

In lieu of mandatory standards and obligations for avoiding and minimizing the wildlife impacts of wind energy projects, FWS has long elected to merely provide non-binding “recommendations” to the wind industry that developers may “voluntarily” choose to follow or reject.

While such recommendations are wholly inadequate, as described further below, it should be noted that such recommendations recognize the need for a federal (and not a state) system to protect migratory birds from the threats posed by wind energy projects. For instance, state public service commissions, which are typically the state authorities that are involved in the approval of wind energy projects on non-federal lands, unlike FWS, are not equipped to address the cumulative migratory bird impacts of wind energy projects. Indeed, the MBTA itself is premised on the recognition that migratory birds constitute a unique federal trust resource that ought to be protected under a federalized system rather than in an ad hoc manner by individual states.¹⁰⁵ In State of Missouri v. Holland, 252 U.S. 416 (1920), the U.S. Supreme Court upheld the constitutionality and validity of the MBTA and particularly recognized the need for “national action” in lieu of potentially inconsistent state actions to protect and regulate take of migratory birds. The Court observed as follows:

No doubt it is true that as between a State and its inhabitants the State may regulate the killing and sale of such birds, but it does not follow that its authority is exclusive of paramount powers.... The whole foundation of the State's rights is the presence within their jurisdiction of birds that yesterday had not arrived, tomorrow may be in another State and in a week a thousand miles away.... Here a national interest of very nearly the first magnitude is involved. It can be protected only by national action in concert with that of another power. The subject matter is only transitorily within the State and has no permanent habitat therein. But for the treaty and the statute there soon might be no birds for any powers to deal with. We see nothing in the Constitution that compels the Government to sit by while a food supply is cut

¹⁰⁵ Further, under international law, migratory species that migrate between two or more nations constitute “shared natural resources” over which a single nation cannot assume unilateral control such that it deprives the other concerned nations of their right to an equitable and reasonable share of the resource. See, e.g., U.S.- Import Prohibition of Certain Shrimp and Shrimp Products, 12 October 1998, 38 ILM 118 ¶133 (observing that sea turtles are highly migratory animals, passing in and out of the waters of various coastal states and that each of such states can claim an interest in the species conservation); see also Philippe Sands, Principles of International Environmental Law 238 (2d ed. 2003); U. N. Env't Prog., Principles of Conduct in the field of the Environment for the Guidance of States in the Conservation and Harmonious Utilization of Natural Resources Shared by Two or More States, 17 ILM 1097 (1978), Principle 3(3).

off and the protectors of our forests and our crops are destroyed. It is not sufficient to rely upon the States. The reliance is vain, and were it otherwise, the question is whether the United States is forbidden to act. We are of opinion that the treaty and statute must be upheld.

252 U.S. at 434-435.

In recognition of its federal trust responsibility to protect migratory birds, in 2003, FWS issued “Interim Guidance” designed to address impacts of wind energy projects on migratory birds and other wildlife. See FWS, Interim Guidance on Avoiding and Minimizing Wildlife Impacts From Wind Turbines (May 13, 2003) (“2003 Interim Guidance”).¹⁰⁶ FWS indicated its intent to evaluate the guidance over a two-year period. The guidance contained “voluntary” guidelines for the wind industry and did not impose any mandatory requirements to avoid or minimize wildlife impacts. In fact, in 2004, FWS issued a memo which reiterated “the voluntary and flexible nature” of the 2003 Interim Guidance and went so far as to state that, “[t]he Interim Guidelines are not to be construed as rigid requirements, which are applicable to every situation, nor should they be read literally.” Memo from Steven Williams, FWS Director to FWS Regional Directors, Implementation of Service Voluntary Interim Guidelines to Avoid and Minimize Wildlife Impacts from Wind Turbines (Apr. 26, 2004).¹⁰⁷

Subsequently, DOI announced the formation of a Wind Turbine Guidelines Federal Advisory Committee (“Wind FAC”) to provide recommendations and advice to DOI and FWS “on developing effective measures to protect wildlife resources and enhance potential benefits to wildlife that may be identified.” DOI, Establishment of Wind Turbine Guidelines Advisory Committee, 72 Fed. Reg. 11373 (Mar. 13, 2007). On October 26, 2007, the Secretary of the Interior announced in a press release that 22 individuals had been named to serve on the Wind FAC. Thereafter, several wildlife conservation groups raised objections about the skewed composition of the Wind FAC which was dominated by representatives of the wind power industry. Many members of the wildlife conservation community argued that the Committee violated the requirements of the Federal Advisory Committee Act (“FACA”), 5 U.S.C. App. 2 §§1-16, that all chartered advisory committees must be “fairly balanced in terms of the points of view represented and the functions to be performed by the advisory committee,” and “will not be inappropriately influenced by ... any special interest.” Id. §§ 5(b)(2)-(3). In response to these objections, although DOI made some limited changes to the composition of the Committee, the members representing the wildlife protection interests continue to

¹⁰⁶ Available at <http://www.fws.gov/midwest/wind/guidance/Serviceinterimguide.pdf> (last visited Nov. 17, 2011).

¹⁰⁷ Available at http://www.fws.gov/habitatconservation/wind_guidelines.pdf (last visited Nov. 17, 2011).

be clearly outweighed by industry advocates and do not represent the full spectrum of viewpoints on the issue that exist within the wildlife protection community.¹⁰⁸

On April 13, 2010, the Wind FAC submitted its final recommendations to FWS and DOI. See Wind Turbine Guidelines Advisory Committee Recommendations (2010) (“Committee Recommendations”).¹⁰⁹ Instead of merely rubber-stamping the Committee Recommendations, FWS’s wildlife biologists recognized that those Recommendations suffered from certain shortcomings and would not accomplish their stated conservation objectives, at least without substantial revision. See FWS, Comparison of FAC Recommendations to FWS Draft Voluntary Guidelines (Feb. 2011).¹¹⁰ Thus, FWS convened a team of its wind-wildlife experts during late spring 2010 to prepare new guidelines for wind energy projects, which were finally published for public comment by FWS on February 8, 2011, i.e., the Draft Voluntary Land-Based Wind Energy Guidelines (“Wind Guidelines First Draft”) and the Draft Eagle Conservation Plan Guidance (“Eagle Guidance”). See FWS 2011 MBTA Conference Presentation at 13. Both documents provided agency recommendations for industry to avoid and minimize wildlife impacts.

The Wind Guidelines First Draft was commended by many in the conservation community as an important first step, and there was strong support for further strengthening the guidelines and making their provisions mandatory for wind energy developers. See, e.g., ABC et al., Wind Energy Guidelines Comments (May 19, 2011) (“The guidelines must be strengthened and made mandatory”); Black Swamp Bird Observatory, Wind Energy Guidelines Comments (May 18, 2011) (“If the Guidelines are to truly avoid and minimize negative effects to fish, wildlife and their habitats resulting from construction, operation and maintenance of land-based, wind energy facilities, then the Guidelines, once finalized, must be regulatory and not voluntary on all lands, public and private.”); Cornell Lab of Ornithology, Comments to the U.S. Fish and Wildlife Service: Draft Land-based Wind Energy Guidelines (May 2011) (“We respectfully suggest that at least some components of the Guidelines move forward as mandatory.”); Friends of Blackwater et al., Wind Energy Guidelines Comments and Eagle Conservation Plan Guidance Comments (May 19, 2011) at 2 (“Unfortunately, as presently written, the Guidelines cannot satisfy this fundamental objective for a national policy on land-based wind power projects because the Guidelines’ provisions addressing siting, construction, operation, and monitoring are merely voluntary, i.e., wind energy developers

¹⁰⁸ Indeed, by far the largest single voting bloc on the Committee is constituted by the wind industry representatives. Excluding the FWS official who works for the agency receiving the recommendations, there are 21 current members in the Committee – 43% are wind industry representatives where 7 members work in wind energy companies and 2 members are lawyers who represent wind energy companies. See DOI Press Release, Interior Secretary Kempthorne Names Members for Committee to Address Wildlife Impacts of Wind Turbines (Oct. 26, 2007); see also FWS, Committee Background, http://www.fws.gov/habitatconservation/windpower/wind_turbine_advisory_committee_information.html (providing a list of the current members of the Committee).

¹⁰⁹ Available at http://www.fws.gov/habitatconservation/windpower/wind_turbine_advisory_committee.html (last visited Dec. 12, 2011).

¹¹⁰ Available at <http://www.fws.gov/windenergy/index.html> (last visited Nov. 17, 2011).

can choose not to adhere to the requirements in the Guidelines.”); Conservation Biology Inst., Comments on Wind Energy Guidelines (May 19, 2011) (“the proposed wind energy guidelines, as drafted, are unlikely to lead to the types of rigorous regional analyses that are necessary to adequately assess potential ecological and cumulative impacts.... The guidelines should be regulatory, not voluntary, on both public and private lands, and should be enforced.”); Pa. Game Comm’n, FWS Draft Land-based Wind Energy Guidelines (May 2011) (“the Guidelines would be more effective if they are regulatory rather than voluntary.”); San Diego Audubon Soc’y, Wind Energy Guidelines Comments (May 19, 2011) (“Given the strong federal emphasis on expanding wind power throughout the country, mandatory guidelines are absolutely essential to preserve our avian heritage. They need to be mandatory now, before thousands of new wind turbines, transmissions lines, and access roads are installed in inappropriate locations, not later when it is too late.”); Email Comment from Roger Shamley, President Chicago Audubon Soc’y (Mar. 5, 2011) (“I suggest that if you are serious about this issue that you make compliance mandatory, rather than optional.”); Pub. Employees for Env’tl. Responsibility (PEER), Wind Energy Guidelines Comments (May 19, 2011) (“Making the Guidelines voluntary rather than mandatory renders them meaningless.... PEER urges USFWS to make mandatory Guidelines for the siting of these facilities.”).¹¹¹

Nonetheless, the Committee itself – which in any event under FACA may only play a purely “advisory” role in the decision-making process, 5 U.S.C. App. II § 2(b)(6) (“the function of advisory committees should be advisory only”) – expressed its “disappoint[ment]” with the agency’s strengthened guidelines, and urged the agency to modify its recommendations in order “to mirror the FAC Recommendations.” FWS, April 27, 2011 Wind Federal Advisory Committee Meeting Summary 2, 18 (2011).¹¹² Indeed, although FWS initially requested the public to specifically comment on whether the Wind Guidelines First Draft should be made mandatory, in response to pressure from the Wind FAC, FWS did not again raise or address this issue, despite extensive public comments (cited above) urging FWS to make the guidelines mandatory. See id. at 14 (summarizing FWS’s position that, “FWS did not intend to write language that gave it control over the project or the process.”); see also id. at 15 (summarizing the FAC’s concern that “[t]he Draft Guidelines shift from trust and communication with the FWS to command and control by the FWS.”).

Further, in response to extensive pressure (particularly from the industry representatives of the Committee), FWS substantially weakened the wildlife protections in its initial guidelines – so much so that on many issues the subsequent two drafts published by the agency presented a complete departure from the agency’s previous position. See FWS, Revised Draft Land-Based Wind

¹¹¹ Public comments on the Guidelines are available here: <http://www.fws.gov/windenergy/index.html> (last visited Nov. 17, 2011).

¹¹² Available at http://www.fws.gov/habitatconservation/windpower/wind_turbine_advisory_committee_past_mtgs.html (last visited Nov. 14, 2011).

Energy Guidelines (July 12, 2011); (“Wind Guidelines Second Draft”) and Wind Guidelines Third Draft (jointly, the “Revised Wind Guidelines”); see also FWS, Comparison of Wind Federal Advisory Committee Recommendations and Guidelines.¹¹³

For instance, the Wind Guidelines First Draft recommended pre-construction monitoring for a minimum duration of three years. However, that position of the expert agency on what was necessary to gather adequate pre-construction data for decision-making was modified substantially by draft Revised Guidelines (in accordance with the Committee Recommendations). Accordingly the Revised Guidelines eliminated the specific duration requirement for pre-construction studies. Another example of substantial watering down of FWS’s own recommendations and language in the Guidelines concerns the agency’s position on adaptive management. In the Wind Guidelines First Draft, FWS extensively premised its recommendations on the need for wind energy developers to carry out comprehensive adaptive management. See Wind Guidelines First Draft at 12 (“Monitoring should be designed to support the adaptive management decision-making/assessment process.”); see also id. at 21 (discussing the applicability of adaptive management).

However, in the Revised Guidelines, FWS substantially weakened what were initially strong recommendations for adaptive management and went on to expressly state that: “[a]daptive management should not typically need to be applied to land-based wind energy projects because, in the majority of instances, when a developer follows the Guidelines, the impacts and the level of uncertainty should be low. Nevertheless, the tiered approach is designed to accommodate [adaptive management], when warranted.” Wind Guidelines Third Draft at 22 (emphases added). The Service, however, proffered no new data to support the proposition that the impacts and level of uncertainty will be “low” in the absence of meaningful adaptive management.

Further, the changes made to the Guidelines based on the Committee’s recommendations are designed to allow project developers to obtain assurances for non-prosecution in exchange for merely documenting FWS recommendations and developers’ reasons for “disagreeing” with the Service to show “adherence” to the Guidelines. See Wind Guidelines Third Draft at 13 (“While the advice of the Service is not binding, neither can it simply be reviewed and rejected without a contemporaneously documented reasoned justification, at least if the developer seeks to have the benefit of the enforcement discretion provisions of these guidelines. Instead, proper consideration of the advice of the Service entails contemporaneous documentation of how the developer evaluated that advice and the reasons for any departures from it.” (emphasis added)). Further, with respect to take of eagles by wind energy projects, in the Wind Guidelines Third Draft, FWS not only purported to provide non-enforcement assurances without regard to the applicable take permit regulations under BGEPA but, remarkably, did so based on the developers’ own determination as to whether such take will occur. See id. (“If taking of eagles is not anticipated, adherence to the Guidelines would give rise to assurances regarding enforcement discretion if an unexpected taking occurs.”).

¹¹³ All drafts of the Guidelines and related documents are available here: <http://www.fws.gov/windenergy/index.html> (last visited Nov. 17, 2011).

Thus, the Revised Guidelines eliminated important recommendations that FWS's own staff had initially adopted in the February 2011 Wind Guidelines First Draft – capitulating to the views of an industry-dominated advisory committee in lieu of the expert agency's own assessment of what is needed to conserve migratory birds and other wildlife resources held in trust for the American people. This is an apparent violation of FACA's directive that the "function of advisory committees should be advisory only," and in any event represents a failure to adopt a system even remotely approximating what the Service's own staff recognized as minimally acceptable to effectuate the MBTA.

Further, while the Revised Wind Guidelines are entirely "voluntary" in nature, the only measure that is "mandatory" as such is one imposed on FWS itself, and not the wind energy developer. The Revised Wind Guidelines impose no mandatory obligations on wind energy developers, but they require FWS to respond to industry proposals for site location within a truncated time frame, *i.e.*, 60 days from receipt of the proposal. See Wind Guidelines Third Draft at 17 ("The Service has determined that Field Offices have 60 calendar days to respond to a request by a wind energy developer to review and comment on proposed site locations, pre- and post-construction study designs, and proposed mitigation."). If the agency fails to provide a response within 60 days, then the developer can proceed with construction of the project without waiting for Service input. Moreover, if the Service takes more than 60 days to respond to the industry proposal, the developer need only consider the Service's recommendations "if feasible" and no comparable flexibility is given to the Service, regardless of the size or complexity of the project, or its risk to wildlife. Id. ("If the Service does not respond within 60 days of receipt of the document, then the developer can proceed through Tier 3 without waiting for Service input. If the Service provides comments at a later time, the developer should incorporate the comments if feasible." (emphases added)).

Thus, despite being well-aware that wind energy projects will invariably take migratory birds protected under the MBTA, FWS has embarked on an approach that merely provides voluntary guidelines in lieu of mandatory obligations for wind energy developers, and that affords developers little incentive to abide by the determinations of FWS biologists as to which sites pose unacceptable risks to migratory birds. See infra Section E.3.ii (discussing various letters sent by FWS to wind energy developers and/or their consultants cautioning them about their project's wildlife impacts). There is no empirical, or even rational, basis for concluding that these guidelines, especially as so watered-down and weakened in response to industry pressure, will be sufficient to ameliorate the serious and growing impacts of poorly sited wind power projects on migratory birds. To the contrary, it is predictable that the Guidelines will have the opposite effect by, in essence, encouraging wind power companies to believe that they may avoid prosecution for violations of the MBTA by self-certifying that they have "complied" with the Guidelines simply by documenting their reasons for declining to abide by the Service's recommendations.

C.4. At present, FWS does not have any standards – not even voluntary guidelines – for addressing the impacts of offshore wind energy projects on migratory birds.

The “voluntary” Guidelines described supra, Section C.3, only apply to land-based wind energy projects and no such comparable document exists for avoiding and mitigating the serious wildlife impacts of offshore wind energy projects. The current draft of the Guidelines further states that “[o]ffshore wind energy projects may involve another suite of effects and analyses not addressed here.” Wind Guidelines Third Draft at 16. In discussions in July and September 2011, FWS staff has told ABC personnel that while FWS might decide to prepare voluntary guidelines for offshore wind at some time in the future, the agency does not currently have a timeline for the preparation of such a document, and in fact has not made a decision to do so. Communication between Kelly Fuller, ABC and Albert Manville, FWS (July 12, 2011), and Jerome Ford, FWS (Sept. 20, 2011). Instead, FWS plans to provide case-by-case input to BOEM in regard to wildlife at proposed offshore wind facilities in federal waters. In addition, FWS plans to provide comments regarding Army Corps of Engineers’ permits for offshore wind facilities.

FWS’s approach to exercising oversight over offshore wind energy projects is extremely inadequate. At present, there are no mandatory standards or rules implementing the MBTA for offshore wind energy project developers. Indeed, there are not even inadequate “voluntary” guidelines such as those that exist for land-based projects. As a result, different FWS regional offices may propose varying methods and measures, resulting in no consistent standard for offshore wildlife protection. Furthermore, the lack of standardized regulatory guidance makes it impossible for offshore wind developers to plan ahead of time for what they will be asked to do. This uncertainty may complicate private-sector project financing, thus discouraging the development of offshore wind energy. In addition, in the absence of standardized regulatory guidance from FWS, other federal agencies that lack FWS’s avian expertise may move into the void and issue what may become de facto offshore wind guidelines. In fact, BOEM has already taken a step down this road by including Best Management Practices (“BMPs”) for reducing avian impacts of offshore wind projects in its Alternative Energy Programmatic Environmental Impact Statement. However, these BMPs set the bar very low and are entirely inadequate to reduce wildlife impacts. U.S. Minerals Mgm’t Serv., OCS Alternative Energy and Alternate Use Programmatic Environmental Impact Statement at 2-25 to 2-26.¹¹⁴

¹¹⁴ The document lists merely five minimal BMPs: “The Lessee shall evaluate avian use of the project area and design the project to minimize or mitigate the potential for bird strikes and habitat loss. The amount and extent of ecological baseline data required will be determined on a project-by-project basis; Lessees shall take measures to reduce perching opportunities; Lessees shall locate cable landfalls and onshore facilities so as to avoid impacts to known nesting beaches; Wind turbine rotors should not come within 30 m (100 ft) of the ocean surface to minimize impacts to water birds; Lessees shall comply with the FAA and Corps requirements for lighting while using lighting technology (e.g., low-intensity strobe lights) that minimizes impacts to avian species.” Needless to say, these five BMPs are not sufficient to avoid, minimize, and mitigate the impacts of offshore wind facilities on birds protected by the MBTA. Available at http://ocsenergy.anl.gov/documents/fpeis/Alt_Energy_FPEIS_Chapter2.pdf. (last visited Nov. 20, 2011).

It is also necessary for FWS to expeditiously take appropriate action to regulate the impacts of offshore wind energy projects on migratory birds because the regulatory processes of BOEM and the Corps will not ensure that all offshore wind energy projects adequately avoid, minimize and mitigate impacts to birds covered by the MBTA.

First, BOEM's regulatory authority over offshore wind projects is limited to those in waters over which BOEM has jurisdiction, which is currently limited to federal offshore waters and would not apply to state waters. In general, state waters extend three nautical miles from shore, however the state water limits in Texas and Florida (off the Gulf Coast) extend to about nine nautical miles. In addition, the Great Lakes are considered state waters. Office of Ocean and Coastal Res. Mgm't and Nat'l Oceanic and Atmospheric Admin., State Jurisdiction and Federal Waters 1 (2011).¹¹⁵ The relative lack of federal regulatory processes in state waters has been marketed by some states, such as Texas, as a reason for offshore wind developers to develop projects in their state waters. Tex. Gen. Land Office, Texas Offshore Wind Energy ("Developers partnering with the Land Office find the state easy to do business in. Texas' unique coastal sovereignty - out to 10.3 miles - means less federal entanglement.").¹¹⁶

Second, while FWS can provide comments during BOEM and Corps processes, unless FWS has its own binding determination to issue under the MBTA, the agency's comments need not be followed, which will leave the agency without a clear path for fulfilling its mandate to protect migratory birds. Wind energy development in state water locations will present significant challenges if it is sited and operated without a concrete framework for avoiding, minimizing and mitigating wildlife impacts. As a general rule of thumb, more birds use near shore areas than locations farther out to sea. In the eastern United States, for example, large numbers of birds migrate along the Atlantic Coast. Likewise, the Texas Gulf Coast is heavily used by birds migrating to and from Globally Important Bird Areas. The Great Lakes are also potentially a difficult location because of the large amount of bird migration that takes place across them. Thus, offshore wind facilities in state jurisdictional waters are where some of the most serious impacts to birds protected by the MBTA could take place, but where FWS may have the least ability to fulfill its wildlife protection mandate, unless a permitting scheme such as that proposed in this Petition is adopted.

Wind energy development in waters outside of federal jurisdiction is already underway and several wind energy projects are being constructed in state waters – areas which, although covered by the MBTA's general prohibition on unauthorized take, may lack any other federal mechanism to the project affording an adequate review of wildlife impacts. The proposed Baryonyx offshore wind facility would have entailed 500 6-MW wind turbines between five and ten miles off the Texas

¹¹⁵ Available at http://seagrants.gso.uri.edu/coast/cmsp_material/state_fed-waters.pdf (last visited Nov. 20, 2011).

¹¹⁶ Available at http://www.glo.texas.gov/glo_news/hot_topics/articles/offshore-wind-energy.html (last visited Nov. 20, 2011).

shore, with transmission cables potentially crossing Padre Island, Padre Island National Seashore, Corpus Christi Bay, and Laguna Madre. The project completed a public comment period related to scoping for an environmental review document (EA or EIS) from the Corps. However, the project was recently cancelled, primarily due to complaints from the U.S. National Park Service (the site would have been visible from a National Seashore). The Baryonyx project could have been disastrous for wildlife, as the FWS comment letter made clear. See Letter from Allan M. Strand, FWS to Jayson Hudson, Corps (Aug. 15, 2011), Attachment L; see also Kelly Fuller, ABC, Comments on Permit Application SWG-2011-00511 (Baryonyx Corporation Offshore Wind Project) (Aug. 17, 2011) (ABC comments submitted to the Corps).

The now defunct Baryonyx offshore wind facility is not the only one that is under consideration for Texas state waters. ABC has been informed that as of August, 2011, Coastal Point had an offshore lease with the Texas State Land Commission and Offshore Wind Systems had a permit from the Corps for an offshore wind testing structure. Personal communication between Kelly Fuller, ABC and Bob Blumberg, Texas General Land Office (Aug. 29, 2011). Coastal Point has since announced plans to install one offshore wind turbine by the end of 2011. See Nathaniel Gronewold, Texas is Bullish on Offshore Wind (E & E News, Nov. 21, 2011), Attachment M. Offshore wind projects in Texas are of tremendous concern because the Texas Gulf Coast is the most sensitive coastal area for birds in the United States, and the State of Texas does not have its own wind energy permitting process with environmental review.

Wind turbine projects in the jurisdictional waters of other states have also been proposed. Although these are currently small proposals, the scale of offshore projects is expected to increase. In addition, in the wrong location, even a single offshore wind turbine could have serious impacts. Some examples of offshore wind energy project proposals in state waters are listed below:

- Gamesa Energy USA and Northrup Grumman International have proposed building a 5-MW wind turbine in lower Chesapeake Bay and the state's Marine Resources Commission has given approval for preliminary studies of the site to take place. FWS staff have raised concerns about potential bird impacts at the Chesapeake Bay location, but the agency was informed that the site could not be changed. See Email from Tylan Dean, FWS to Keith Hastie, FWS (Mar. 30, 2011), Attachment N.
- Fishermen's Energy, LLC has proposed a five-turbine, 20 MW wind facility approximately three miles off Atlantic City in New Jersey state waters. See Fishermen's Energy, LLC, FAQ.¹¹⁷ In spring 2011, the project received all the necessary state permits and is currently awaiting a permit from the Corps. The company has also expressed interest in developing offshore wind in the Great Lakes. Fishermen's Energy, LLC, VA Offshore Wind 2011 Presentation (June 22, 2011).¹¹⁸

¹¹⁷ Available at <http://www.fishermensenergy.com/faq.html> (last visited Nov. 20, 2011).

¹¹⁸ Available at <http://vasierraclub.org/Goldsmith.pdf> (last visited Nov. 20, 2011).

- The University of Delaware has proposed a six-turbine offshore wind facility approximately 2.8 miles off the coast in Delaware state waters and has met with the Corps to discuss it. Corps, Wind Turbine Proposals within Philadelphia District (2011).¹¹⁹
- Deepwater Wind has proposed a five turbine offshore wind facility approximately three miles off Block Island, in Rhode Island state waters. Deepwater Wind, Block Island Wind Farm.¹²⁰ In September, 2011, Deepwater announced that a marine survey at the site had begun. See Deepwater Wind, Block Island Wind Farm Project Advances with Cutting-Edge Marine Surveys, Expanded Team (Sept. 22, 2011).¹²¹
- West Wind Works, LCC has expressed interest in building a 400 MW offshore wind facility three nautical miles south of Oahu. This location may be in the state waters of Hawaii. Email from Kyle Avery, West Wind Works to Hawaii Inter-island Renewable Energy Program, Public Scoping Comment on Hawaii Interisland Renewable Energy Program: Wind (Mar. 9, 2011).¹²²
- The Lake Erie Energy Development Corporation (LEEDCO) and Freshwater Wind, LLC announced in January 2011 that they have a signed option with the state of Ohio to lease lake bottom land in Lake Erie for a 20 MW offshore wind facility of five turbines, approximately seven miles offshore NW of Cleveland. LEEDCo's reported goal is 1,000 MW of offshore wind development in Lake Erie by 2020. See Offshorewindbiz.com, LEEDCo and Freshwater Wind Sign Option With State Ohio to Lease Lake Erie to Build Offshore Wind Farm (Jan. 11, 2011).¹²³ According to an October 2011 Corps fact sheet, LEEDCo's project would be five to eight turbines, and the Corps is encouraging its construction in Lake Erie in order to judge impacts. Larger projects would be built later, up to 1,520 offshore wind turbines in the Great Lakes state waters of New York, Ohio, and Pennsylvania. See Corps, Offshore Wind Farm Sitings on the Lower Great Lakes Fact Sheet (Oct. 2011).¹²⁴

¹¹⁹ Available at http://www.nap.usace.army.mil/cenap-op/regulatory/wind_turbine.html (last visited Nov. 20, 2011).

¹²⁰ Available at <http://dwwind.com/block-island/block-island-project-overview> (last visited Nov. 20, 2011).

¹²¹ Available at <http://dwwind.com/news/block-island-wind-farm-project-advances-with-cutting-edge-marine-surveys-expanded-team/?a=news&p=news> (last visited Nov. 20, 2011).

¹²² Available at http://www.hirepeis.com/documents/scopingcomments/ngos_private_entities/WestWindWords.pdf (last visited Nov. 20, 2011).

¹²³ Available at <http://www.offshorewind.biz/2011/01/09/leedco-and-freshwater-wind-sign-option-with-state-ohio-to-lease-lake-erie-to-build-offshore-wind-farm-usa/> (last visited Nov. 20, 2011).

¹²⁴ Available at <http://www.lrb.usace.army.mil/Factsheets/NYS/NY-22/Offshore%20WindFarms%20Oct%202011.pdf> (last visited Nov. 20, 2011).

Further, the first offshore wind energy project in federal waters approved by the federal government – the Cape Wind project – has raised several concerns about its wildlife impacts, particularly to migratory birds. Several environmental organizations including Public Employees for Environmental Responsibility have challenged that decision on the grounds that the project, as designed, will kill thousands of federally protected birds, without the level of pre-construction surveying that had been recommended by FWS and without any coherent post-construction monitoring or mitigation plan in place for the project. See Second Amended Complaint at 27, 31, Public Employees for Environmental Responsibility v. Bromwich, Case No. 1:10-cv-01067-RMU (D.D.C. 2010).

Thus, as things presently stand, there are patently inadequate, if not counterproductive, voluntary “Guidelines” for land-based wind power projects and not even a guidance document for offshore projects. On the other hand, as described in detail infra, Section D.2 and Section E.1, FWS has more than sufficient legal authority to establish meaningful, effective measures for protecting migratory birds.

D. STATUTORY BACKGROUND: THE BROAD SCOPE OF THE MBTA’S TAKE PROHIBITION

D.1. The MBTA is a broad wildlife conservation statute that prohibits both intentional and incidental take, unless expressly permitted by FWS.

The MBTA is a conservation statute “designed to prevent the destruction of certain species of birds.” Andrus v. Allard, 444 U.S. 51, 52-53 (1979) (noting that the statute was originally enacted to give effect to the 1916 convention between the United States and Great Britain (then for Canada) for the protection of migratory birds, “and for other purposes.”).¹²⁵ Subsequent MBTA amendments ratified similar bilateral conventions with Mexico in 1936, Japan in 1972, and Russia in 1976.

At present, approximately 1,007 bird species are protected under the Act, ranging from a wide variety of songbirds, waterfowl, and shorebirds to hawks, owls, vultures, and falcons, including Golden Eagles and Bald Eagles.¹²⁶ See FWS, Revised List of Migratory Birds and Your Permit:

¹²⁵ The phrase “other purposes” has been interpreted to mean purposes other than giving effect to the treaty wherein “Congress intended to invoke its own powers to accomplish other purposes than those enabled by the treaty.” Cerritos Gun Club v. Hall, 96 F.2d 620, 627-628 (9th Cir. 1938).

¹²⁶ Bald and Golden Eagles are protected under both the MBTA and BGEPA. BGEPA makes it illegal to take any bald or golden eagle, or any part, nest or egg thereof. 16 U.S.C. § 668a. BGEPA provides broad authority to FWS to issue permits for the take of Bald or Golden Eagles in certain circumstances, provided that such permits are compatible with the preservation of the species. Id. § 668a. FWS has recently promulgated regulations establishing a general permit process for incidental takes, under which permits may be granted for

Questions and Answers (Nov. 1, 2010).¹²⁷ These species are shared natural resources subject to FWS’s “federal trust responsibility,” *i.e.*, FWS, as a trustee of these resources, has the duty to conserve, protect and enhance migratory birds. See FWS, Recommendations to Avoid Adverse Impacts to Migratory Birds, Federally Listed Species, and Other Wildlife from Communication Towers & Antennae (2000) (“Migratory birds are a federal trust resource responsibility, and the Service considers migratory bird concentration areas environmentally significant.”); see also Wind Guidelines Second Draft at 3, 12.

The MBTA prohibits the taking or killing of migratory birds, as well as any attempt to take or kill migratory birds or any part, nest, or eggs of any such bird, “at any times, by any means, or in any manner.” 16 U.S.C. § 703; see also Andrus, 444 U.S. at 56, 57, 59–60 (describing the statutory prohibitions of the MBTA as “comprehensive,” “exhaustive,” “carefully enumerated,” “expansive,” and “sweepingly framed”). Regulations implementing the statute explain that the term “take” means to “pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect.” 50 C.F.R. § 10.12. Significantly, the statute does not have a *mens rea* requirement, *i.e.*, entities that violate the Act can be prosecuted on a strict liability basis regardless of intent or motive to take or kill migratory birds. Further, it is pertinent to note that unlike BGEPA’s take prohibition, the MBTA also prohibits “attempt” to take. Compare BGEPA, 16 U.S.C. § 668c and 50 C.F.R. § 22.3 with MBTA, 16 U.S.C. § 703 and 50 C.F.R. § 10.12.

Plainly, as courts have agreed, the take prohibition in the MBTA is broad and prohibits both intentional take, such as hunting, and incidental or unintentional take, such as bird mortality due to collision with wind turbines. See, e.g., Ctr. for Biological Diversity v. Pirie, 201 F. Supp. 2d 113 (D.D.C. 2002) (military training exercises of the Department of the Navy resulting in incidental take of migratory birds without a permit violated the MBTA); United States v. Apollo Energies, Inc., 611 F.3d 679, 684 (10th Cir. 2010) (failure to bird-proof oil drilling equipment resulting in incidental take of migratory birds is a violation of the MBTA); United States v. Moon Lake Elec. Ass’n, 45 F. Supp. 2d 1070 (D. Colo. 1999) (failure to install protective equipment on power poles by electrical association resulting in incidental take of migratory birds is a violation of the MBTA); United States v. FMC Corp., 572 F.2d 902 (2d Cir. 1978); United States v. Corbin Farm Serv., 444 F. Supp. 510 (E.D. Cal. 1978) (both cases holding that bird deaths related to pesticide use resulting in incidental take is a violation of the MBTA).

unavoidable incidental takes, subject to compliance with appropriate avoidance, minimization and mitigation measures. 50 C.F.R. § 22.6(c).

¹²⁷ Available at
<http://www.fws.gov/migratorybirds/RegulationsPolicies/mbta/Part%2010.muscovy%20Fact%20Sheet.11-1-2010.pdf> (last visited Nov. 8, 2011).

In brief, the MBTA is a national conservation statute which is premised on the “important public policy behind protecting migratory birds,” FMC Corp., 572 F.2d at 908, and prohibits both intentional and incidental take.

D.2. FWS can authorize limited take of protected birds only by exercising its broad authority to promulgate regulations and issue take permits under the MBTA.

Despite the broad take prohibitions embodied in Section 703 of the Act, the scope for FWS to promulgate regulations permitting take and implementing the treaties, “render[s] the initial flat [take] prohibition eminently workable.” Larry Martin Corcoran & Elinor Colbourn, Shocked, Crushed and Poisoned: Criminal Enforcement in Non-hunting Cases Under the Migratory Bird Treaties, 77 Denv. U. L. Rev. 359, 371 (1999). Under Section 704 of the MBTA, FWS is “authorized and directed” to determine the exceptions to the MBTA’s take prohibition, i.e., FWS has the sole authority and responsibility “to determine when, to what extent, if at all, and by what means” taking of migratory birds is permissible, and to “adopt suitable regulations permitting and governing the same.” 16 U.S.C. § 704(a);¹²⁸ see also infra Section E.1 (discussing in detail the broad rulemaking authority of FWS over incidental takes).

Such regulations are crucial because in the absence of authorization by FWS regulations for take of migratory birds, activities that kill or have the potential to kill migratory birds are “otherwise wholly unlawful.” United States v. Catlett, 747 F.2d 1102, 1105 (6th Cir. 1984); see also, e.g., Ctr. for Biological Diversity v. Pirie, 201 F.Supp.2d 113 (D.D.C. 2002) (enjoining military training exercises of the Department of the Navy in the absence of appropriate permit from FWS for incidental take of migratory birds). In addition, under Section 712 of the MBTA, FWS is also expressly authorized to issue implementing regulations related to the international migratory bird treaties. See MBTA § 712(2).

Further, it is well-established that the delegation of authority to the agency was a valid exercise by Congress of its treaty and commerce powers. Bailey v. Holland, 126 F.2d 317, 321 (4th Cir. 1942) (holding that regulations promulgated by the Secretary of Interior prohibiting the hunting of migratory wildfowl on land and water adjacent to certain federally owned lands are valid).

FWS has recognized that its authority to issue take permits under the MBTA stems from the MBTA, 16 U.S.C. §§ 703-712, and its implementing regulations, 50 C.F.R. Pts. 10, 13, 21, 22. See FWS, Manual, Authorities, Objectives, and Responsibilities for Migratory Bird Permits, 724 FW 1 (Aug. 6, 2003);¹²⁹ see also Meredith Blaydes Lilley & Jeremy Firestone, Wind Power, Wildlife, and

¹²⁸ The authority vested in the President in Section 704(a) has been delegated to the Secretary of the Interior. See Executive Order 10250: Providing for the Performance of Certain Functions of the President by the Secretary of the Interior § 2(b) (June 5, 1951).

¹²⁹ Available at <http://www.fws.gov/policy/724fw1.html> (last visited Nov. 17, 2011).

The Migratory Bird Treaty Act: A Way Forward, 38 Env'tl. L. 1167, 1180 (2008) (“Section 704 of the MBTA confers permitting authority to the Secretary of the Interior, who has, in turn, delegated that authority to U.S. Fish and Wildlife Service.”). Further, FWS has stated that the objective of the migratory bird permit program is “[t]o promote the long-term conservation of migratory bird populations while providing opportunities for the public to study, use, and enjoy migratory birds consistent with the [MBTA] and [BGEPA].” Id.

At present, FWS issues MBTA take permits for a range of activities such as import/export, scientific collecting, taxidermy, waterfowl sale and disposal, educational use, game bird propagation, salvage, falconry, raptor propagation, rehabilitation, control of depredating migratory birds, and special purpose activities. See FWS, Manual: Migratory Bird Permits, 724 FW 2 (Aug. 6, 2003).¹³⁰ Permittees must maintain accurate records of their permitted activities and may be required to submit reports covering those activities to the Regional Migratory Bird Permit Office. Id. FWS may suspend or revoke a migratory bird permit for a violation of the terms and conditions of the permit or the regulations under which the permit was issued, or for any reason set forth in 50 C.F.R. § 13.27 (permit suspension) and 50 C.F.R. § 13.28 (permit revocation). Id. The validity of any permit is conditioned on observance of all applicable foreign, state, local, or other federal laws. Id. Further, regardless of issuance of a permit, FWS has expressly cautioned that “[t]he migratory birds, nests, eggs, and any portions thereof remain in the stewardship of the Fish and Wildlife Service and may be recalled at any time.” Id.

Accordingly, FWS has the statutory mandate to protect “public trust resources” protected under the MBTA and may only authorize take of such resources in accordance with Section 704(a) of the Act, i.e., through “suitable regulations.” In the absence of such authorization, any activities that take or have the potential to take protected birds are flatly unlawful.

D.3. FWS has the primary responsibility to enforce the MBTA and its implementing regulations.

The MBTA provides for both misdemeanor, 16 U.S.C. § 707(a), as well as felony offenses. Id. § 707(b). “Any person, association, partnership, or corporation” that “violate[s] any provisions” of the Act or its implementing regulations is guilty of a misdemeanor. Id. § 707(a). On the other hand, felony offenses are more limited in nature and involve “knowingly” taking birds for sale or barter. Id. § 707(b). Thus, taking of migratory birds without an appropriate permit can result in a criminal conviction – either a misdemeanor or, in some circumstances, a felony conviction.

Unlike the ESA, the MBTA contains no citizen suit provision, meaning that entities other than the federal government may not initiate legal action against private parties for violating the Act. However, as a number of cases have recognized, private parties may use the APA to pursue civil claims against federal agencies for taking actions that authorize or lead to violations of the MBTA.

¹³⁰ Available at <http://www.fws.gov/policy/724fw2.html> (last visited Nov. 17, 2011).

See, e.g., City of Sausalito v. O’Neill, 386 F.3d 1186 (9th Cir. 2004); Humane Soc’y of the U.S. v. Glickman, 217 F.3d 882 (D.C. Cir. 2000). In any event, because the MBTA does not contain a citizen suit provision, FWS has the primary responsibility to administer and enforce the Act.

Further, in 2001, President Clinton executed Executive Order 13186, 66 Fed. Reg. 3853 (Jan. 17, 2001) (“Migratory Bird Executive Order”),¹³¹ which identified the responsibilities of federal agencies to protect migratory birds under the Act. The Executive Order directs federal agencies to take actions to protect and conserve migratory birds. The Order resulted in memorandums of understanding (“MOUs”) between certain federal agencies and FWS, which memorialize actions that each party will take to fulfill their respective responsibilities under the Act. See, e.g., MOU Between BLM and FWS to Promote the Conservation of Migratory Birds (Apr. 2010).¹³²

E. DISCUSSION: FWS HAS BOTH THE LEGAL AUTHORITY AND COMPELLING CONSERVATION REASONS TO ESTABLISH AN MBTA PERMITTING REGIME FOR WIND POWER PROJECTS.

E.1. FWS has broad regulatory and permitting authority under the MBTA to regulate incidental take by wind energy projects.

Section 703 of the MBTA establishes a strict liability prohibition against take of listed migratory birds “at any time, by any means or in any manner” “[u]nless and except as permitted by regulations[.]” See 16 U.S.C. § 703 (emphasis added). Pursuant to Section 704, FWS is authorized to permit “take” through “suitable regulations” so long as such taking is compatible with the terms of the migratory bird conventions. Id. § 704(a); see also Fund for Animals v. Kempthorne, 538 F.3d 124 (2d Cir. 2008).

In establishing such regulations, FWS may consider factors such as the zones of temperature and the distribution, abundance, economic value, breeding habits, and times and lines of migratory flight of birds. 16 U.S.C. § 704(a). The regulations may stipulate “when” take is permissible, “to what extent,” and “by what means.” Id. In addition, under Section 712, FWS is authorized to issue “such regulations as may be necessary to implement” the migratory bird treaties with Canada, Russia, Japan, and Mexico. Id. § 712(2).

¹³¹ Available at http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=2001_register&docid=fr17ja01-142.pdf (last visited Nov. 8, 2011).

¹³² Available at http://www.blm.gov/wo/st/en/info/regulations/Instruction_Memos_and_Bulletins/national_information/2010/IB_2010-110.html (last visited Nov. 8, 2011).

The rulemaking authority conferred upon the Secretary has been “liberally construed,” Bailey v. Holland, 126 F.2d 317, 322 (4th Cir. 1942), and is “greatly flexible.” Fund for Animals v. Norton, 365 F. Supp. 2d at 419. FWS has “broad permitting authority,” Kemphorne, 538 F.3d at 124, and “plenary power” to establish permitting regulations controlling the “taking of migratory birds, which is otherwise *wholly unlawful*.” Catlett, 747 F.2d at 1105.

FWS’s “broad permitting authority” has been recognized to encompass authority to regulate both intentional and non-intentional or incidental take. Indeed, as described below, FWS’s regulatory authority over incidental take has been recognized not only by FWS and federal courts, but by Congress itself.

i. Congress has recognized FWS’s broad rulemaking authority over incidental take under the MBTA.

The MBTA authorizes FWS to regulate both intentional and incidental take. Congress recognized FWS’s authority to regulate incidental take when it enacted the National Defense Authorization Act for FY 2003 (“National Defense Act”). Pub. L. No. 107–314, § 315, 116 Stat 2458 (Dec. 2, 2002). Section 315 of the Act provides that “the Secretary of the Interior shall exercise the authority of that Secretary under [Section 704(a) of the MBTA] to prescribe regulations to exempt the Armed Forces for the incidental taking of migratory birds during military readiness activities[.]” Id. (emphasis added). The Act clearly indicates that Congress did not bestow new authority on FWS to regulate incidental take, but directed it to exercise its existing authority under the MBTA to allow incidental take by the Armed Forces. Accordingly, there can be no legitimate dispute that FWS has the authority to establish permitting regulations for particular activities that are otherwise legitimate but that have adverse impacts on migratory birds.

Further, the legislative history of the National Defense Act shows that Congress deliberately rejected the original proposal to provide a blanket legislative exemption for military activities from the take prohibitions of the MBTA, and instead chose a course of action that would involve FWS exercising its regulatory authority and oversight over the Armed Forces. 148 Cong. Rec. S10858-01, 2002 WL 31520009 at S10861 (Nov. 13 2002) (“We were able to modify a House provision which authorized the exemption of certain Department of Defense activities from the provisions of the Migratory Bird Treaty Act. That was a highly controversial action on the part of the House. We were able to obtain some important concessions in the conference relative to that provision, including an agreement to structure the provisions so that the Department of Interior will be required to exercise its regulatory powers over the Department of Defense activities impacting migratory birds and to require appropriate actions to mitigate the impact of Department of Defense actions on migratory birds.” (emphasis added)); see also id. at S10868 (“it is clear in Subsection (d) [of Section 315 of the National Defense Act] that the authority of the Secretary of the Interior to prescribe regulations for the incidental taking of migratory birds during military readiness activities is limited to the Secretary’s authority under section 3(a) of the Migratory Bird Treaty Act”).

The experience with the National Defense Act further demonstrates that, even with activities as crucial as those necessary for national defense preparedness, Congress did not endorse a wholesale exemption from the MBTA (which, as discussed further below, is tantamount to what the wind power industry is now receiving in view of the Service's systemic failure to enforce the Act's take prohibition against wind power projects), nor did Congress authorize the military to take a purely voluntary approach to MBTA compliance.

Thus, FWS does not require any additional authorization from Congress to regulate incidental take and can do so by exercising its existing authority under the MBTA.

ii. *FWS has already established regulations for permitting certain incidental takes.*

As a result of the National Defense Act, FWS promulgated regulations governing take of migratory birds by the Armed Forces incidental to military readiness activities. See 50 C.F.R. § 21.15 (2007). The regulations require the Armed Forces to “confer and cooperate with the Service to develop and implement appropriate conservation measures” for “those ongoing or proposed activities” that may result in a significant adverse effect on a population of migratory bird species.¹³³ Id. § 21.15(a)(1) (emphasis added). However, the incidental take authorization provided therein can be suspended or withdrawn by the Secretary. The Secretary can “suspend” take authorization if he determines, after seeking the views of the Secretary of Defense and consulting with the Secretary of State, that the take authorization is no longer compatible with the migratory bird treaties. Id. § 21.15(b)(1). The Secretary can also “withdraw” take authorization in certain circumstances when a proposed military readiness activity is likely to result in significant adverse effects on the population of a migratory bird species. Id. § 21.15(b)(2).

In establishing the incidental take regulations for military incidental take, FWS reiterated that the agency had authority to regulate incidental take under the MBTA, independent of the National Defense Act's directive:

[T]he authorization that this rule provides is essential to preserving the Service's role in determining what military readiness activities, if any, create an unacceptable risk to migratory bird resources and therefore must be modified or curtailed.... In the Authorization Act, Congress directed the

¹³³ “Significant adverse effect on a population” has been defined by FWS to mean “an effect that could, within a reasonable period of time, diminish the capacity of a population of migratory bird species to sustain itself at a biologically viable level. A population is ‘biologically viable’ when its ability to maintain its genetic diversity, to reproduce, and to function effectively in its native ecosystem is not significantly harmed. This effect may be characterized by increased risk to the population from actions that cause direct mortality or a reduction in fecundity. Assessment of impacts should take into account yearly variations and migratory movements of the impacted species. Due to the significant variability in potential military readiness activities and the species that may be impacted, determinations of significant measurable decline will be made on a case-by-case basis.” 50 C.F.R. § 21.3.

Secretary to utilize his/her authority to permit incidental take for military readiness activities. Furthermore, Congress itself by passing the Authorization Act determined that allowing incidental take of migratory birds as a result of military readiness activities is consistent with the MBTA and the treaties. Thus, this rule does not abrogate the MBTA... The Defense Authorization Act does not limit that authority [of FWS under Section 704 of the MBTA]... the Defense Authorization Act does not restrict or limit our authority in 16 U.S.C. 704 and 712 relative to administering and enforcing the MBTA and complying with the four migratory bird treaties.... Even in the absence of the Authorization Act, regulations authorizing take incidental to military readiness activities are compatible with the terms of the treaties, and therefore authorized by the MBTA.

FWS, Final Rule: Migratory Bird Permits - Take of Migratory Birds by the Armed Forces (Feb. 28, 2007) (“Military Take Final Rule”) (emphases added).

In addition to the incidental take regulations for military take, other existing regulations promulgated under the MBTA enable FWS to regulate and authorize certain incidental takes. For example, under 50 C.F.R. § 21.27, FWS has the authority to issue special purpose permits for take that is otherwise outside the scope of the standard form permits of Part 21. See United States v. Winddancer, 435 F.Supp.2d 687, 690 (M.D. Tenn. 2006) (“50 C.F.R. § 21.27 provides for special purpose permits available to all citizens ‘for special purpose activities related to migratory birds, their parts, nests, or eggs’ that are not otherwise provided for by the other permit provisions.”); see also Military Take Final Rule at 8947 (“Special purpose permits may be issued for actions whereby take of migratory birds could result as an unintended consequence.”); Wind FAC Legal Subcommittee White Paper at 13 (Oct. 22, 2008) (“FAC Legal White Paper”).¹³⁴ The relevant portion of the regulation provides that:

§ 21.27 Special purpose permits.

Permits may be issued for special purpose activities related to migratory birds, their parts, nests, or eggs, which are otherwise outside the scope of the standard form permits of this part. A special purpose permit for migratory bird related activities not otherwise provided for in this part may be issued to an applicant who submits a written application containing the general information and certification required by Part 13 and makes a sufficient showing of benefit to the migratory bird resource, important research reasons,

¹³⁴ Available at

[http://www.fws.gov/habitatconservation/windpower/Subcommittee/Legal/Reports/Wind_Turbine_Advisory_Committee_Legal_Subcommittee_White_Paper_\(Final_As_Posted\).pdf](http://www.fws.gov/habitatconservation/windpower/Subcommittee/Legal/Reports/Wind_Turbine_Advisory_Committee_Legal_Subcommittee_White_Paper_(Final_As_Posted).pdf) (last visited Nov. 17, 2011).

reasons of human concern for individual birds, or other compelling justification.

50 C.F.R. § 21.27 (emphases added).

FWS has issued special purpose permits to authorize certain incidental takes and to exercise ongoing federal oversight over such activities. For example, FWS has issued a special purpose permit to the Channel Islands National Park permitting incidental take of migratory birds resulting from spraying rat poison in order to eradicate black rats on Anacapa Island. See Anacapa Island Restoration Project, Channel Islands National Park, Phase I MBTA Summary Report (2002) (explaining that on Nov. 16, 2001, FWS issued a Special Purpose Permit (MB050154-0) providing incidental take authorization to Channel Islands National Park), Attachment O; see also FWS Memo from Acting Director to Regional Directors, Migratory Bird Permits for Controlling Invasive Species (Jan. 20 2010) (“FWS Invasive Species Memo”) (advising that FWS may process applications for special purpose permits under 50 C.F.R. § 21.27 for take of migratory birds incidental to eradication or control of invasive species);¹³⁵ FAC Legal White Paper at 13-14 (“[Special purpose permits] potentially could be used to authorize incidental take caused by wind energy projects. For example, a wind energy project theoretically could apply to FWS for a special use permit for an incidental take of birds based on a showing that the wind facility was providing an overall positive benefit to the migratory bird resource, perhaps through accompanying mitigation measures, or constitutes a situation of compelling justification due to the benefits of renewable energy generation.”).

Indeed, it appears that FWS has previously undertaken the process of developing general incidental take regulations. See FWS Invasive Species Memo (“The [FWS] Division of Migratory Bird Management is continuing work towards developing regulations to address the larger issue of incidental take of migratory birds. In the meantime, staff should continue to work with our agency counterparts to consider migratory bird impacts during project planning and to incorporate conservation measures where appropriate[.]”). In fact, during the course of litigation concerning take of migratory birds incidental to military readiness activities – a case that was eventually dismissed on mootness grounds upon the enactment of the National Defense Act – the federal government went on record to state that FWS had already drafted a proposed rule that would authorize incidental take of migratory birds by federal agencies. See Brief of Fed. Defendants-Appellants, Ctr. for Biological Diversity v. England, 2002 WL 34248159 (D.C. Cir. Sept. 17, 2002). In that case, the government argued as follows:

There are several conceivable avenues by which the Navy could come into compliance with the district court’s holding that its exercises on FDM violate the MBTA. First, the Navy may obtain a permit from the FWS. Indeed the

¹³⁵ Available at

http://nctc.fws.gov/CSP/Resources/mig_birds/CD/MBTA%20Resources/invasive_species_memo.pdf (last visited Dec. 11, 2011).

Navy is actively pursuing an MBTA permit [under 50 C.F.R. s 21.27], in compliance with the court's order... Second, the Navy may petition the FWS to amend the regulations to authorize its taking of migratory birds. The MBTA grants the FWS this authority. 16 U.S.C. ss 704, 712(2). Although the FWS has in the past relied upon its enforcement discretion in cases of unintentional takes, it has already drafted a proposed rule that would authorize the unintentional taking of migratory birds by federal agencies incident to other lawful activities.

Id. (emphasis added).

Thus, FWS itself has been on record for many years that it has the authority to issue regulations circumscribing the conditions under which particular entities or activities may incidentally take migratory birds.

iii. *Federal courts and other sources have also recognized that FWS has the authority to regulate incidental take under the MBTA.*

As explained supra, Section D.2, federal courts have also recognized the “broad” “plenary power” of FWS to regulate take under Section 704(a) of the MBTA. In fact, regulations promulgated by FWS to avoid and minimize incidental take under the MBTA have been upheld at least in one instance. Nat'l Rifle Ass'n of Am. v. Kleppe, 425 F. Supp. 1101 (D.D.C. 1976). In that case plaintiffs challenged the adoption of regulations which required the use of steel shot in 12-gauge or larger shotguns for hunting. Although the regulations were related to intentional taking, the stated purpose for establishing these regulations was to avoid and minimize incidental take, i.e., “to limit further deposition of lead pellets in areas used by aquatic birds. . . . (which cause) lead intoxication and death...” Id. at 1103-04. The court upheld the regulations as being grounded in Section 704 of the MBTA. Id. at 1110. This decision was affirmed by the U.S. Court of Appeals for the D. C. Circuit, Nat'l Rifle Ass'n of Am. v. Andrus, 571 F.2d 674 (Table) (D.C. Cir. 1978), and has also been relied on in cases concerning other environmental statutes. See, e.g., Conn. Coastal Fishermen's Ass'n v. Remington Arms Co., 989 F.2d 1305, 1317 (2d Cir. 1993) (holding that lead shot was subject to regulation as hazardous waste under the Resource Conservation and Recovery Act of 1976).

Further, other sources have also recognized the authority of FWS to regulate incidental take. For example, the committee established by DOI under FACA to advise FWS on developing effective measures to avoid or minimize wildlife impacts related to land-based wind energy facilities, has also concluded that FWS has the authority to regulate incidental take, specifically in the wind energy context:

The language of the MBTA gives the FWS authority and discretion to adopt regulations to permit reasonable activities that result in the taking of birds.

Congress, in Section 704 of the MBTA, expressly authorizes the promulgation of regulations that permit the taking of migratory birds in a broad grant of authority to the FWS... From this broad Congressional grant of authority in Section 704(a), the FWS may have the authority to promulgate regulations establishing a new permit that would allow for the taking of birds at wind energy developments under certain conditions. Although the FWS does not have express authorization in the MBTA to issue “incidental take permits” as provided in the ESA, the broad grant of authority in Section 704 seems to allow issuance of such permits should the FWS choose to exercise this authority in the wind energy and other contexts. This would require the promulgation of a new regulation by the FWS.

FAC Legal White Paper at 13-14 (emphases added).¹³⁶

In addition, FWS has been advised by its legal department that regulations specifically tailored for permitting incidental take may be more appropriate than using the mechanism provided for allowing incidental take through issuance of special purpose permits under 50 C.F.R. § 21.27. See Memorandum from Pete Raynor, Assistant Solicitor, Fish and Wildlife Branch, to John Rogers, Deputy Director, FWS, Permitted Incidental Take of Migratory Birds Listing Under the Endangered Species Act 3 (Feb. 5, 1996) (“although [50 C.F.R.] § 21.27 appears to be broad enough to encompass the permitting of unintentional take for the purposes of the MBTA, that section is not narrowly focused on incidental take. A regulatory permitting program specifically geared to the problems of incidental take may be advisable.” (emphasis added)), Attachment P.

In sum, Sections 704(a) and 712(2) of the MBTA provide broad authority to FWS to promulgate regulations regulating, and authorizing certain incidental takes, subject to appropriate conditions and ongoing federal oversight. Accordingly, FWS clearly has the requisite rulemaking authority to establish a permitting scheme to regulate the incidental take of migratory birds by wind energy projects.

E.2. Wind energy projects have been taking and are likely to continue to take migratory birds in violation of the MBTA’s take prohibition.

¹³⁶ The White Paper prepared by the Legal Subcommittee was adopted by the full Wind Turbine Guidelines Federal Advisory Committee. See Appendix B (FAC Legal Subcommittee White Paper), Committee Recommendations.

As noted supra, see Section C.2, FWS is well aware that many wind energy projects are either already in operation or are being planned that will take migratory birds in violation of the MBTA. See Wind Guidelines Third Draft at 15 (“The Service recognizes that hundreds of wind energy projects exist and are being planned.”). By 2020, it is expected that an exponential increase of wind turbines will kill at least one million birds each year, and impact almost 20,000 square miles of terrestrial bird habitat, and another 4,000 square miles of marine habitat. See ABC’s Bird-smart Wind Principles.

Further, as explained supra, Section C.1, present-day utility scale wind turbines are massive machines and their size continues to increase on a regular basis. However, such an increase in turbine size also expands the rotor-swept area of the blades (at present exceeding 400 acres), which in turn further increases the potential for bird collisions. See FWS 2011 MBTA Conference Presentation at 5-6 (the rotor swept area of wind turbines has increased from 3,700 square meters (about 1 acre) in 2000 to 15,000 square meters (3.8 acres) in 2010). Like other for-profit industries that are made to internalize the environmental costs of their operations, the wind industry should be required to internalize the costs related to the impacts of its projects on migratory birds and other wildlife that have concrete societal benefits in terms of ecosystem functioning, ecotourism, and the like. See Cornell Lab of Ornithology, Comments to the U.S. Fish and Wildlife Service: Draft Land-based Wind Energy Guidelines (May 2011) (“we strongly encourage the Guidelines to require research protocols and open access to wildlife research data as a mandatory “cost of doing business.” (emphasis added)).

Indeed, especially since the wind power industry seeks to present itself as a “green” energy source that is part of the solution to climate change – and hence beneficial to wildlife – the industry should not be permitted to simultaneously undermine the conservation of migratory bird populations in violation of the MBTA, especially with regard to species already at risk or otherwise of conservation concern. Yet FWS already possesses definitive evidence, much of which is discussed in and attached to this Petition, that wind energy projects in the United States will inevitably kill, injure, or otherwise harm many of the 1007 migratory bird species listed under the MBTA, such as a wide variety of songbirds, raptors, and waterfowl including but not limited to, the Bald Eagle, Golden Eagle, Ferruginous Hawk, Swainson’s Hawk, American Peregrine Falcon, Short-eared Owl, Flammulated Owl, California Condor, Whooping Crane, Snail Kite, Marbled Murrelet, Hawaiian Goose, Hawaiian Petrel, Bicknell’s Thrush, Sprague’s Pipit, Cerulean Warbler, Oak Titmouse, Lewis’s Woodpecker, Brewer’s Sparrow, Long-billed Curlew, Bay-breasted Warbler, and Blue-winged Warbler. See supra Section C.2. Indeed, the agency’s voluntary guidelines are themselves grounded on the fact that wind turbines that fail to abide by basic standards for siting, construction, operation, and monitoring will take listed migratory birds in violation of the MBTA. Given the reality that the wind industry as a whole is in patent violation of the MBTA, FWS must ensure that the entire industry is brought into compliance with the Act, and that individual projects that refuse to comply will be subject to appropriate enforcement action. Such a comprehensive approach would be the simplest and most efficient method for assuring industry-wide compliance with the Act.

The reality is that migratory birds and wind turbines often tend to congregate in the same locations – corridors where strong winds blow. A majority of the nation’s wind farms are located in major wind corridors – in general, the harder and more often the wind blows, the more efficiently the turbine works and the more power it creates. Given this reality and the high likelihood of conflict between wildlife protection and the industry, there is an urgent need for an appropriate means to resolve this conflict, and that is through an effective legal mechanism, *i.e.*, regulations that balance the two objectives in a manner that promotes the industry by proving it with a reasonable degree of regulatory and legal certainty while at the same time protecting wildlife in compliance with federal wildlife law. Accordingly, this Petition seeks a permitting scheme that will facilitate siting decisions in a manner that avoids and minimizes wildlife impacts, and effectuates ABC’s long-standing position with regard to wildlife impacts of wind energy projects – you can make a good site better through operational measures, but you cannot make a bad site good. In sum, the wind power industry is killing and otherwise harming migratory birds in clear violation of federal law and, consequently, steps need to be undertaken to bring the industry into conformance with the law while not needlessly impeding the development of wind power. The proposed regulations set forth in the Appendix to this Petition are designed to accomplish that result.

E.3. FWS should exercise its broad permitting authority to address the ongoing unregulated and wholly unlawful take of protected birds by wind energy projects.

As detailed below, there are several reasons grounded in fact, law and policy, for FWS to promulgate regulations governing the wildlife impacts of wind energy projects.

i. *FWS must encourage wind energy development by providing the industry a concrete and lawful means to comply with the MBTA.*

The crux of the problem is that the wind energy industry as a whole is in violation of the MBTA because essentially all projects are taking or inevitably will take MBTA-protected birds. See supra Section C.2; see also, e.g., supra Map 2.1 (map showing wind energy turbines that have been proposed in several areas of critical importance to birds). However, in the absence of a permitting system, even wind energy developers that know that their projects will take migratory birds and desire to operate within the law have no concrete means of doing so, short of abandoning the project.

The inadequate solution devised by FWS and the Committee, *i.e.*, “voluntary” Guidelines in return for vague non-enforcement “assurances,” does nothing to resolve this problem because the “guidelines do not authorize take under MBTA or BGEPA,” and, regardless of efforts by individual projects to comply with the Guidelines, “[v]iolations of those statutes may result in prosecution.” See Wind Guidelines Third Draft at 13. Indeed, the legal complications related to the voluntary Guidelines have raised concerns not only among many in the conservation community but also by

the U.S. Department of Justice.¹³⁷ In this regard, it is important to stress that federal agencies are not exempt from the MBTA's broad strict-liability take prohibition, and consequently any federal agency action that in effect authorizes or leads to take of migratory birds – in the absence of the specific mechanisms provided for in the MBTA – is itself a violation of the Act. See Humane Soc'y of the U.S. v. Glickman, 217 F.3d 882 (D.C. Cir. 2000). Thus, FWS itself is subject to the MBTA and therefore its actions, such as adoption of voluntary Guidelines that essentially endorse the unauthorized taking of migratory birds – by providing projects with any non-enforcement assurances at all – is in clear tension with the Act. See Migratory Bird Executive Order.

In Glickman, plaintiffs challenged implementation of a management plan for Canada Geese, which did not require the Department of Agriculture to seek permits before taking or killing such birds. The federal defendants argued that federal agencies were not subject to the MBTA and therefore need not obtain a permit before taking migratory birds. The court of appeals rejected the government's argument and held that the Department was required to seek a permit before implementing the management plan. That case may be particularly relevant in the context of the voluntary Guidelines, since there the court held that the Department of Interior's interpretive policy statement that allowed federal agencies to take without a permit violated the MBTA. Thus Glickman's ruling that mere non-binding policy statements of a federal agency could be in violation of the MBTA has clear implications for the legality of the voluntary Guidelines, because the Guidelines essentially endorse unauthorized take by wind energy projects without a permit, which is a clear violation of the MBTA by the agency.

Indeed, an agency need not itself be killing or taking birds to be in violation of the Act. See, e.g., Hill v. Norton, 275 F.3d 98, 106 (D.C. Cir. 2001) (subsequently superseded by statute) (holding that failure of the Department of Interior to list mute swans under the MBTA “ha[d] led to numerous adverse actions - including killing and egg destruction” and was therefore an action that violated the MBTA and was reviewable under the APA). Thus, FWS's failure to make the Guidelines mandatory – while providing assurances to developers that their compliance with the Guidelines will limit the agency's enforcement discretion – will likely lead to the unauthorized “taking” of birds by wind energy projects without a permit under the MBTA. Accordingly, FWS cannot, through non-binding Guidelines, absolve developers of liability for violation of the Act resulting from incidental take; and by purporting to do so FWS would itself be violating the MBTA and running afoul of the ruling in Glickman and other cases.

On the other hand, the Act expressly provides a mechanism for permitting take in Section 704, i.e., permitting take through “suitable regulations.” 16 U.S.C. § 704(a). FWS should implement Section 704 of the Act by promulgating regulations that not only establish mandatory

¹³⁷ This was communicated by FWS during the public comment session in the Wind Federal Advisory Committee meeting held on September 21, 2011. Further, ABC has repeatedly requested FWS to provide the meeting summary and recording of the September 2011 Committee meetings (as required under FACA, 5 U.S.C. App. 2 §§ 10(b)-(c)), and has to date not been provided the same.

standards for the industry, but also enable developers to cooperate with FWS in obtaining formal authorization through incidental take permits for appropriate projects, as envisaged in the Proposed Regulations. In sum, this is the critical juncture at which FWS must take stock of the legal and empirical inadequacy of the approach taken to date and then commit to a different one – which can build on the hard work done in drafting the Guidelines – under which wind energy developers have both a meaningful, reliable mechanism to site and operate their projects in a bird-friendly fashion, and a well-placed concern for potential agency enforcement if they do not.

ii. *Mandatory standards for wind energy projects are necessary particularly due to the lack of enforcement of the MBTA by FWS against the wind industry.*

The MBTA does not have a citizen suit provision and therefore FWS has the primary responsibility to administer and enforce the Act. Many prosecutions for incidental take have been pursued by FWS under the MBTA, including against companies involved in resource and energy production. In 2009, for instance, the electric utility PacifiCorp paid approximately \$1.4 million in fines and restitution and approximately \$9.1 million to repair and replace equipment in order to minimize impacts on migratory birds, after pleading guilty to 34 counts of unlawfully taking Golden Eagles, hawks, and ravens in violation of the MBTA.¹³⁸ Also in 2009, Exxon-Mobil pled guilty to 85 violations of the MBTA for failure to take precautions to prevent the death of migratory birds at one of the company's petroleum facilities, and paid \$600,000 in fines. Thus, there is a long history of these types of prosecution. See, e.g., United States v. Moon Lake Electric Ass'n Inc., 45 F.Supp. 2d 1070 (D. Colo. 1999) (prosecution of electric company for failing to take reasonable measures to minimize the impact of power lines on migratory birds); United States v. Stuarco Oil Co., 73-CR-129 (D. Colo. 1973) (prosecution of oil company for the death of 23 birds resulting from the company's failure to build oil sump pits in a manner that could keep birds away); United States v. Equity Corp., Cr. 75-51 (D. Utah 1975) (oil company charged for the death of 14 ducks caused by the company's oil sump pits); United States v. Union Tex. Petroleum, 73-CR-127 (D. Colo. 1973) (prosecution of oil company for no proper maintenance of oil sump pit).

As explained supra, see Section D.3, FWS has the primary responsibility to administer and enforce the MBTA. However, to date, despite conceded rampant violations of the MBTA by wind energy projects, FWS has never brought enforcement action against wind energy developers for incidental take. See Laura J. Beveridge, The Migratory Bird Treaty Act and Wind Development (N. Am. Wind Power, Sept. 2005) (opinion of attorney representing the energy sector that the government's ongoing reluctance to prosecute wind energy projects provides assurance to developers that they will not be held liable for avian deaths), Attachment Q.

¹³⁸ FWS News Release: Utility Giant to Pay Millions for Eagle Protection (July 10, 2009), <http://www.fws.gov/mountain-prairie/pressrel/09-47.html> (last visited Nov. 8, 2011).

Further, the agency is aware of large-scale illegal killing and potential take of MBTA-protected birds at many wind energy projects across the country not merely in violation of federal statutes but also, in some cases, in clear violation of the specific standards provided in the voluntary guidelines. See, e.g., Memo from Alan Forster, NedPower Mt. Storm LLC to Laura Hill, FWS, NedPower September 25, 2011 Monitoring Event (Oct. 10, 2011) (describing an “unusual number of bird casualties” found near a single turbine), Attachment R; Letter from FWS to Amber Zuhlke, Wind Capital Group, Big Lake Wind Facility in Palm Beach, Florida (July 1, 2011) (“Many recommendations within the Draft Eagle Guidance were not included in the pre-construction monitoring plan for identifying potential risk to eagles. The Service requests the Draft Eagle Guidance be followed...”), Attachment K. Thus, there are situations in which a company flatly admits bird mortality at its project, and yet FWS fails to bring any enforcement action. See, e.g., Memo from Stantec Consulting (consultants for developer) to Laura Hill, FWS, Bird Mortality at Laurel Mountain Substation Memo (Oct. 25, 2011) (reporting the death of 314 birds), Attachment J; Louis Sahagun, Federal Officials Investigate Eagle Deaths At DWP Wind Farm (L.A. Times, Aug. 3, 2011) (explaining that the Los Angeles Department of Water had reported raptor mortalities to FWS at its Pine Tree Wind Project in the Tehachapi Mountains).¹³⁹

Although FWS has considerable discretion in deciding whom to prosecute for violation of the MBTA, Alaska Fish & Wildlife Fed’n & Outdoor Council v. Dunkle, 829 F.2d 933 (9th Cir. 1987), courts have held that an ongoing “pattern of non-enforcement of clear statutory language” amounts to “an abdication of its statutory responsibilities,” which is a violation of the APA. Heckler v. Chaney, 470 U.S. 821, 833 n.4 (1985) (citing Adams v. Richardson, 480 F.2d 1159 (D.C. Cir. 1973) (emphasis added)); see also id. at 839 (Brennan, J., concurring) (“It may be presumed that Congress does not intend administrative agencies, agents of Congress’ own creation, to ignore clear jurisdictional, regulatory, statutory, or constitutional commands[.]”). Accordingly, an ongoing practice and policy of non-enforcement while wind energy projects openly flout the MBTA may open FWS to suit under the APA, for engaging in a “pattern of non-enforcement of clear statutory language.” This is still another reason why the promulgation of a system for permitting wind power projects is far preferable to FWS’s existing approach, under which it has, at least as a practical matter, made it abundantly clear that it has no intention of enforcing the MBTA against such projects.

In fact, FWS is further exacerbating the problem of non-enforcement and implementation of the MBTA, by endeavoring to provide “assurances” to wind energy developers that they will not be prosecuted for violations of the MBTA even when the Service disagrees with their reasons for siting in a particular location and the project results in take of migratory birds. Even worse, the most recent published version of the wind Guidelines (as of this writing) recommends that “if the developer seeks to have the benefit of the enforcement discretion” of FWS, it must merely maintain

¹³⁹ Available at <http://articles.latimes.com/2011/aug/03/local/la-me-wind-eagles-20110803> (last visited Nov. 16, 2011).

“contemporaneous documentation of how the developer evaluated [FWS’s] advice and the reasons for any departures from it.” Wind Guidelines Third Draft at 13 (emphases added). Simply put, what this means is that a private company can claim to be in “compliance” with the Guidelines and entitled to non-enforcement assurances, while at the same time refusing to abide by the position of the biologists of the federal agency whose stated mission is to “conserve, protect, and enhance” migratory birds “for the continuing benefit of the American people” and which has the statutory duty under the MBTA to protect and prevent taking of migratory birds. FWS, Mission Statement,¹⁴⁰ see also Wind Guidelines Third Draft at 1 (explaining that the “the advice of the Service is not binding” and that “the guidelines leave decisions up to the developer.”).

This is a counterproductive and almost certainly unlawful approach to managing migratory bird impacts, especially because FWS is frequently in disagreement with the developer’s analysis of the wildlife risks posed by its project. See, e.g., Letter from Deborah Carter, FWS to Curry & Kerlinger, LLC (environmental consultants of developer) at 2 (Sept. 30, 2009) (explaining that the agency “disagreed” with the developer’s “conclusions drawn from [the risk assessments].”), Attachment S; Letter from Laury Zicari, FWS to Dana Vallieu, TRC (May 11, 2011) at 6 (explaining that the studies conducted by the developer’s consultants were insufficient to assess the project’s impacts on Golden Eagles and providing several recommendations to modify the developer’s approach), Attachment T; Letter from Gary Miller, FWS to Sue Oliver, Or. Dep’t of Energy (Feb. 14, 2011) at 8-9 (“Throughout this energy facility siting process, the Service and [developer] have reached agreement on some issues, but many remain. The Service continues to have concerns with this Project...”), Attachment U; see also id. at 13-16 (FWS providing a chart of items identifying the developer’s response to agency recommendations - on some issues the developer had “declined” to follow the agency’s recommendations).

In particular, the voluntary Guidelines do not effectively address the most crucial problem related to impacts of wind energy projects on birds, i.e., poor siting, because they allow developers to build projects in high risk areas so long as they communicate with the agency and record their reasons for departure from the agency’s advice. See, e.g., Letter from Michael D. George, FWS to Jay Prothro, BP Wind Energy, Southwest Power Pool Docket #ERII-3833 (Oct. 11, 2011) (FWS expressing frustration with developer’s decision to proceed with the project in complete disregard to the agency’s recommendations – “British Petroleum representatives and their consultants have repeatedly been advised of the unacceptability of the proposed BP wind project west of Merna given its high risk to whooping cranes and other migratory birds. The Service again recommends that the proposed BP wind project not proceed as planned [because it] provides an abundance of suitable habitat for the federally endangered whooping crane.”), Attachment V; see also Letter from Robert D. Williams, FWS to Tim Carlson, Nevada Wind, Proposed Virginia Peak Wind Facility and Existing Golden Eagle Resources in the Pah Rah Range, Washoe County, Nevada (Aug. 13, 2010) at 2 (FWS contacted the developer by telephone when it had not heard back from the developer for

¹⁴⁰ Available at <http://www.fws.gov/info/pocketguide/fundamentals.html> (last visited Nov. 11, 2011)

more than a year since communication of its recommendations, only to find out that construction of the project was to begin in 45 days without regard for its recommendations), Attachment W; Letter from Scott Hicks, FWS to Xio Cordoba, Heritage Sustainable Energy (Nov. 4, 2011) (even though FWS had for many years recommended that the developer “not construct a commercial wind energy development on the Garden Peninsula because of the high potential for avian mortalities and violations of Federal wildlife laws,” the developer informed FWS that it “intended to move forward with construction of the wind energy development, regardless of [FWS’s] previous recommendations and wildlife concerns.”), Attachment X.

Thus, although FWS provides certain recommendations to the wind industry, such as its recommendations that developers apply the tiered approach adopted in the Guidelines and that they communicate extensively with the agency, the reality remains that these Guidelines are entirely non-binding and there is no means to ensure that developers follow the recommendations of the very authority that has the statutory mandate to protect migratory birds and other wildlife.

Being the primary authority responsible for protecting wildlife and enforcing federal wildlife statutes such as the MBTA, FWS has the statutory responsibility to either enforce the Act effectively so that future violations are deterred or to establish a comprehensive regulatory regime that avoids and minimizes wildlife impacts at wind energy projects. By refusing to regulate or prosecute wind energy companies, FWS is essentially providing the industry a free pass to violate federal wildlife law, and at the same time creating a regulatory limbo which simply cannot afford legal certainty to projects that are in fact in violation of the MBTA.

iii. Regulations are crucial in order to require wind energy developers to share information with FWS at the earliest stage of the project.

Given that proper siting of wind energy projects is the most important element in avoiding and minimizing wildlife impacts, FWS has urged developers to “‘come to us at the get-go, before a site has been selected [and] before a landowner agreement has been signed.’” John Clapp, FWS Official Urges Cooperation (N. Am. Windpower June 2011) (quoting Albert Manville, Senior Wildlife Biologist, FWS);¹⁴¹ see also Letter from FWS to Chris Taylor, Element Power (Jan. 31, 2011) (“Developers should seek this consultation **prior to** making irrevocable commitments.”), Attachment Y.

Unfortunately in the absence of mandatory rules requiring developers to obtain permits to proceed with particular projects, at present FWS is facing a situation where it is not only having difficulties in obtaining information from the industry but is also in some cases entirely unaware of the existence of projects that may have serious wildlife impacts. Clapp, supra (quoting Albert

¹⁴¹ Available at <http://www.wind-watch.org/news/2011/06/03/fws-official-urges-cooperation/> (last visited Nov. 17, 2011).

Manville, Senior Wildlife Biologist, FWS, “[u]nfortunately, right now in many cases, we find out about the development of a project through a news release or something on the evening news when we have not been consulted whatsoever, and that’s frustrating.” (emphasis added)); see also, e.g., Letter from Robert D. Williams, FWS to Tim Carlson, Nevada Wind, Proposed Virginia Peak Wind Facility and Existing Golden Eagle Resources in the Pah Rah Range, Washoe County, Nevada at 1 (Aug. 13, 2010) (stating that FWS “first became aware of this project when a local state agency contacted it”), Attachment W.

Further, increasingly some wind energy developers are becoming less forthcoming in sharing information with FWS and are proceeding with construction without regard to the agency’s recommendations. See, e.g., Letter from Laury Zicari, FWS to Nicholas D. Livesay, Pierce Atwood LLP (attorneys of the developer) (Mar. 31, 2011) (FWS response to developer’s application for an incidental take permit under BGEPA expressing “surprise” “to learn that USDA funded the project” and “to learn that groundbreaking for the project occurred despite the many concerns that [FWS] raised concerning this project” and even before completion of “two full seasons” of pre-construction studies as recommended by FWS for avoiding risks to Bald Eagles), Attachment Z; Letter from FWS to Chris Taylor, Element Power (Jan. 31, 2011) (despite developer’s assurance that it would submit an ABPP based on the agency’s recommendations, no such information was forthcoming from the developer – “Service biologists have not heard from any representative of the company, nor has the Service received a revised ABPP... We note that these deficiencies persist despite our attempts to work -cooperatively with the company to correct them.”), Attachment Y; Letter from Robert D. Williams, FWS to Tim Carlson, Nevada Wind, Proposed Virginia Peak Wind Facility and Existing Golden Eagle Resources in the Pah Rah Range, Washoe County, Nevada at 2 (Aug. 13, 2010) (“We requested that you provide this information to us for review so that we could assist you in determining the level of risk of your project to golden eagles. To date we have not received the requested resource information.”), Attachment W.

In addition, in some cases, developers are entering into confidentiality agreements with their hired biological consultants, thereby making it more difficult for the agency, and the public, to study the wildlife impacts of the projects.¹⁴² See Manville 2009 Paper at 9 (“The transparency of research results conducted by wind industry consultants continues to be a recurrent frustration for USFWS—in part because of early project industry confidentiality issues.”) (emphasis added).

¹⁴² In fact, when asked about the utility of such “confidentiality” agreements, a wind industry representative recently stated that the industry considered wildlife mortality information as “proprietary information.” Statements made by FWS and Wind Industry Representative in a panel discussion on BGEPA during a conference on ‘Reshaping the Migratory Bird Treaty Act’ organized by Lewis and Clark Law School (October 21, 2011). More information on this conference is available here: http://law.lclark.edu/programs/environmental_and_natural_resources_law/conferences_and_lectures/2011_migratory_bird_treaty_act/

In addition, recent incidents have documented the inherent problems associated in having surveys, monitoring and assessments of wildlife impacts at wind energy projects conducted by consultants retained by and paid for by the project developers themselves. For example, in finding a wind power project in violation of the ESA, a federal district court expressly rejected the findings of one such developer-hired consultant in favor of other independent experts who appeared before the Court. See Animal Welfare Inst. v. Beech Ridge Energy LLC, 675 F. Supp. 2d 540, 582 (D. Md. 2009). In Beech Ridge, the court found that the developer-hired consultant performed minimal surveys, presented result-oriented analyses, and even suppressed important acoustic data, placing the interests of the company ahead of wildlife protection interests. As the Beech Ridge ruling makes clear, often consultants have inherent conflicts of interest that lead to their adoption of “a minimalist approach to [their] responsibilities,” leading to the sort of unacceptable, insufficient, and result-oriented studies done at Beech Ridge. 675 F. Supp. 2d at 582.

Indeed, the wildlife mortality estimates documented by many wind energy projects are underestimates of actual mortality levels because of inconsistent reporting of incidental mortality, which is not handled in a standard way across the industry. Incidental mortality refers to carcasses found in addition to the official mortality searches, either occurring at a different time than the scheduled searches, or at a wind turbine that wasn’t searched. Mortality studies generally do not include all of a facility’s wind turbines. Not all mortality studies report incidental finds. For example, a report about bird and bat mortality at wind facilities in the Montezuma Hills of California did not include Swainson’s Hawk fatalities in the report even though the researchers were aware of them and the Swainson’s Hawk is a species of conservation concern. See H. T. Harvey & Assocs., Bird and Bat Movement Patterns and Mortality at the Montezuma Hills Wind Resource Area,¹⁴³ see also Shiloh IV Wind Energy Draft Environmental Impact Report 4-7 (Aug. 23, 2011) (noting the Swainson’s Hawk fatalities were found during the above study at some wind projects), Attachment AA.

A significant amount of the mortality for many species as a whole may be found incidentally, not during the standardized searches. See K. Shawn Smallwood & Brian Karas, Comparison of Mortality Estimates in the Altamont Pass Wind Resource Area When Restricted to Recent Fatalities 3 (June 2008).¹⁴⁴ For example, often the bird and bat mortality estimates are based only on carcasses found in routine searches. Such estimates often do not take into consideration, (a) carcasses found incidentally (i.e., found outside regular/routine carcass searches); and (b) bird and bats killed due to major fatality incidents (usually caused due to lights being left on at a turbine or substation, or heavy fog). See, e.g., Curry & Kerlinger, LLC, A Study of Bird and Bat Collision Fatalities at the

¹⁴³ Available at <http://www.co.solano.ca.us/civicax/filebank/blobdload.aspx?blobid=10104> (last visited Dec. 11, 2011).

¹⁴⁴ Available at http://www.altamontsrc.org/alt_doc/p101_smallwood_karas_mortality_restricted_to_recent.pdf (last visited Dec. 11, 2011).

Mountaineer Wind Energy Center, Tucker County, West Virginia: Annual Report for 2003 (Feb. 14, 2004) at 5 (wildlife mortality estimate did not take into consideration a major fatality incident that took place in May 2003, thus only carcasses found during standardized searches were used to calculate the mortality estimate).¹⁴⁵

Finally, it has long been known that scavengers can remove carcasses before they are found and searchers do not always find all carcasses. Although mortality studies now attempt to correct for these factors, recent research suggests that some of the adjusted mortality numbers may still be too low. See K. Shawn Smallwood et al., Novel Scavenger Removal Trials Increase Wind Turbine–Caused Avian Fatality Estimates 74(5) J. Wildlife Mgmt. 1089 (2010), Attachment BB. Thus, there appears to be a serious problem of underestimating actual wildlife mortality at many wind energy projects.

In sum, a skewed picture of actual wildlife mortality at wind energy projects is emerging. In this regard, regulations requiring the developer to consult with FWS will enable the agency to thoroughly scrutinize the studies conducted and conclusions drawn by hired consultants in order to ensure unbiased biological information collection and surveying, and accurate analysis of biological data.

In the absence of mandatory regulations requiring the developer to consult FWS and share requested information, FWS cannot simply expect or rely upon the goodwill or cooperation of the industry. In any event, mandatory rules are required to resolve environmental conflicts in any given industry and are especially necessary to regulate the uncooperative actors in the industry that do not follow the law. Indeed, the good corporate actors that diligently follow the law are in effect penalized by a system that relies entirely on voluntary compliance because they will incur costs whereas less responsible companies will not.¹⁴⁶ Thus, there is a crucial need for establishing uniform industry-wide regulations so that FWS can exercise oversight on those developers and operators who will not otherwise cooperate with the agency.

The problems posed by a lack of information and failure to consult with FWS is further exacerbated by the fact that most wind energy projects are constructed on private lands. See Nat’l Research Council, Environmental Impacts of Wind-Energy Projects (Nat’l Academies Press, 2007) at 194. Thus, often, there is no “federal nexus” for wind energy projects to trigger NEPA review.

¹⁴⁵ Available at <http://www.wvhighlands.org/Birds/MountaineerFinalAvianRpt-%203-15-04PKJK.pdf> (last visited Nov. 17, 2011).

¹⁴⁶ Good examples of such actors in the wind energy industry that are truly concerned about the impacts of their projects on migratory birds are some that have recently decided to abandon sites that are particularly adverse to wildlife. See, e.g., Richard Cockle, Developers drop plans for two wind farms on Steens Mountain slopes, but still plan a third (The Oregonian, Nov. 17, 2011), http://www.oregonlive.com/pacific-northwest-news/index.ssf/2011/11/developers_drop_plans_for_two.html (last visited Nov. 22, 2011)

See Manville 2009 Paper at 9 (“Since the vast majority of wind development is currently on private lands, the USFWS lacks any strong federal nexus”). Simply put, this means that there may be hundreds of wind turbines on private lands entirely outside the scrutiny of FWS due to the lack of any current mechanism that triggers FWS review. See, e.g., Email from Wende S. Mahaney, FWS to Donald E. Murphy, Maine Department of Conservation, First Wind - Blue Sky East, LLC Bull Hill Wind Project Development Application (Mar. 07, 2011)¹⁴⁷ (FWS biologist stating that the agency will not be submitting comments on the state permit application of a wind energy developer because “[i]t is our understanding that all wetland fill impacts are being avoided, so the project does not trigger federal jurisdiction with the Corps of Engineers. That being the case, there is no requirement for consultation under the federal Endangered Species Act ... So, I don’t believe USFWS will be submitting any comments... Many bird and bat issues are “flying under the radar screen” (pun intended.....) for USFWS.”). Indeed, many more bird impacts due to wind energy projects will be “flying under the radar screen” of FWS under the approach adopted in the voluntary Guidelines, where FWS staff are required to respond to wind energy developers within a truncated 60 day review period. As explained supra, see Section C.3, the Guidelines impose the 60-day review requirement on FWS, regardless of the size or complexity of the project, or its risk to wildlife.

iv. FWS should take action to prevent destruction of migratory birds before the actual taking occurs.

The MBTA is a strict liability statute. See United States v. FMC Corp., 572 F.2d 902 (2d Cir. 1978). In essence what this means is that regardless of intent to violate the law, “when one enters into a business or activity for his own benefit, and that benefit results in harm to others, the party should bear the responsibility for that harm.” Id. at 907. “The [MBTA] does not include as an element of the offense ‘willfully, knowingly, recklessly, or negligently’ [because] Congress recognized the important public policy behind protecting migratory birds.” Id. at 908 (emphasis added).

The “public policy behind protecting migratory birds” informs FWS’s “federal trust responsibility” over migratory bird species. Specifically, this policy governs FWS’s MBTA-permit program which is premised on the need to prevent destruction of migratory birds by taking precautionary measures, such as requiring appropriate permits, before the actual taking or killing of birds takes place. See, e.g., 50 C.F.R. § 21.22(a) (banding permits required “before any person may capture migratory birds”); id. § 21.23(a) (“scientific collecting permit is required before any person may take”); id. § 21.24(a) (taxidermist permit is required before any person may perform taxidermy”); id. § 21.27(a) (“special purpose permit is required before any person may lawfully take”); see also Fund For Animals v. Norton, 281 F.Supp.2d 209, 217 (D.D.C. 2003) (“The MBTA authorizes the Secretary of the Interior to promulgate regulations permitting the taking of migratory birds as long as the regulations are consistent with the Convention. The regulations prohibit the

¹⁴⁷ Available at http://www.maine.gov/doc/lurc/projects/Windpower/FirstWind/BlueSkyEast/DP4886/Application/Comments/Federal_Agencies_Comments.pdf (last visited Nov. 15, 2011).

taking [] of any migratory birds except as allowed by a valid permit.” (Citing 50 C.F.R. § 21.11) (emphasis added and other citations omitted)).

The precautionary approach is further reiterated in the MBTA definition of “take” which, like the definition of “take” under the ESA, prohibits “acts that lead to the taking of protected species.” United States v. Apollo Energies, 611 F.3d 679, 684 n.3 (10th Cir. 2010) (citing Babbitt v. Sweet Home Chapter of Cmty. for a Great Or., 515 U.S. 687 (1995) (“The *regulatory* definition of ‘take’ [in the MBTA] is the same as the ESA’s *statutory* definition except that the regulatory definition omits to ‘harass’ and ‘harm.’”). Further, in the context of ESA enforcement, courts have accepted the reasonable certainty of future unlawful takes as sufficient to support remedies designed to prevent such takes from occurring, such as issuing an injunction against construction and operation until the developer obtains an appropriate take permit. See, e.g., Beech Ridge Energy LLC, 675 F. Supp. 2d at 545, 580 (holding that ESA requires courts to carefully scrutinize an activity that may take endangered species without a permit and granting injunction against wind energy project for likely take of endangered Indiana bat). In Beech Ridge, the court examined the potential conflict between two federal policies relevant to wind energy projects, one favoring the protection of endangered species under the ESA, and the other encouraging development of renewable energy resources, and observed that “[t]he two vital federal policies at issue in this case are not necessarily in conflict” so long as the project developer obtains take authorization in accordance with the ESA. Id. at 582-583. The court admonished the industry that, “[t]he development of wind energy can and should be encouraged, but wind turbines must be good neighbors” and that “the only way in which the Court will allow the [wind energy] project to continue” was through the permitting process under Section 10 of the ESA. Id.

Analogies for preventative regulations can also be drawn from conservation schemes in other federal wildlife laws that are premised on the precautionary approach to wildlife protection and are designed to prevent or minimize the taking of protected wildlife. The ESA and the Marine Mammal Protection Act (“MMPA”), 16 U.S.C. § 1361 et seq., also prohibit unauthorized take of protected wildlife. Further, like the MBTA those statutes provide FWS with broad rulemaking authority to protect such wildlife. For example, FWS has promulgated regulations under the ESA and the MMPA for protecting manatees through the establishment of “manatee protection areas” where waterborne activity is prohibited or subject to restrictions. 50 C.F.R. §§ 17.100-108. FWS describes the manatee regulations as “protective regulations,” designed to “reduce the incidence of manatee injuries and deaths.” FWS, Final Rule Providing for the Establishment of Manatee Protection Areas, 44 Fed. Reg. 60962 (Oct 22, 1979).

Similarly, in the case at hand, FWS should establish a mechanism through regulations to anticipate incidental take by wind energy projects and to be actively involved in ensuring that such projects are not constructed on sites that pose an undue risk to migratory birds and that any impacts that do occur are minimized and mitigated. Indeed, the incontrovertible evidence that wind energy projects, if operated as designed, will foreseeably take some migratory birds protected under the MBTA, strongly supports creation of a system for limiting the amount of take that will occur.

v. *The wind energy industry particularly lends itself to federal oversight through appropriate regulations established under the MBTA.*

As explained above, FWS has the authority to regulate incidental take and there are several concrete reasons for establishing such a regulatory scheme for incidental take by wind energy projects. Further as explained *infra*, see Section E.4, the permitting scheme recommended in this Petition is particularly beneficial for regulating the incidental take by wind energy projects. Other mechanisms may be more appropriate for other incidental takes. See, e.g., Memo from Willie R. Taylor, FWS to FCC, FCC Draft Programmatic Environmental Assessment (DPEA), Antenna Structure Registration (ASR) Program (recommending that FCC “create a programmatic approach to authorizing communication towers that, along with its goal of avoiding and minimizing hazards to air navigation, explicitly seeks to avoid or minimize bird mortality.”), Attachment CC.

The wind energy industry has sought to trivialize incidental take of birds by wind energy projects by comparing it to the level of avian mortality due to other incidental takes, such as cat predation, collision with windows and vehicles, and other external threats – presumably in order to downplay the risk of wind energy projects to wildlife. See, e.g., EDP Renewables, FAQs: Wind Technology¹⁴⁸ (website of leading wind energy developer arguing that “wind’s overall impact on birds is lower than other sources of avian mortality such as vehicles, buildings and house cats.”). Further, objections have been raised (mostly by the industry) that incidental take regulations for wind energy projects will mean that FWS will be required next to regulate all forms of incidental take.

This justification (that other actions are incidentally taking birds as well) is a specious argument that fails to recognize several key issues, explained in detail below, including that bird mortality is cumulative across the full spectrum of causes and that different sources of anthropogenic bird mortality variously impact different species. It also sidesteps the crucial issue, *i.e.*, are bird mortalities from wind farms an issue of concern from an environmental standpoint, and is a permitting scheme an appropriate way of addressing it? The simple answer to both questions is “yes.” Wind turbines have burgeoned and continue to develop across the nation in critical bird areas and constitute a serious threat to many bird species. A permitting process is an appropriate means of both alleviating that threat and allowing wind energy development in a more bird friendly fashion. See supra Section C.2. In addition, as explained below, it is eminently clear that incidental take by wind energy projects is distinct from many other modes of incidental take and is, in any event, particularly appropriate for regulation by FWS.

FWS itself has expressly recognized that “[s]iting of a wind energy project is the most important element in avoiding effects to species and their habitats.” Wind Guidelines First Draft at

¹⁴⁸ Available at <http://www.edprenovaveis.com/Technology/WindTechnology/FAQs> (last visited Nov. 10, 2011).

8; Letter from FWS to Amber Zuhlke, Wind Capital Group, Big Lake Wind Facility in Palm Beach, Florida (July 1, 2011) (“[FWS] supports properly-placed renewable energy projects and is willing to assist companies in positioning these projects on the landscape in locations that are compatible with wildlife and their habitats.”), Attachment K. Indeed, FWS biologists have recognized that even a single turbine can pose a serious threat to wildlife if it is constructed in an improper site. See, e.g., Letter from Mary Knapp, FWS concerning the operation of a single 25 kW wind turbine at Kelleys Island, Ohio at 6 (June 8 2011) (“The Service is concerned that the proposed project may result in take of migratory birds due to its location... While the small size and rotor-swept area of the turbine may aid in minimizing the likelihood of a migratory bird being struck, overall the Service believes this site poses a high risk to birds.”), Attachment DD; see also Cornell Lab of Ornithology, Scientists to Investigate Impacts of Wind Energy on Migratory Wildlife (July 27, 2009) (“We know that in some locations a small percentage of wind turbines may cause the majority of bird and bat deaths. For example, Altamont Pass, east of Oakland, California, is an extreme case: in an area used regularly by migrant and resident raptors, only a fraction of the 5,000 turbines are responsible for most of the raptor deaths annually.” (quoting Dr. Andrew Farnsworth of the Cornell Lab of Ornithology)).¹⁴⁹

FWS has also recognized that in certain situations the most appropriate means to address the potential wildlife impacts of any given wind energy project is that the project is simply not constructed at a particular site. See, e.g., Wind Guidelines Third Draft at 36 (recommending abandoning a project site if there is “a high probability of significant adverse impacts to species of concern or their habitats”); Wind Guidelines Second Draft at 16 (explaining the possible outcomes arising from collection of information and cooperation with FWS and describing one such outcome as “the project site is abandoned because the risk is considered unacceptable.”); see also Cornell Lab of Ornithology, Scientists to Investigate Impacts of Wind Energy on Migratory Wildlife (July 27, 2009)¹⁵⁰ (“Due to our significant [wildlife] concerns over the proposed project location, we encourage [the developer] to consider alternative locations to explore wind energy in the Southeast, with consideration of the issues outlined”).

Thus, for some projects, the best available scientific information will indicate that the project should not be constructed at that site. As more and more projects are being constructed in pristine forested mountains and ridgelines, designated Important Bird Areas, and high risk areas crucial to migratory birds such as migratory bird flyways, feeding and nesting areas, and areas of high bird concentrations (i.e., rookeries, leks, state or federal refuges, staging areas, wetlands, riparian corridors, etc.) – without any mandatory standards and regulation whatsoever – mortality and habitat fragmentation due to wind energy projects is increasing tremendously. See, e.g., Letter from Thomas R. Chapman, FWS to Colonel Philip Feir, Corps at 10 (Mar. 12, 2009) (“Wind turbines located on ridgelines in the project area may pose multiple threats to migrating birds.”), Attachment

¹⁴⁹ Available at http://www.birds.cornell.edu/pr/wind_wildlife_pr.html (last visited Nov. 14, 2011).

¹⁵⁰ Available at http://www.birds.cornell.edu/pr/wind_wildlife_pr.html (last visited Nov. 14, 2011).

EE; Letter from David A. Stilwell, FWS to Michael Speerschneider, EverPower Wind Holdings (July 11, 2011) (discussing potential for incidental take of Bald Eagles or Golden Eagles as a result of the turbine blades striking eagles during migration, or as they pass through the project area on their way to foraging or roosting sites and cautioning that the project is located in an Important Bird Area), Attachment FF. In light of the unique significance of siting of massive wind turbines – which are inherently hazardous to birds and other flying animals – and hence the need for developers to work with FWS at the early stages of the project, the wind energy industry lends itself to appropriate regulation under the MBTA.

Additionally, it is also important to identify the particular species at risk at wind energy projects. Comparing other mortality threats, such as cat predation, to bird mortality from wind turbines is a misleading comparison because the birds threatened by wind turbines, often placed in critical bird migratory routes and habitats, disproportionately include species of particular conservation concern, particularly raptors such as the Bald Eagle, Golden Eagle, Ferruginous Hawk, Swainson’s Hawk, and American Peregrine Falcon. See, e.g., Letter from Laury Zicari, FWS to Dana Vallieu, TRC (May 11, 2011) at 6 (“New information about migration and movements of golden eagles suggest this species may be the raptor most vulnerable to wind power in the eastern U.S.” (emphasis added)), Attachment T; see also supra Section C.2. For example, a comparison of the types of bird species adversely impacted by wind energy projects with those that are taken due to cat predation demonstrates that this is an apples-to-oranges comparison – not only is it infeasible to develop a permitting scheme addressing cat predation but it is extremely unlikely that Bald Eagles could fall prey to house cats, or that California Condors could collide with skyscrapers, and yet they are at risk from poorly sited wind projects.

In addition, for many activities resulting in incidental take of migratory birds, implementing the MBTA wholly through post hoc enforcement actions (instead of establishing formal regulations for the same), may be feasible in light of the ready availability of effective avoidance and mitigation measures, such as use of anti-perching devices on power lines to avoid electrocution of birds, specific types of glass for tall buildings to avoid bird collisions, and bird-proofing oil drilling equipment to avoid bird deaths in oil and waste pits. Imposing sanctions for a company’s failure to implement such measures may be an appropriate way of both punishing an individual violator and sending the message to an entire industry as to what is necessary to avoid migratory bird takes. At present, however, the best available science does not provide a similar ‘quick-fix’ solution for wind turbines to avoid bird mortality. See FWS 2011 MBTA Conference Presentation (explaining that FWS is lacking uniform best management practices for the industry, “except through *proper site location*”). Further, there may never be an across-the-board readily-applicable measure for avoiding and mitigating impacts of wind energy projects on migratory birds because, as explained above, due to the inherently hazardous nature of wind power for birds, the most significant step for avoiding impacts is proper siting of wind turbines, and, hence, in some situations, the best solution is to identify another site for the project. Post hoc enforcement, even if pursued by FWS – and, as discussed supra, Section E.3.ii, it never is pursued when it comes to wind power projects – is simply

not an effective means for addressing poor facility siting, the most fundamental factor in avoiding or minimizing bird impacts.

Moreover, the fact that other threats to birds exist does not provide a free pass to the wind industry to exacerbate wildlife mortality and violate the MBTA and other wildlife protection laws. To the contrary, the fact that migratory birds are killed by preexisting sources is an additional reason to avoid, minimize, and mitigate a new source of mortality before it irreversibly contributes to a further decline in bird populations. See FWS 2011 MBTA Conference Presentation at 16 (Comparing direct impacts of wind to other sources of anthropocentric mortality is not helpful since “overarching issues are about cumulative impacts – ALL things impacting birds”); see also, e.g., Letter from Laury Zicari, FWS to Dana Vallieu, TRC (May 11, 2011) at 6 (explaining that given that Golden Eagles in Maine were seriously impacted by pesticide contamination, “the potential harm to golden eagles from an additional source of mortality makes careful evaluation of the siting and effects of proposed wind power facilities essential”), Attachment T. Indeed, once again, the need to properly avoid, minimize and mitigate wildlife impacts is especially crucial for an industry that seeks to market itself as “green energy” and environmentally friendly.

Lastly, with regard to the oft-cited unjustified objection against regulating incidental take of wind energy projects under the MBTA, i.e., that the agency would eventually be required to regulate innocent incidental takes (such as accidentally killing a bird while driving a car), it should be noted that courts have clarified that the MBTA does not lead to such “absurd results.” United States v. Moon Lake Elec. Ass’n, 45 F. Supp. 2d 1070, 1084 (D. Co. 1999). Such cases of incidental take from activities that have a low likelihood of impacting migratory birds – such as the probability that any single driver will kill a bird -- can clearly be distinguished from incidental take by wind energy projects on the basis of foreseeability of wildlife impacts, i.e., “if the injury be one which might be *reasonably anticipated or foreseen as a natural consequence of the wrongful act.*” Id. at 1085 (internal citation and quotation marks omitted). In Moon Lake the Court observed as follows:

Because the death of a protected bird is generally not a probable consequence of driving an automobile, piloting an airplane, maintaining an office building, or living in a residential dwelling with a picture window, such activities would not normally result in liability under § 707(a), even if such activities would cause the death of protected birds. Proper application of the law to an MBTA prosecution, therefore, should not lead to absurd results...

Id.

In fact, in Moon Lake, the Court examined the many facets of the MBTA and its implementing regulations that enable avoiding such “absurd results,” and expressly identified, as an example, Section 704 of the MBTA under which “the Secretary has established when and how migratory birds may be taken, killed, sold, etc.” Id. (citing implementing regulations establishing permit requirements under the MBTA). Indeed, in the context of incidental take by wind energy projects, the “absurd result” is that in the absence of appropriate regulations the industry’s ordinary

operation will inevitably and predictably place it in violation of federal law. FWS should promulgate regulations establishing mandatory standards and an incidental take permit system in order to avoid such a situation of having an industry (that the federal government especially wants to encourage and support) that is largely violating the MBTA.

In the end, FWS cannot refuse to promulgate needed permitting regulations for wind energy projects merely because other threats to wildlife exist or because such regulations will have purported implications for incidental bird deaths from everyday acts such as driving a car. Massachusetts v. E.P.A., 549 U.S. 497, 533 (2007) (an agency must proffer a “reasoned justification” for declining to regulate where it has statutory authority to do so).

E.4. Incidental Take Permits for Certain Wind Energy Projects Will Effectively Protect Migratory Birds, And Also Afford More Certainty to Wind Energy Developers.

As explained supra, Section D.2, FWS has very broad rulemaking authority under the MBTA to promulgate regulations so long as the regulations are “compatible” with the four migratory bird treaties. 16 U.S.C. § 704(a). In accordance with the MBTA, FWS has expressed statutory authority to promulgate regulations establishing a broad framework for wind energy development subject to mandatory conditions. Id.; see also id. § 712(2). ABC strongly recommends that such regulations adopt a process for issuing individual incidental take permits for certain wind energy projects, as recommended in the Proposed Regulations. See Appendix: Proposed Regulations.

The Proposed Regulations enable FWS to effectively carry out its statutory mandate to protect wildlife through establishing a clear permitting process under which the agency can regulate the siting of wind energy projects and their impacts on wildlife. As set forth in the Appendix, the Proposed Regulations would categorically require both land-based and offshore wind power projects to apply for MBTA permits. Both operating and planned projects would be required to comply with the Regulations, although the obligations would differ somewhat in light of the reality that siting alternatives for operating projects differ from those for projects that are still in the planning phase. With respect to the latter, the Proposed Regulations would afford a clear, up-front mechanism by which the Service can steer projects away from the most problematic sites. In addition, for both operating and planned projects, the Proposed Regulations would require FWS to adopt measures for minimizing and mitigating impacts on migratory bird populations to the maximum extent practicable.

In contrast to the present system – in which the conservation and independent scientific communities have, at best, ad hoc access to pertinent information and involvement in the review of wind power projects – the Proposed Regulations would ensure that there is at least some opportunity for public comment before an MBTA permit is issued. At the same time, as to projects for which the Service determines there is a low likelihood of adverse impact on bird populations, the Proposed Regulations would provide for expediting project review and permit approval. Because the issuance

of an MBTA permit is a federal action necessitating review under NEPA, the proposed permitting scheme would also afford a firm basis on which significant impacts to wildlife otherwise unprotected by federal law (e.g., unlisted bat species, and birds unprotected by the MBTA) would be addressed.

For a variety of reasons, implementing an effective incidental take mechanism along the lines of the Proposed Regulations is advantageous to the wind industry, FWS, and wildlife interests, in that it recognizes the value of renewable energy development and provides greater regulatory and legal certainty to the industry, while also enabling FWS to far more effectively carry out its statutory mandate to conserve federally protected wildlife, and avoid and minimize the harmful taking of migratory birds to the maximum extent practicable.

i. The permit mechanism recommended in the Proposed Regulations enables FWS to require developers to consult FWS and to establish mandatory standards for the siting, construction, and operation of wind energy projects.

Unlike the Wind Guidelines, the Proposed Regulations enable FWS to require developers to consult and share information with the agency at the earliest stage of project planning. The Proposed Regulations enable FWS to ensure that projects are not constructed in high risk areas. For other projects that may have adverse impacts but which can be avoided or minimized through effective mitigation measures, FWS may issue individual incidental take permits that authorize the project subject to the terms and conditions stipulated in the permit. For the remaining projects that may have minimal impacts, the Proposed Regulations envisage a broad framework for authorizing such projects subject to a determination by the agency, and other standards and criteria that are prescribed in the Proposed Regulations and otherwise by the agency.

In the context of military incidental take, FWS chose to implement the MBTA through a broad authorization subject to mandatory conditions, in lieu of an approach that required individual take permits. However, the Service's reason for not imposing more comprehensive and concrete obligations on the Armed Forces is related to the reasonable expectation that the Armed Forces will be addressing the impacts of its actions through the NEPA process. See Military Final Rule at 8939-40. As NEPA only applies to federal agency actions, the same treatment cannot be assured for wind energy projects that lack any clear nexus to a federal agency action. Further, three other reasons provided by FWS for structuring the regulatory system for military incidental in the form of a "broad, automatic authorization," and that distinguish it from incidental take by wind energy projects are – (1) that military readiness activities rarely have significant impacts; (2) that the Armed Forces like other federal agencies are required to comply with the Migratory Bird Executive Order; and (3) that it was especially important not to create a complex process in light of the importance of military readiness to national security. Id. at 8947. This indicates an acknowledgment by FWS that it has the authority to promulgate regulations for issuing individual permits for incidental takes - but chose not to exercise this authority in the military take context given the unique features of that context. See id. ("Without the rule, the Armed Forces might not be able to complete certain military readiness

activities that could result in the take of migratory birds pending issuance of an MBTA take permit[.]”).

Further, the reality that FWS is lacking uniform best management practices for the industry, “except through *proper site location*,” FWS 2011 MBTA Conference Presentation, only strengthens the case for imposing concrete obligations on developers to consult FWS, in advance of project construction, in accordance with the “precautionary” principle that FWS itself has expressly relied on while advising wind energy developers. See, e.g., Letter from FWS to Amber Zuhlke, Wind Capital Group, Big Lake Wind Facility in Palm Beach, Florida (July 1, 2011) (“Wind facilities have not previously been sited in areas with Everglade snail kite presence or habitat; thus, there are no data indicating the potential risk of wind turbines on snail kites. Therefore, a conservative approach using precautionary principles is required.”(emphasis added)), Attachment K.

ii. *The Permit mechanism recommended in the Proposed Regulations provides a means to protect species of concern that are not yet listed under federal wildlife laws, such as certain bat species.*

The permit mechanism in the Proposed Regulations will do more than protect birds listed under the MBTA – it will trigger NEPA review providing much needed protection for bats and other wildlife. One justification often cited for retaining “voluntary” guidelines in lieu of mandatory standards for wind energy projects is that the voluntary guidelines need not necessarily be tied to existing federal wildlife laws such as the ESA, MBTA, and BGEPA, and would therefore facilitate protection of both birds and bats that are not listed or protected under those statutes. See, e.g., Julia Pyper, New Bird Kills Raise Questions About Growth Of Wind Industry (E&E ClimateWire, Oct. 31, 2011) (quoting John Anderson, AWEA’s Director of Siting Policy, that “there will actually be greater protection if the guidelines are voluntary” because this would entail protection of wildlife outside the scope of certain federal wildlife laws).

Although certain bat species such as hoary bats, red bats, and silver-haired bats, and certain birds, including such as sage grouse and prairie chickens¹⁵¹ are not presently protected under the ESA, MBTA, or any other federal wildlife protection statute, and they could in theory be addressed

¹⁵¹ Both the Lesser Prairie-Chicken and the Greater Sage-Grouse, are ESA candidate species and FWS Birds of Conservation Concern, which are not covered by MBTA. The population of the Lesser Prairie-Chicken is estimated at merely 32,000, while that of the Greater Sage-Grouse is estimated at only 150,000. Wind energy development is a serious threat to both species because much of the species’ remaining ranges coincide with areas containing strong wind resources. Thus, wind turbines and associated transmission lines are likely to be a barrier to movements of both Greater Sage-Grouse and Lesser Prairie-Chicken. For example, in 2009, in Oklahoma alone there were approximately 250 wind turbines in Lesser Prairie-Chicken range, with at least another 1,300 proposed. Christin L. Pruet et al., It’s Not Easy Being Green: Wind Energy and a Declining Grassland Bird, 59 BioScience 257, 260 (Mar. 2009), <http://vmpincel.bio.ou.edu/download/publications/bio.2009.59.3.10.pdf>.

by the Wind Guidelines, those Guidelines, once again, are entirely voluntary, and may be complied with by a project developer merely recording its reasons for disagreeing with the Service on site selection or any other issues. Therefore, the Guidelines will not effectively protect any wildlife.

On the other hand, the permit process in the Proposed Regulations will afford a far better mechanism for addressing project impacts on even non-MBTA protected birds, unlisted bat species, and other wildlife currently unprotected under federal law. This is because the proposed issuance of a federal MBTA permit will trigger NEPA review, which will necessarily encompass any significant impacts on any wildlife populations. See 42 U.S.C. § 4332 (requiring an analysis of “environmental impact[s] of the proposed action” for “major Federal actions significantly affecting the quality of the human environment”); 40 C.F.R. § 1508.18 (defining “Major Federal Action” as “actions with effects that may be major and which are potentially subject to Federal control and responsibility” such as “[a]pproval of specific projects... approved by permit or other regulatory decision.”). NEPA requires the agency to consider a “range of alternatives” to the proposed action, including the no-action alternative, and to identify appropriate mitigation measures to address the various impacts of the proposed action. 40 C.F.R. § 1505.1(e). Thus, the proposed regulations do encompass a mechanism of protection of both listed and non-listed wildlife and, because the permitting process, as proposed, would also involve public comment, it would allow for a far more meaningful opportunity to address impacts on otherwise unprotected birds, bats, and other wildlife than under the entirely voluntary Guidelines, which, among other problems, afford no basis on which conservation groups or other members of the public may weigh in on project impacts on an ongoing basis.

Moreover, nothing in the proposed regulations would preclude FWS from establishing both a mandatory permitting system for species protected under the MBTA, and voluntary guidelines for otherwise unprotected species – just as the existence of permitting processes under the ESA and BGEPA did not preclude the Service from drafting the current Guidelines. In fact, the process proposed here and guidelines focused on otherwise unprotected species could function in an entirely complementary fashion, with such Guidelines being brought to bear on the NEPA analysis that must be conducted on the MBTA permit application.

iii. The permit mechanism recommended in the Proposed Regulations enables an evaluation of cumulative effects of wind energy development on a regional and national level.

As discussed previously, the cumulative effects of the ever-escalating increase in wind projects, along with other impacts on migratory birds, pose extremely serious threats to the survival, habitat and behavior of migratory birds. In particular, habitat fragmentation from poorly sited wind power projects is an important contributor to cumulative impacts. Under the Proposed Regulations, the extent to which a proposed project will contribute to habitat loss and fragmentation, and other forms of cumulative impact, can be thoroughly evaluated in light of the early blueprints of a project, especially since the project’s footprint and infrastructure needs (such as access roads, transmission

lines, and substations) should already be fairly well determined by that time. Similarly, consideration of adjacent projects and other habitat-harming activities can be accomplished early in project planning (although they may need to be reviewed if other projects are added during the development phase).

In contrast, the approach adopted by FWS in the voluntary Guidelines utterly fails to provide appropriate measures and directives to study, avoid and mitigate cumulative effects at a national or regional level. The Guidelines explicitly state that “where there is no federal nexus, individual developers are not expected to conduct their own cumulative impacts analysis.” Thus, the Guidelines recommend an analysis for cumulative effects by federal agencies only for projects that have “a federal nexus” such as those that “require a federal permit.” *Id.* at 21. This does not result in a thorough analysis of cumulative effects of wind energy development, particularly because most wind energy projects are constructed on private lands with no “federal nexus,” other than the impact on birds protected under MBTA and BGEPA. Further, the Guidelines recommend that the developers “communicate” with the agency about cumulative effects of the project only in the final phase of the project where construction is complete and the developer is considering the need for post-construction studies. *See* Wind Guidelines Third Draft at 14-15 (recommending in Tier 5 – tier dealing with post-construction studies and research – that the developer “communicate with the Service about ways to evaluate cumulative impacts on species of concern, particularly species of habitat fragmentation concern”). In short, FWS has so far failed to take any concrete and effective measures to address the cumulative impacts of wind energy development. This is especially troubling since, as illustrated *supra*, *see* Map 2.1, there are hundreds of wind energy projects that have likely been constructed (and more in the pipeline) and many of these projects are built along common migratory corridors and have serious direct and indirect impacts on birds.

iv. The Permit mechanism recommended in the Proposed Regulations provides an opportunity for concerned citizens to ensure compliance with the MBTA.

Citizen suits are useful tools that empower citizens, including individuals and non-profit groups, to enforce federal law and supplement federal enforcement of the law. Unlike the ESA, however, the MBTA does not contain a citizen suit provision that allows “any person” to bring a civil suit to enjoin violation of the statute. 16 U.S.C. § 1540(g)(1)(A). The only means by which a private lawsuit can be brought to enforce the MBTA is via the APA and only then in the event that there is a federal agency action involved in project planning or pursuit, *i.e.*, lawsuits under the APA cannot be brought directly against a private party or state/municipal agencies and may only be brought against federal agencies when they take a final action that is connected to the alleged violation (for example where a wind energy project is located on public lands, or where it requires a permit from the Corps or another federal agency). Consequently, with regard to incidental take by wind energy projects, at present, the primary means of enforcing the MBTA must be through FWS enforcement actions – an avenue for enforcement that is essentially meaningless and is certainly not an effective check unless FWS opts to enforce the Act for at least flagrant violations of the Act, which has never happened in the context of wind power projects. *See supra* Section D.3.

The permit mechanism envisaged in the Proposed Regulations will effectively address this overriding problem of non-enforcement of the MBTA because the process is specifically designed to delineate the conditions under which the Service may authorize the take of migratory birds in connection with wind power projects. In addition, issuance of a federal incidental take permit under the MBTA will constitute a final federal agency action thereby triggering the availability of APA review. Consequently, the grant (or denial) of a permit can be set aside by a federal court if it is found to be “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” 5 U.S.C. § 706(2).

v. The Permit mechanism recommended in the Proposed Regulations will not unnecessarily constrain the agency’s staff and resources.

For many years now, FWS has been grappling with drafting and implementing voluntary Guidelines for wind power projects, thereby expending a large amount of time, money and other resources of the agency on a cause that, unfortunately, has proven to be of little value in attaining its stated objective, *i.e.*, to effectively avoid and minimize wildlife impacts of wind energy projects. In 2011 alone, FWS has issued three iterations of voluntary Guidelines (in a process that substantially weakened the initial agency recommendations), and as of the date of this writing is yet to finalize the Guidelines. In the meantime, wind power projects continue to proliferate, and adverse impacts on migratory birds and other wildlife continue to become ever more severe in the absence of better mechanisms for addressing and ameliorating such impacts.

Further, for wind energy developers that do consult the agency, the Guidelines envisage a “tiered approach” whereby the agency is expected to be involved in all phases of the project, albeit on an informal “voluntary” basis. While the Guidelines essentially treat the agency as a quasi-permitting authority requiring it to evaluate extensive information and provide advice to the developers, unlike a formal permitting system, FWS does not obtain appropriate permit fees which typically provide some amount of resources and revenue to the agency. *See, e.g.*, 50 C.F.R. §13.1(d)(4) (specifying applicable fee for take permits under federal wildlife laws such as the MBTA, BGEPA, and ESA). Thus, this is plainly not a cost-effective arrangement because under the Guidelines, the agency is in any event using extensive resources and expending the time of its experienced staff, to make non-binding recommendations that the project proponents are free to disregard (so long as they document their reasons for disagreeing).

In sharp contrast, under the proposed permitting system, FWS will inevitably obtain much more conservation bang for its buck – and will also be able to defray at least some of its expenses in processing applications through appropriate permit fees, as it has done with other permitting regimes.

vi. *The Permitting mechanism recommended under the Proposed Regulations complements the protections afforded by the ESA and BGEPA.*

While a wind energy developer is able, when the relevant criteria are satisfied, to obtain an incidental take permit for impacts on endangered or threatened species of birds under the ESA, there is presently no comparable mechanism for authorizing take by developers under the MBTA, which strictly prohibits take of all birds protected under the Act in the absence of a permit issued pursuant to the Act. This places project developers in the legally untenable position of obtaining a federal permit under one law (the ESA) for taking a particular species, but being in violation of another law for taking the very same species. See Memorandum from Pete Raynor, Assistant Solicitor, Fish and Wildlife Branch, to John Rogers, Deputy Director, FWS, Permitted Incidental Take of Migratory Birds Listing Under the Endangered Species Act (Feb. 5, 1996) at 2 (“ESA incidental take documents do not provide any relief from the prohibitions of the MBTA and BGEPA; indeed, some of those documents specifically state that they do not provide any such relief. Therefore, an applicant that wants complete protection from prosecution for the take of an ESA-listed migratory bird pursuant to an ESA incidental take document must also seek a permit under the MBTA, or [BGEPA]”), Attachment P. In addition, by issuing an ITP that authorizes a project that will result in the take of migratory birds – in the absence of any permitting mechanism under the MBTA for doing so – FWS places itself at risk of being sued under the APA. See supra Section D.3. The Proposed Regulations rectify these problems and legal confusion, at least insofar as wind power projects are concerned by authorizing FWS to issue take permits under the MBTA, as well as the ESA.

The Proposed Regulations will also resolve legal anomalies involving Golden Eagles and Bald Eagles, and result in enhanced protection of those species. Although incidental take permits can be issued for eagles under BGEPA, in the absence of a permitting scheme under the MBTA, even wind power projects receiving BGEPA permits will be in at least technical non-compliance with the MBTA. More importantly, while providing for the issuance of take permits, nothing in the BGEPA regulations categorically requires wind power projects to obtain such a permit, even where FWS biologists believe that eagle take is likely. Worse, the current version of the Guidelines provide that if project developers themselves do “not anticipat[e]” taking eagles, and “adhere” to the Guidelines by documenting their disagreement with the Service concerning the likelihood of take, this alone “would give rise to assurances regarding enforcement discretion if an unexpected taking occurs.” Wind Guidelines Third Draft. Accordingly, with regard to wind power projects, the Guidelines undercut any potential safeguards afforded by the BGEPA regulations, by not only providing that project developers may override the concerns of FWS biologists, but that they may even obtain “assurances regarding enforcement discretion” if they do so and nonetheless kill or otherwise take a Bald or Golden Eagle. Id.

The Proposed Regulations would both resolve the legal anomaly concerning compliance with the MBTA and BGEPA, and also far better protect eagles than at present. The Proposed Regulations would categorically provide that all wind power projects must, prior to construction, obtain an

MBTA permit, thus necessarily triggering a FWS (and public) review of all potential migratory bird impacts, including to eagles in the vicinity or migrating through the project site.

vii. *The Permitting Mechanism recommended under the Proposed regulations will afford more legal and regulatory certainty to the wind power industry than can be afforded under the current, confusing regulatory regime.*

According to the wind power industry, regulatory uncertainty and potential criminal liability under the MBTA has been a barrier to the growth of the industry and has proven to be especially troubling in terms of securing investor confidence. See, e.g., Bryan McBournie, Q&A with Peter Duprey: Leading in an uncertain energy industry (interview with CEO of Broadwind Energy, a provider of products and services primarily for the wind-energy industry, who stated, “[w]e undoubtedly need more regulatory certainty to help tame the volatility of the wind industry in the U.S., as the industry will remain challenged without it.” (emphasis added)).¹⁵² The wind industry desires regulatory and legal certainty particularly with regard to the application of federal wildlife laws to wind energy projects.

In contrast to the voluntary Guidelines, the establishment of a permitting scheme under the Proposed Regulations would provide far greater regulatory and legal certainty to wind energy developers and their investors, and will also establish a level playing field for all wind energy developers. By failing to impose clear regulatory obligations on wind energy projects to anticipate and avoid migratory bird impacts before they occur, and by largely allowing the industry itself to make siting decisions, FWS has not only effectively penalized those companies that do attempt to comply with the agency’s guidance – since they are essentially placed at a competitive disadvantage with those companies that refuse to do so – but has also tacitly approved widespread disregard for wildlife statutes the Service is entrusted to enforce. Indeed, since the Service cannot lawfully extend non-enforcement assurances for compliance with voluntary Guidelines – particularly Guidelines that allow wind power projects to “comply” merely by recording their reasons for disagreeing with the Service’s concerns – under the current regime, wind power projects will necessarily be facing an ongoing risk of prosecution when they, inevitably, take migratory birds in violation of the MBTA. In addition, there is nothing to prevent a new Administration from adopting, if it so chooses, a tougher stance when it comes to enforcing the MBTA against wind power projects that are in fact in violation of the law. And, where there is a federal nexus to a project, compliance with anemic Guidelines surely will not insulate a project from APA review and a potential ruling by a federal court that an agency’s approval of a project should be set aside because it will lead to migratory bird takes in violation of the MBTA.

In short, with a valid permit in hand, wind power developers would not face these risks, but rather would be provided assurance against prosecution so long as they comply with the terms and conditions of the permit. Thus, the Proposed Regulations will enable the wind industry to have far

¹⁵² Available at <http://smartblogs.com/leadership/tag/renewable-energy/> (last visited Dec. 11, 2011).

greater predictability and regulatory certainty, while also far better establishing itself as a genuinely green and environmentally protective industry.

E.5. The Proposed regulations are compatible with the international migratory bird treaties.

As explained *supra*, Section D.1, the MBTA is the domestic implementing legislation for various international treaties designed to safeguard migratory birds and their habitats. Accordingly, the present system of non-regulation of wind power projects, and reliance on voluntary Guidelines and industry self-certification of compliance with them, flouts not only the statute, but also the underlying conventions. On the other hand, regulation of incidental take by wind energy projects, as proposed in this Petition, is entirely compatible with the terms of the migratory bird conventions. Indeed, the large-scale ongoing taking of a wide variety of bird species protected under the migratory bird conventions, coupled with lack of oversight, regulation, and enforcement of the law by FWS, is a clear contravention of the conventions.¹⁵³ Further, FWS has previously determined, albeit in the context of military incidental take, that regulations permitting incidental take are compatible with all four migratory bird conventions. See Military Take Final Rule at 8946.

i. *Convention between the United States and Canada*

The United States entered into a convention with Great Britain (for Canada) in 1916 for the protection of migratory birds in the United States and Canada. See 39 Stat. 1702 (1916). This convention was amended in 1995 by a protocol which replaced most of the provisions of the original convention. See Protocol Amending the 1916 Convention for the Protection of Migratory Birds, S. Treaty Doc. No. 104-28, 1995 WL 877199 (“1995 Protocol”) (hereinafter jointly referred to along with the convention as “Canada Treaty”).

The 1995 Protocol recognized the commitment of both parties towards “long-term conservation of shared species of migratory birds” through a comprehensive international framework that involves, among other things, regulation of take. See Preamble, 1995 Protocol. The Treaty requires the parties to “ensure the long-term conservation of migratory birds” in accordance with certain “conservation principles” such as managing migratory birds internationally, ensuring a variety of sustainable uses, sustaining healthy migratory bird populations for harvesting needs, providing for and protecting habitat necessary for the conservation of migratory birds, and restoring depleted populations of migratory birds. Id. Art. II. The Treaty recognizes that the conservation principles may be achieved through means such as monitoring and regulation. Id. Further, the

¹⁵³ Moreover, the obligation of nations, to ensure that activities within their jurisdiction or control do not harm the environment beyond their territory, is also firmly entrenched in customary international law. See, e.g., Co-operation in the Field of Environment Concerning Natural Resources Shared by Two or More States, U.N.G.A.Res. 3129 (XXVIII) (1973).

Treaty expressly provides that “subject to laws, decrees or regulations to be specified by the proper authorities,” the taking of migratory birds may be allowed at any time for specific purposes consistent with the conservation principles. *Id.* Art. II(3). In addition, the Treaty requires parties to seek means to prevent damage to migratory birds. *Id.* Art. IV(a).

In sum, the Canada Treaty contemplates the permitting of take through regulation “for specific purposes” consistent with the conservation principles of the Treaty and subject to appropriate regulations. Regulations monitoring and regulating incidental take by wind energy projects will likely be compatible with the terms of the Canada Treaty. Such regulations facilitate the parties’ long-term commitment to conserve migratory birds through appropriate regulations and are consistent with the conservation principles adopted in the Treaty.

ii. *Convention between the United States and Mexico*

In 1937, the United States entered into a convention with Mexico for the protection of migratory birds and game mammals. *See* Convention between the United States of America and Mexico for the Protection of Migratory Birds and Game Mammals, 50 Stat. 1311, T.S. No. 912 (1937) (“Mexico Treaty”). The Treaty recognized that “it is right and proper to protect the said migratory birds . . . in order that the species may not be exterminated,” and that there is a need “to employ adequate measures which will permit a rational utilization of migratory birds for sport as well as for food, commerce and industry.” *Id.* Preamble (emphasis added).

Specifically, the Mexico Treaty allows the parties to use “adequate methods which will permit . . . the utilization of [migratory birds] rationally for purposes of sport, food, commerce and industry.” *Id.* Art. I (emphases added). Towards this end, the Treaty requires the parties “to establish laws, regulations and provisions” to satisfy the need to permit rational utilization of migratory birds for various uses, including, commerce and industry. Such regulations may adopt various appropriate measures such as establishment of “refuge zones” in which taking will be prohibited, and prohibition of the killing of migratory insectivorous birds. *Id.* Art. II.

In sum, the Mexico Treaty allows parties to adopt regulations permitting take of migratory birds for industry or commerce on a rational utilization basis. Thus, regulations permitting incidental take by wind energy projects will likely be compatible with the terms of the Mexico Treaty so long as the taking is based on a rational utilization of the resources and measures are adopted to ensure against the extermination of any species.

iii. *Convention between the United States and Japan*

The United States entered into a treaty with Japan in 1972 for the protection of migratory birds and birds in danger of extinction. *See* Convention Between the Government of the United States of America and the Government of Japan for the Protection of Migratory Birds and Birds in Danger of Extinction, and Their Environment, T.I.A.S. No. 7990, 25 U.S.T. 3329, 1974 WL 166630

(U.S. Treaty) (1974) (“Japan Treaty”). The Japan Treaty recognizes that the “great value” of migratory birds can be “increased with proper management,” and that there is a need to take measures for the “management, protection, and prevention of the extinction of certain birds.” *Id.* Preamble (emphasis added).

The Japan Treaty prohibits the taking of migratory birds. *Id.* Art. III. However, “[e]xceptions to the prohibition of taking may be permitted in accordance with the laws and regulations [of the parties]....[for] specific purposes not inconsistent with the objectives of this Convention.” *Id.* Further, the Treaty recognizes that special protection is required for preservation of birds that are in danger of extinction. *Id.* Art. IV(1). In addition, the Treaty provides that the parties shall endeavor to establish sanctuaries and other facilities for the protection and management of migratory birds. *Id.* Art. III(3). The parties are also required to “take measures necessary to carry out the purposes” of the Treaty. *Id.* Art. VII.

In sum, the Japan Treaty allows parties to permit taking through regulations in accordance with applicable law so long as it is consistent with the objectives of the conventions. Thus, regulations governing incidental take by wind energy projects will likely be compatible with the terms of the Japan Treaty if it facilitates the objectives of the Treaty and, as stated in its preamble, protects and prevents the extinction of migratory birds.

iv. Convention between the United States and Russia

The United States entered into a treaty with Russia in 1978 to conserve migratory birds and their environment. See Convention between the United States of America and the Union of Soviet Socialist Republics Concerning the Conservation of Migratory Birds and Their Environment, T.I.A.S. No. 9073, 29 U.S.T. 4647, 1978 WL 182150 (U.S. Treaty) (1978) (“Russia Treaty”). The Russia Treaty recognizes that - the value of migratory birds can be “increased under proper management,” that there is a need to protect migratory bird species along with their flyways, and breeding, wintering, feeding and moulting areas; and that certain endangered bird species are in need of particular protective measures. *Id.* Preamble (emphasis added).

The Treaty requires the parties to prohibit the taking of migratory birds. *Id.* Art. II(1). “Exceptions to these prohibitions may be made on the basis of laws, decrees or regulations” for “specific purposes” not inconsistent with the principles of the Treaty. *Id.* (emphasis added). To the extent possible, the parties are required to prevent “detrimental alteration” of the environment of migratory birds. *Id.* Art. IV(1). Accordingly, the parties are required to identify areas of breeding, wintering, feeding and moulting that are of special conservation importance to migratory birds. *Id.* Art. IV(2)(c). In addition, the Treaty enables the parties to enter into special agreements for the conservation of particular species of migratory birds, *id.* Art. II(3), and to undertake necessary measures to establish preserves, refuges, and protected areas for the conservation of migratory birds and their environment. *Id.* Art. VII. The Treaty specifically provides that parties may adopt stricter

domestic measures that are deemed to be necessary to conserve migratory birds and their environment. *Id.* Art. IX.

Similar to the other conventions, the Russia Treaty allows parties to devise exceptions to the take prohibition so long as it is consistent with the principles of the Treaty. Regulations governing incidental take by wind energy projects are necessary to ensure that important bird areas such as flyways are protected and that wind turbines are not constructed in such areas of special conservation importance. Thus, regulations for take by wind energy projects are not only compatible with the terms of the Russia Treaty, but will likely also facilitate the Treaty's mandate to prevent "detrimental alteration" of migratory bird habitat.

E6. Precedence

Recent regulatory actions and discussions provide precedence for an MBTA permit that would focus on the energy sector, including solar and wind. For example, the FWS is considering the development of a MBTA permitting process to address the problem of seabird by-catch from the fishing industry (http://www.abcbirds.org/PDFs/FRNotice_HILonglineMBTAPermit_Aug2012.pdf; http://www.abcbirds.org/PDFs/CommentLetter_MBTA-HI.pdf). While ABC supported the concept of incidental take through a permitting process, it also expressed concern that certain elements were missing, including a FWS insistence that "any issued permit include provisions requiring reduction of take to truly unavoidable levels." It further suggested that FWS should "strengthen its analysis of what constitutes unavoidable take, so that the criteria are more explicit." Thus, while ABC is supportive of an MBTA incidental take permit for the energy sector, it also believes strongly that the term "unavoidable" needs to be carefully defined and that criteria and numbers need to be explicit, and not left open-ended. Otherwise the permitting process will have no teeth and will be of little use as a regulatory mechanism.

In 2014, ABC, along with more than 70 other conservation organizations called upon the Department of the Interior and FWS to conduct a comprehensive national programmatic wind EIS that would identify key areas where wind energy development should not occur based on the risk to public trust resources, including our nation's native birds and bats. There is a precedence for such an undertaking as the Bureau of Land Management (BLM) recently conducted an EIS to assist with the siting of solar energy facilities in the west (<http://blmsolar.anl.gov/>). Hopefully, this will help to keep solar energy development away from sensitive habitats for federally-protected species. The collaborative proposal was recently rejected by DOI, who stated that "We currently do not have the resources to undertake the nationwide process you have suggested." While we understand that the DOI and FWS have undergone severe budget cuts in the past half-decade, we also believe that these agencies are obligated to protect ecologically-important birds and bats from being harmed by the energy industry. Given the many cumulative anthropogenic impacts to our nation's birds and bats, we believe that such an effort is necessary. A failure to do so could result in unprecedented losses, which will be difficult to recover from after the fact. The time to do this is now before the coming rapid growth of the wind industry, which could result in a tenfold increase in the number of turbines on the landscape. Once they are up, they will not be coming down. No wind energy facility, once operational, has ever been shut down or decommissioned, even if the loss of federally-protected birds and bats has been high. The poorly-sited Altamont, CA wind facility, for example, is still

killing large numbers of birds post-mitigation, and has never been prosecuted for violations of BGEPA despite killing over 2,000 Golden Eagles.

F. CONCLUSION

ABC requests that FWS issue, as expeditiously as possible, new regulations based on those proposed in this Petition, see Appendix: Proposed Regulations, pursuant to Sections 704(a) and 712(2) of the MBTA, for establishing a framework for regulating and authorizing conditional take by wind energy projects.

APPENDIX: PROPOSED REGULATIONS

PERMITS FOR WIND POWER PROJECTS PURSUANT TO THE MIGRATORY BIRD TREATY ACT

Subpart A – Introduction

§ 1.1 Purpose of Regulations

These regulations are designed to facilitate the development of wind power projects while, to the maximum extent practicable, avoiding, minimizing, and mitigating their adverse impacts on birds protected by the Migratory Bird Treaty Act (“MBTA”). The regulations contained in this part supplement the Department of the Interior’s general permit regulations contained in Part 13 of this subchapter, as well as the Department’s general regulations implementing the MBTA contained in Part 21 of this subchapter. Compliance with the regulations contained in this part does not relieve wind power projects from also complying, where applicable, with other regulations that impose requirements or prohibitions concerning particular migratory birds, such as regulations implementing the Endangered Species Act (“ESA”) and the Bald and Golden Eagle Protection Act (“BGEPA”).

§ 1.2 Definitions

In addition to definitions contained in Part 10 of this chapter, and unless the context requires otherwise, as used in this part:

FWS or Service is the United States Fish and Wildlife Service.

Migratory bird is any species that is covered by the MBTA and treaties implementing the MBTA.

Person means any individual, corporation, partnership, academic institution or any legal entity formed in any manner for the purpose of developing, constructing, and/or operating a wind power project.

Practicable alternative is an alternative site for a proposed wind power project that would accomplish essentially the same objectives as the proposed project without significantly increased costs or other practical or financial constraints.

Wind power project means any land-based or offshore project that uses, or is designed to use, the wind to generate electricity within the jurisdiction of the United States and includes but is not limited to, the project’s wind turbines and associated infrastructure such as transmission lines, substations, meteorological towers, and access roads.

§ 1.3 General Requirements and Exceptions

§ 1.3.1 General Permit Requirements

No person shall construct or operate a wind power project except as may be permitted under the terms of a valid permit issued pursuant to the provisions of this part and Part 13, as well as any other applicable regulations issued pursuant to the ESA, BGEPA, or other pertinent law. A wind power project that is in receipt of a valid permit issued pursuant to this part and that is in compliance with that permit shall not be subject to criminal or civil penalties for violation of the take prohibition of the MBTA.

§ 1.3.2 General Exception to Permit Requirement

Any wind power project that is operational – *i.e.*, generating any electricity through turbine operation – on the date that these regulations become effective may continue to operate without a permit issued pursuant to this part so long as a complete application for such a permit that complies with § 1.5, as set forth below, is submitted to FWS within 120 days of the date that these regulations become effective. For the purpose of these regulations, any substantial upgrade, modification, or expansion of the project that has the potential to impact migratory birds – *e.g.*, an expansion in the number of turbines or the rotor swept area – is treated as a new project.

§ 1.4 Specific Permit Provisions Applicable to Non-Operational Wind Power Projects

§ 1.4.1. General Requirement

The requirements of this part must be satisfied in order for any non-operational wind power project – *i.e.*, a project that is not generating electricity on the date that these regulations become effective – to obtain a permit pursuant to this part.

§ 1.4.2. Contents of Permit Application

Each application for a permit pursuant to this section must contain the following, along with any other information that FWS may prescribe in guidance supplementing these regulations:

- (a) a detailed description of the proposed site for the project, including the proximity of the site to known ridges and other migratory routes, nesting locations, wetlands and other areas where migratory birds are present, and other resources of particular importance to migratory birds;
- (b) detailed descriptions and results of all preconstruction surveys that are of sufficient duration, nature, and scope to reasonably evaluate the extent to which (1) a particular proposed site is used by specific species of migratory birds; (2) the degree of risk that the site poses to the various species of birds that use the site; and (3) local siting of turbines or other design modifications may be employed to avoid or mitigate the risk to affected bird species. In determining the duration, nature, and scope of surveys that will be deemed adequate for a particular site, and who

is qualified to conduct such a survey, the project developer shall comply with any written guidance issued by FWS supplementing these regulations, and shall consult as appropriate with the Migratory Bird Permit Office of the Regional FWS Office in which the proposed project is located;

(c) a detailed description of the proposed project, including (1) the number, size and type of turbines contemplated; (2) the anticipated life of the project; (3) the proposed layout of the entire project, including turbines, transmission lines, power stations, roads, and other physical features; (4) the proposed schedule for project construction; (5) the applicant's proposed pre-construction and post-construction monitoring plans; (6) all measures that the applicant is proposing to undertake to avoid, minimize, and mitigate the effects of the anticipated take of migratory birds to the maximum extent practicable; and

(d) any other information that FWS may request to evaluate and study the wildlife impacts of the project.

§ 1.4.3. Public Comment

The public will be afforded an opportunity to comment on each application for a permit. The public comment period will be for a period of no less than thirty days. If, after reviewing the application, FWS believes that the project poses a low risk for migratory birds, and will not otherwise have any significant adverse environmental impacts, the Service's notice soliciting public comment will advise the public that the Service intends, subject to the consideration of public comments, to expedite its review of, and determination on, the application.

Prior to the initiation of the public comment period, FWS will make available to the public all survey data and other information submitted by the permit applicant in support of the application. If FWS complies with the National Environmental Policy Act ("NEPA") by preparing an Environmental Assessment ("EA") in connection with the permit application, the Service will make the EA available to the public prior to the initiation of the comment period on the permit application. If the Service complies with NEPA by preparing an Environmental Impact Statement ("EIS") in connection with the project, the Service will coordinate public comment on the permit application with public comment on the EIS.

§ 1.4.4. Evaluation of Permit Applications

In determining whether to issue a permit, the Service will evaluate all factors relevant to whether a permit may be issued consistent with the purposes of the MBTA, including but not limited to:

(a) the overall impact of the project on migratory birds and important migratory bird habitat, and the extent to which the project is compatible with the maintenance of populations of migratory birds likely to be affected by the project, taking into account the cumulative present and projected impacts of other activities on the affected bird species, including from other wind projects;

(b) the proximity of the project to important bird habitats, including migratory routes and nesting, roosting, and/or feeding areas;

- (c) the proposal for pre-construction and post-construction monitoring;
- (d) whether the applicant has proposed avoidance, minimization, mitigation, and monitoring measures to reduce the take and the adverse effects of the take to the maximum extent practicable;
- (e) the extent to which the project will result in adverse impacts to any species that FWS has determined qualify as a Bird of Conservation Concern and any species that is a candidate for listing under the ESA; and
- (f) whether there are practicable alternative sites for the project that would have a less deleterious impact on migratory bird populations and habitats.

§ 1.4.5 Required Determinations

Before issuing a permit, FWS must find that:

- (a) the effects of the anticipated take and required mitigation, together with cumulative effects of other activities and additional factors affecting the bird populations and habitats impacted by the project, are compatible with the maintenance and conservation of bird populations, particularly populations of birds designated by FWS as Birds of Conservation Concern and bird species that are candidates for listing under the ESA;
- (b) the permit applicant will conduct appropriate, adequate pre-construction and post-construction monitoring;
- (c) the permit applicant will to the maximum extent practicable avoid, minimize, and mitigate adverse effects on migratory birds and important migratory bird habitats;
- (c) the permit applicant will conduct such monitoring and adaptive management as the Service determines is necessary to fully and effectively evaluate the impact of the project, including the efficacy of minimization and mitigation measures, on migratory birds and migratory bird habitat, and to evaluate whether changes need to be made in the project's operation in order to better minimize and mitigate the impact on migratory birds; and
- (d) there are no practicable alternatives to the project as proposed that would entail less adverse impact on migratory birds.

§ 1.4.6 Permit Conditions

FWS will attach to any issued permit such terms and conditions, including if appropriate specified take limits, and requirements for additional mitigation, adaptive management and monitoring, as are deemed necessary to avoid, minimize, and mitigate to the maximum extent practicable the adverse effects of the project on migratory birds. The permit holder must comply with all such terms and conditions, as well as with the avoidance, minimization, and mitigation measures set forth in the permit application and approved by the Service.

§ 1.4.7 Permit Duration

The duration of each permit issued under this section will be designated on its face, and will

be based on the duration of the proposed project, the level of anticipated impacts, the difficulty of reliably predicting the impacts, and the likelihood that adaptive management will be able to address impacts beyond those anticipated. In no event, however, will the permit length exceed five years unless it is extended in response to a renewal request that must be made available for public comment in accordance with this subpart prior to action by FWS.

§ 1.4.8 Monitoring and Incident Reports

The permit terms and conditions shall specify the frequency with which monitoring reports must be prepared and submitted to FWS but in no event will such reports be required less than annually. In addition, the permit terms and conditions will require the permit holder to promptly submit incident reports containing detailed information about any incidents involving major wildlife mortality. All monitoring and incident reports will promptly be made available to the public.

§ 1.4.9 Revocation, Suspension and Modification

The Service shall revoke and/or suspend any permit when it determines that a permitted project is failing to comply with the requirements in this subpart, or, for any reason, is having a significant adverse effect on a migratory bird population and that is not promptly addressed by modification of the permit. The Service may modify the terms and conditions of the permit if necessary to avoid, minimize and mitigate the impacts of the project, and subject to public comment. Any member of the public may petition the Service to revoke, suspend, or modify a permit on these grounds, and the Service shall respond to any such petition in a timely manner and no later than 90 days after receipt of the petition. For purposes of this provision, a significant adverse effect is one that could, within a reasonably foreseeable period of time, diminish the capacity of a population of migratory birds to sustain itself at a biologically viable level. A population is 'biologically viable' when its ability to maintain its genetic diversity, to reproduce, and to function effectively in its native ecosystem is not significantly harmed.

§ 1.5 Permit Provisions Applicable to Operational Wind Power Projects

All of the foregoing provisions shall also be applicable to operational projects, except that the applicant need not address the practicability of alternative sites and the Service will not base any decisions on that factor. In imposing any permit terms or conditions the Service will take into account the extent to which ongoing project operations may reasonably be modified without causing significant disruptions in the operation of the project.

§ 1.6 Review Period

FWS will review and make a decision on whether to grant a permit within a reasonable time in light of such factors as the complexity and size of the project and the degree of risk it poses to migratory birds. For a project for which the Service decides to prepare an EA rather than an EIS, the

Service will ordinarily make a final decision on a permit application no later than 12 months after a complete application is received by the Service.

LIST OF ATTACHMENTS

- A. Daniel J. Lebbin et al., ABC, The North American Bird Conservancy Guide to Bird Conservation (2010) (excerpts)
- B. Tamara Enz & Kimberly Bay, Post-Construction Avian and Bat Fatality Monitoring Study, Tuolumne Wind Project, Klickitat County, Washington, Final Report, April 20, 2009 to April 7, 2010 (July 6, 2010) (excerpts)
- C. J. K. Fiedler et al., Results of Bat and Bird Mortality Monitoring at the Expanded Buffalo Mountain Windfarm, 2005 (June 28, 2007) (excerpt)
- D. David P. Young, Jr. & Zapata Courage, Avian/Bat Monitoring September 25, 2011 Memo (Sept. 30, 2011)
- E. BioResource Consultants Inc., 2009/2010 Annual Report Bird and Bat Mortality Monitoring, Pine Tree Wind Farm, Kern County, California (Oct. 14, 2010)
- F. Albert Manville, FWS, Presentation on Shoreline, Near-shore, and Offshore Wind Energy Development in Texas State Waters: Tools to Help Avoid or Minimize “Take” of Waterbirds and Other Avifauna (2011)
- G. Albert Manville, FWS, Presentation on Framing the Issues Dealing with Migratory Birds, Commercial Land-based Wind Energy Development, USFWS, and the MBTA (Oct. 21, 2011)
- H. Letter from Laury Zicari, FWS to Jennifer McCarthy, Corps (May 11, 2011)
- I. Albert Manville, FWS, Towers, Turbines, Power Lines, and Buildings – Steps Being Taken By the U.S. Fish and Wildlife Service to Avoid or Minimize Take of Migratory Birds at These Structures (July 17 2009)
- J. Memo from Stantec Consulting (consultants for developer) to Laura Hill, FWS, Bird Mortality at Laurel Mountain Substation Memo (Oct. 25, 2011)
- K. Letter from FWS to Amber Zuhlke, Wind Capital Group, Big Lake Wind Facility in Palm Beach, Florida (July 1, 2011)
- L. Letter from Allan M. Strand, FWS to Jayson Hudson, Corps (Aug. 15, 2011)
- M. Nathaniel Gronewold, Texas is Bullish on Offshore Wind (E & E News, Nov. 21, 2011)

- N. Email from Tylan Dean, FWS to Keith Hastie, FWS (Mar. 30, 2011)
- O. Anacapa Island Restoration Project, Channel Islands National Park, Phase I MBTA Summary Report (2002)
- P. Memorandum from Pete Raynor, Assistant Solicitor, Fish and Wildlife Branch, to John Rogers, Deputy Director, FWS, Permitted Incidental Take of Migratory Birds Listing Under the Endangered Species Act (Feb. 5, 1996)
- Q. Laura J. Beveridge, The Migratory Bird Treaty Act and Wind Development (N. Am. Wind Power, Sept. 2005)
- R. Memo from Alan Forster, NedPower Mt. Storm LLC to Laura Hill, FWS, NedPower September 25, 2011 Monitoring Event (Oct. 10, 2011)
- S. Letter from Deborah Carter, FWS to Curry & Kerlinger, LLC (environmental consultants of developer) (Sept. 30, 2009)
- T. Letter from Laury Zicari, FWS to Dana Vallieu, TRC (May 11, 2011)
- U. Letter from Gary Miller, FWS to Sue Oliver, Or. Dep't of Energy (Feb. 14, 2011)
- V. Letter from Michael D. George, FWS to Jay Prothro, BP Wind Energy, Southwest Power Pool Docket #ERII-3833 (Oct. 11, 2011)
- W. Letter from Robert D. Williams, FWS to Tim Carlson, Nevada Wind, Proposed Virginia Peak Wind Facility and Existing Golden Eagle Resources in the Pah Rah Range, Washoe County, Nevada (Aug. 13, 2010)
- X. Letter from Scott Hicks, FWS to Xio Cordoba, Heritage Sustainable Energy (Nov. 4, 2011)
- Y. Letter from FWS to Chris Taylor, Element Power (Jan. 31, 2011)
- Z. Letter from Laury Zicari, FWS to Nicholas D. Livesay, Pierce Atwood LLP (attorneys of the developer) (Mar. 31, 2011)
- AA. Shiloh IV Wind Energy Draft Environmental Impact Report (Aug. 23, 2011) (excerpt)
- BB. K. Shawn Smallwood et al., Novel Scavenger Removal Trials Increase Wind Turbine–Caused Avian Fatality Estimates, 74(5) J. Wildlife Mgmt. 1089 (2010)

- CC. Memo from Willie R. Taylor, FWS to FCC, FCC Draft Programmatic Environmental Assessment (DPEA), Antenna Structure Registration (ASR) Program
- DD. Letter from Mary Knapp, FWS concerning the operation of a single 25 kW wind turbine at Kelleys Island, Ohio (June 8 2011)
- EE. Letter from Thomas R. Chapman, FWS to Colonel Philip Feir, Corps (Mar. 12, 2009)
- FF. Letter from David A. Stilwell, FWS to Michael Speerschneider, EverPower Wind Holdings (July 11, 2011)

Organization: Audubon Missouri Submitter Name: Anita Randolph

The following comments are provided by Audubon Missouri in response to the May 2015 notice from the U.S. Fish and Wildlife Service (USFWS) to prepare a programmatic environmental impact statement pursuant to the National Environmental Policy Act to evaluate the potential environmental impacts of a proposal to authorize incidental take of migratory birds under the Migratory Bird Treaty Act.

Audubon Missouri, with headquarters located in West Alton, MO, is the Missouri state office of the National Audubon Society.

Every year, tens of millions of birds unnecessarily fall victim to urbanization; energy development, generation or distribution projects; communications towers and other activities. We encourage and support strong leadership by the USFWS to advance bird conservation by strengthening and modernizing the Migratory Bird Treaty Act by ensuring protections are extended to address these widespread threats to birds.

Audubon Missouri believes the USFWS should consider a programmatic flyway approach with conservation plans for each flyway that address species in each flyway. We believe this could work better than a project-by-project process. The overriding purpose and need should be to conserve migratory birds rather than to respond to an application for a permit. All migratory birds covered under MBTA are not equal. Population-level impacts to non-listed sensitive species such as cerulean warblers are not the same as population-level impacts to ravens, so a free pass for all migratory birds is not desirable.

The ESA permit program has been successful and should serve as a good model (as opposed to the Bald and Golden Eagle Protection Act permitting system, which currently allows for 30-year take permits, which we strongly oppose). The MBTA should be more like ESA with a conservation framework.

Currently, the USFWS requires some solar and wind projects to prepare a BBCS (Bird Bat Conservation Strategy) that outlines what the applicant will do to avoid, minimize and specify mitigation and adaptive management measures based on monitoring of mortality of migratory birds on a project site. We urge that the USFWS consider making a BBCS a requirement. Also, wind and solar projects should be included in the incidental take evaluation to be performed by the USFWS.

A landscape-level analysis should be included, and analysis should show how permits will increase or maintain populations of migratory birds and not decrease populations of migratory birds.

Compensatory mitigation should not be one-size-fits all. Compensatory mitigation should be based on population-level impacts on sensitive species of migratory birds and should be directed to those species. For example, the simple restoration of riparian habitat near a project is not sufficient.

Monitoring should be required to determine whether mitigation efforts are being effective, with real monitoring data provided to the USFWS for ongoing assessment of programmatic effectiveness.

Thank you for the opportunity to comment.

Anita Randolph

President
Audubon Missouri



Colorado River Basin SALINITY CONTROL FORUM

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MGMT. Programs

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July 27, 2015

Public Comments Processing
Attention: FWS-HQ-MB-2014-0067
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Re: Incidental Take of Migratory Birds - Comments on Notice of Intent to Prepare a Programmatic Environmental Impact Statement

This letter is to convey the Colorado River Basin Salinity Control Forum's (Forum) support of the U.S. Fish and Wildlife Service's (FWS) Notice of Intent (NOI) to prepare a programmatic environmental impact statement (PEIS) pursuant to the National Environmental Policy Act, 42 §§ U.S.C. 4321-4347 (NEPA), to evaluate the potential environmental impacts of a proposal to authorize the incidental take of migratory birds under the Migratory Bird Treaty Act, 16 U.S.C. §§ 703-712 (MBTA). (See 80 Fed. Reg. 30032, May 26, 2015) (NOI).

Created in 1973 by the seven Colorado River Basin States of Arizona, California, Colorado, Nevada, New Mexico, Utah and Wyoming, the Forum seeks to reduce the salt load to the Colorado River through implementation of the Colorado River Basin Salinity Control Program (Program), created by the 1974 Colorado River Basin Salinity Control Act, by coordination with state and federal agencies and local water users.

Though Program activities generally do not raise concerns with the incidental take of migratory birds, the Bureau of Reclamation is currently conducting an EIS for a brine disposal replacement alternative at its Paradox Valley Unit which has raised questions regarding possible impacts to migratory birds. Uncertainty relative to the Migratory Bird Treaty Act and its impact to possible incidental take of migratory birds has impeded the EIS efforts, and the increased definitions and certainty which could come from the FWS's proposed PEIS and possible future rule would be most helpful and appreciated.

EXECUTIVE DIRECTOR Don A. Barnett

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Therefore, the Forum supports the FWS in its intent to enter into a PEIS process and requests that it be included in the effort. Should you have any questions regarding the concerns being raised in the Paradox EIS and Alternatives Study or the Forum's support of the FWS's PEIS, please contact me.

Sincerely,

A handwritten signature in black ink, appearing to read 'D. Barnett', with a horizontal line extending from the end of the signature.

Don A. Barnett, Executive Director

BIRD NEST SURVEY PROTOCOLS

LIMIT VEGETATION REMOVAL TO PROTECT NESTING BIRDS

As stated in the Presidio Trust Management Plan (PTMP) Record of Decision, Mitigation Monitoring and Enforcement Program, Mitigation Measure NR-9:

Any vegetation removal shall follow the park guidelines for protection of nesting birds. This includes guidelines on timing of vegetation removal.

Vegetation provides wildlife species with cover from predators, resting areas, and food. Removal of vegetation is one of the most direct levels of disturbance for wildlife, but it is also a frequent need at the Presidio. While the loss of vegetation can result in harm to wildlife during any time of year, the potential impacts from vegetation removal are of particular concern during the breeding and young-raising seasons for wildlife, when species are more vulnerable to disturbance. Removal of vegetation can a) directly destroy nests, eggs, chicks, or den sites; b) reduce cover adjacent to nests or breeding areas, exposing nests to predators and reducing food supply; and/or c) cause an overall level of disturbance, potentially resulting in an animal abandoning an existing nest or young. In addition to the potential harm to actively nesting birds, removal of habitat during nesting season precludes future nesting of birds during the nesting season. This incremental loss of habitat can cumulatively reduce available habitat and the reproductive success of species, especially if substantial amounts of vegetation are removed early in the nesting season.

The Migratory Bird Treaty Act (MBTA) prohibits the killing or “take” of most birds, nests, or eggs.¹ All federal agencies and all work on federal lands are required to adhere to the requirements of the MBTA. Protections of the MBTA do not apply to non-native, human-introduced bird species such as the rock pigeon (the familiar “pigeon” of cities and parks) (70 FR 12710-12716 [Mar. 15, 2005]). Trust policies outlined in the PTMP also promote the protection of native species (including nesting birds not protected under the MBTA, such as the California quail). Mitigation measures adopted through the PTMP Record of Decision state that removal of vegetation shall follow park guidelines for protection of nesting birds including restrictions on timing of vegetation removal.

MINIMIZE DISTURBANCE TO SENSITIVE WILDLIFE HABITAT DURING BIRD NESTING SEASON

The PTMP states that “activities that might disrupt sensitive wildlife habitat areas or corridors will be scheduled for times when disturbance can be minimized, such as after nesting seasons.”²

Sensitive wildlife areas include remnant native habitat, restored native habitat and those in active restoration, raptor nesting areas in historic forest, and wetlands identified in the PTMP and updated in the Wildlife Management and Monitoring Plan. In sensitive wildlife habitat areas, additional considerations may be appropriate for activities other than nest destruction. For example, if a bird is nesting outside of the area where vegetation is removed, and vegetation is being removed from the majority of its territory, which could cause lethal disturbance to the nest or ability to feed the young, the decision could be made to postpone or alter the project.

¹ Under the MBTA, “take” means to “pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect” (50 C.F.R. 10.12). It is also unlawful under the MBTA to possess or transport any migratory bird, nest, egg, or part thereof (16 U.S.C. § 703(a)).

² Presidio Trust, 2002a, page 17.

Beyond the actual vegetation removal, noise and disturbance in the vicinity of a nest can also cause abandonment or failure of a nest, and, if located in a sensitive wildlife area, should be considered as part of the nest survey, even where vegetation removal would not directly take a nest. The effect from noise and disturbance will likely vary depending on site-specific circumstances, including extent of vegetation shielding the area from disturbance activities and attenuating sound, topography, length of time needed for proposed project activity, distance to nest, species involved, and the phase of nesting/ brooding at a nest. In these cases, a judgment needs to be made whether the activity would still result in harm to the nest due to disturbance in a sensitive wildlife area. PTMP Mitigation Measure NR-23 limits construction noise levels to no more than 80 A-weighted decibels (dBA) at 100 feet.³ For general construction, if vegetation removal is required for the project a nest survey will be necessary.

Vegetation removal during nesting season should be limited to:

- incidental landscaping projects (such as removal of individual shrubs, bushes, tree, and minor landscape maintenance activities);
- vegetation removal required for public safety, including tree risk mitigation; building maintenance or preservation activities;
- small-scale invasive plant removal (weeding) as part of habitat restoration projects;
- projects required by outside regulatory agencies, where work cannot realistically be completed outside of nesting season; and
- Clearance of downed vegetation.

All other projects should be scheduled to occur outside of nesting season whenever feasible.

Although important, reliance on nest surveys has limitations; bird activity is viewed in a one-time “snapshot” and a variety of factors can greatly affect the likelihood of observing bird behaviors indicating the presence of nesting birds. Weather, time of day, length of time conducting a survey, site-specific conditions, species-specific stealthiness around nests, and the experience of the surveyor can all affect the feasibility and success of conducting nest surveys.

The size of a project area and density of vegetation in a project area also can constrain the effectiveness of a nest survey. As the area and density of vegetation grow, the ability to conduct a thorough and accurate nest survey diminishes. Even surveys in small areas can miss clues and evidence of nesting during a one-time survey. Surveys should not be viewed as a guarantee of avoiding impacts on nesting birds. Adequate time is needed to ensure a thorough survey; often birds will remain hidden, especially if on a nest, for long periods of time, venturing off the nest only briefly. Bird movement, a key observation for detecting nesting behavior, may be obscured by dense vegetation. All vegetation in a project area should be surveyed; removal activities typically affect a larger area than just specific vegetation being removed due to vegetation being trampled during site activities, removed vegetation falling on other vegetation, and ingress/egress routes for equipment (i.e. the sphere of influence). For example, if a tree or shrub is to be removed, any understory around the tree/shrub and any vegetation within the impact area should be assessed for potential nesting.

BIRD NESTING SEASON

To be most protective of nesting birds, all efforts should be made to conduct vegetation removal outside of nesting season, which is defined as:

- January 1 through July 31 for trees (raptors and hummingbirds) and shrubs (hummingbirds only).

³ Presidio Trust, 2002b, page 13.

- March 1 through July 31 for all other species.

Nesting season dates may not encompass all nesting activity. If nests/chicks are observed outside of the defined nesting season, the nests/chicks must be protected under the MBTA. The dates defined above are an effort to balance resource protection and park management. However, the MBTA does not limit protections to certain dates. Review of nesting season dates should occur every three to five years and should be modified if new information indicates a shift in the timing of nesting behavior. Potential sources of information could include Presidio-specific monitoring of bird nesting and scientific information of trends in breeding birds in the coastal Bay Area. Presidio staff may want to evaluate especially those species known to regularly nest later than July in other regions (e.g., American robin, American goldfinch). Changes to published nesting season dates will be based on the best available scientific information and will be approved by the Presidio Trust, Director of Cultural and Natural Resources.

For any vegetation removal during bird nesting season, a bird nest survey, consistent with the following protocols, will be completed prior to initiation of vegetation removal. Turf areas that are regularly mowed (e.g., ball fields and residential lawn areas) are exempt from this requirement provided grass height is kept low (eight inches or less) throughout the season.

The purpose of doing nest surveys is to protect the birds and their nests. All work will be done with that goal in mind. No work or disturbance to the site will begin in the area prior to completion of the nest survey and written verification of approval submitted to the project manager.

METHODOLOGY FOR NEST SURVEYS

The following measures will be applied for vegetation removal projects during the breeding season. Additional mitigation measures for projects located in sensitive wildlife habitat areas are noted in *italics*:

- Survey the area that comprises the vegetation within the project area's "sphere of influence."
- If project is approved to proceed in the midst of an active nest, a buffer will be designated around the nest. Buffers will be context depended and assessed by the surveyor and project manager. If uncertainty of appropriate methods exist consult with the Trust Wildlife Ecologist.
 - Examples of buffers include putting up a barrier between nest and activities to prevent physical contact *and/or reduce visual/auditory disturbance*. Or painting the sides of buildings that do not have a nest and resume painting after nesting occurs.
- The surveyor is required to document post-project (within 24 hours) nest status (i.e. abandonment or "no impact observed") *including relevant information such as nest distance from project disturbance*, type of equipment used, mitigation methods, etc. on the survey form (see below). Post-project active nest follow-ups provide an opportunity to reduce uncertainties of species tolerance to disturbance and will allow for more informed adaptive management in the future.

When nest surveys are conducted, a nest survey form is filled out, and the nest surveyor records start and stop time, surveyor(s), date, location (representing project area and appropriate buffer), and weather. The appropriate survey length will be determined on site by the qualified nest surveyor. Surveys are typically conducted via a combination of the observer walking through the survey area and looking for birds and nests; observing potential nesting behavior both while walking and from a fixed location; and observing the survey area from a distance to

determine what individuals are using the area and where they are going within the area, without interfering with their activities.

To maximize the effectiveness of surveys, surveys will be completed in early morning when birds are most active. The optimal time for surveys is within two to three hours after sunrise. However, nests found incidentally after this window in project areas will inform project activities and will still be protected. Inclement weather, including rain, heavy wind, and/or heavy fog conditions, can greatly reduce bird activity and the likelihood of adequate observation therefore conducting surveys in those conditions is not recommended. The qualified nest surveyor will make decisions about the appropriateness of the conditions on a given morning.

All observations of nesting behaviors are filled out on the survey form below. A different line of data is given to each species, and any nesting behaviors observed are recorded by checking the appropriate columns on the form. Specific details that might affect the proposed project can be added to the margins of the form.

In many cases, nests are well hidden to avoid detection and a nest per se does not need to be found to confirm nesting activity.⁴ Evidence of nesting activity includes the following activities:

- copulations;⁵
- carrying material to build nests within the survey area;
- carrying food or feeding young;
- carrying fecal sacs away from nest;
- repeated “bee-line” flying to likely nest site;
- observation of nest;
- distraction (e.g., broken-wing) display;
- observation of chicks;
- females giving call or chirp notes alerting their mate that they are off the nest or auditory evidence of nestlings or not fully fledged young.

Observations of courtship, mate feeding, territorial displays, defensive behavior (e.g., dive bombing), nervous behavior (e.g., alarm calling, bill-wiping), and flushing from a potential nest site (where the bird – especially ground or shrub nesters – flushes only after the observer has come very close, e.g., one to three feet) indicate potential nesting. Observation of these behaviors often indicates nearby nesting (Cornell Lab of Ornithology), and warrants a second nest survey if needed to verify status. If an empty nest is observed with no immediate presence of adults building the nest or eggs in the nest, the observer will look for signs of activity, which include but are not limited to the presence of liner or fresh feces on or around the nest. The use of extension mirrors will allow visual inspection of higher nests. If direct visual inspection of the nest is not possible the surveyor will watch the nest from a hidden area for a minimum of 45 minutes to determine any activity indicating nesting behavior. Prior to authorization of work in the site, the observer will return the following morning to re-survey the site. Evidence of active use of the nest may be discerned through additional nest-building since the previous morning.

Based on observations, the surveyor will make a determination as to whether an active nest is present in the project area. If the surveyor determines an active nest is present (and the project cannot be modified to avoid the active nest(s)), projects will be postponed until one of the following conditions are met:

⁴ Kreitingner and Gardali, 2006; Cornell Lab of Ornithology, nd.

⁵ Copulations typically indicate a female is building a nest or laying eggs (Cornell Lab of Ornithology).

- end of nesting season;⁶
- abandonment of nest;
- nest failure due to predator;
- complete fledging of nestlings and fledglings moving outside of project area;⁷ or
- site-specific assessment by a qualified wildlife ecologist experienced in avian biology indicating that the project will not harm the nest and/or chicks and including any mitigation plan necessary.

If the surveyor determines an active nest is present within the project area, the surveyor will assess whether the project can proceed based on the specifics of the site, species, and risk of injury to the species or destruction of the nest, typically following consultation with another surveyor and concurrence with a supervisor. Often, work may be able to proceed, depending on the type of activities involved, duration of the project, and topography/cover of the site. If the surveyor deems that the project should not proceed based on the guidelines given, yet the project cannot be delayed, the nest will be found and protective measures evaluated by at least two Presidio bird nest surveyors. In addition, if a surveyor deems that the project should not proceed (and the project is not time sensitive), but the project manager disagrees then the situation will be elevated for a resolution by appropriate Trust staff.

If a project is delayed, a follow-up survey may be conducted after the estimated time period for chicks to fledge. If this survey indicates no nesting activity (including no new nests) and all young fully fledged or nest has failed, the project may proceed.

PERSONNEL CONDUCTING NEST SURVEYS

For quality control, Trust staff authorized to conduct nest surveys will be trained by staff experienced in conducting nest surveys. An annual refresher will be conducted with all Trust bird nest surveyors. A more complete description of training steps for surveyors is described below.

While Trust staff typically conduct nest surveys for projects involving vegetation removal during nesting season, if necessary to adequately complete a survey, a qualified outside consultant may be required. The use of qualified consultants typically would be limited to projects where large areas of vegetation or extremely dense vegetation is required to be cleared during nesting season, and the project cannot be rescheduled to avoid nesting season. Qualified consultants, once approved by the Trust natural resource manager or designee, are authorized to conduct nest surveys, consistent with the protocols defined in this section. Survey reports will be provided to the Trust natural resource manager or designee for review and concurrence prior to initiation of work.

SURVEY FORMS

The survey form (below) will be used on each survey. A scanned and/or hard copy will be provided to the Project

⁶ As discussed above, the use of dates defining nesting season is an effort to balance resource protection and ongoing management needs of agencies. If an active nest is known to be present either before or after the designated nesting season dates, that nest will continue to be protected until birds have fledged.

⁷ During the early stages of fledging, young birds may begin leaving the nest, but the young of a few species still return to nests for up to several weeks. Juveniles who are fully fledged no longer return to nests for feeding or at night.

Manager and trust Wildlife Ecologist at the completion of the survey/project/post-project follow-up. Electronic forms will be stored in the R: Natural Resources drive.

For most vegetation removal projects during the nesting season, the survey area will comprise the vegetation within the project area as well as any additional area that may be affected by vegetation being trampled during site activities, vegetation falling on other vegetation, and ingress/egress routes for equipment (i.e. the sphere of influence).

Surveys are valid for up to 72 hours. If work does not begin within 72 hours of the survey, another survey will be completed prior to initiation of work. This restriction is necessary due to the behavior and timing of many bird species; for some species, nests can be initiated and completed in several days. Even if a nest is not fully completed within a three-day window, initiation of a nest indicates a favorable area for a bird and is a considerable investment of energy. Subsequently, if a project is begun and work lapses for more than 72 hours, the site will be resurveyed prior to re-initiation of work.

BIRD NEST SURVEY PROTOCOL TRAINING

Training of Trust surveyors will be conducted only by personnel experienced with nest searching methods (such as using behavioral cues and systematic searches) and familiar with the bird species found in the Presidio (including vocalizations and breeding ecology). If there is no such experienced personnel at the Trust, then qualified personnel from other agencies or institutions may be brought in to provide this training.

Successful trainees must demonstrate the ability to interpret breeding behaviors and find nests. Until demonstration of such an ability, trainees should be paired with experienced nest surveyors in order to gain experience themselves.

Primary training components include:

- Species identification (visual and through vocalizations).
- Teaching the NEST SEARCHING section of the Handbook of Field Methods for Monitoring Landbirds, (Ralph, *et al.* 1993; at http://www.fs.fed.us/psw/publications/documents/psw_gtr144/psw_gtr144.pdf). This includes emphasizing how to find nests during different nesting stages (building, egg-laying, incubation, and nestling stage) as well as reading behavioral cues and minimizing predation risk to the nest.
- Discussion and observation of the ecology of common Presidio breeding bird species, including pertinent details of nest site preferences from the Birds of North America species accounts (available online or from some libraries).
- Discussion of how to identify nests (including using nest and nestling guide as a reference and potentially after generating a collection of inactive nests).
- Protocols for conducting a nest survey and filling out nest survey forms.
- Communication processes for conveying information on presence or absence of nesting birds after a survey has been completed, and related data management steps.

Presidio Trust Bird Nesting Survey

Observer(s):			
Date:		Start Time:	End time:
Location (w/ specifics):			
Visit #:	Temperature:	% cloud cover:	Wind speed:

Species	Tally of individuals (<u>S</u> ong, <u>V</u> isual, <u>C</u> all)	Total	Breeding Behaviors (check all that apply)													
			Nesting confirmed ¹								Nest suspected ²					
			pair	copulation	carrying nesting material	carrying fecal sac	carrying food / feeding nestlings	hear nestlings or fledglings	nest found	distraction display (broken-wing)	bee-line flights to potential nest	territorial display	courtship / mate-feeding	flushing from potential nest	nervousness (alarm-calls, bill wiping, dive-bombing)	Fledgling observed

Nesting confirmation (please circle): YES or NO

If nest found, project moves forward (both Surveyor and Project Manager agree): YES or NO

Details of work in presence of nest/mitigation efforts (e.g. distance/time worked near nest, equipment used, number of workers, etc):

Post-project nest follow-up (within 24 hr after project completion), provide status of nest details:

Notes and flyovers (include details of nests found, breeding behaviors):

¹ Although some of these behaviors don't 100% confirm nesting status, nesting is considered confirmed from a vegetation removal perspective.

² Requires a subsequent survey to confirm nesting status.



via <http://www.regulations.gov>

July 27, 2015

Public Comments Processing
Attention: FWS-HQ-MB-2014-0067
Division of Policy and Directives Management, U.S. Fish and Wildlife Service
5275 Leesburg Pike, MS-PPM
Falls Church, VA 22041-3803

Re: Incidental Take of Migratory Birds (Docket No. FWS-HQ-MB-2014-0067)

On behalf of the Center for Biological Diversity and our over 900,000 members and supporters we submit these comments regarding the U.S. Fish and Wildlife Service's (FWS) Notice of Intent (NOI) to prepare a programmatic environmental impact statement (PEIS) to evaluate the potential environmental impacts of a proposal to authorize incidental take of migratory birds under the Migratory Bird Treaty Act (MBTA), Docket No. FWS-HQ-MB-2014-0067.

The Center has long advocated for consistent implementation and enforcement of the MBTA and therefore supports FWS's initiation of a rulemaking process that would clarify standards for authorization of incidental take under the statute. However, any such rulemaking must not just serve as a vehicle for authorization of otherwise prohibited take, but also serve to further the conservation purposes of the MBTA.

A. The Conservation Purposes of the MBTA

Congress passed the MBTA on July 3, 1918 to implement the International Convention for the Protection of Migratory Birds, 39 Stat. 1702 (1916), between the United States and Great Britain (acting for Canada). These governments were "desirous of saving from indiscriminate slaughter and of insuring the preservation of such migratory birds as are either useful to man or are harmless." Convention, August 16, 1916, U.S.-Gr. Brit., 39 Stat. 1702, 1702. The United States subsequently executed treaties with Mexico, Japan, and the former Union of Soviet Socialist Republics, the protections of which are now incorporated into the MBTA. 16 U.S.C. § 703.

The MBTA and the Convention it implemented are considered "conservation measures of prime importance." H.R. Rep. No. 65-243 at 3. Justice Holmes called the preservation of migratory birds a "national interest of very nearly the first magnitude." *Missouri v. Holland*, 252 U.S. 416, 435 (1920). The Convention bound the signatories to respect prohibitions on capturing, killing, and transporting migratory birds. The Convention allows the taking of migratory birds for scientific, propagation, and depredation purposes only to the extent authorized by the appropriate government authorities in compliance with the Convention's provisions.

Congress enacted the MBTA for the express purpose of making the Convention "effective and enforceable by the courts." H.R. Rep. No. 65-243, at 1 (1918). The statute was intended to protect migratory birds from all forms of unauthorized harm. *See, e.g.*, 56 Cong. Rec. 7448 (June

6, 1918) (Statement of Rep. Robbins). The statute implements this intent by strictly prohibiting all “taking” of migratory birds unless authorized by a permit issued pursuant to Department of Interior regulations. “The fundamental prohibition in the Migratory Bird Treaty Act is couched in ... expansive” language. *Andrus v. Allard*, 444 U.S. 51, 59 (1979).

The language of Section 703 of the MBTA is unequivocal:

Unless and except as permitted by regulations made as hereinafter provided in this subchapter, it shall be unlawful **at any time, by any means or in any manner**, to pursue, hunt, **take**, capture, **kill**, attempt to take, capture, or kill . . . any migratory bird . . . included in the terms of the [conventions between the United States and Great Britain, Mexico, Japan, and Russia].

16 U.S.C. § 703 (emphasis added). “Take” is defined as to “pursue, hunt, shoot, wound, kill, capture, or collect,” or attempt to do so. 50 C.F.R. § 10.12.

The MBTA imposes strict liability for killing migratory birds, without regard to whether the harm was intended. Its scope extends to harm occurring “by any means or in any manner,” and is not limited to, for example, poaching. *See e.g., U.S. v. Moon Lake Electric Association*, 45 F. Supp. 2d 1070 (1999) and cases cited therein. Indeed, the federal government has successfully prosecuted under the MBTA’s criminal provisions those who have unintentionally killed migratory birds. *E.g., U.S. v. Corbin Farm Service*, 444 F. Supp. 510, 532-534 (E. D. Cal.), affirmed, 578 F.2d 259 (9th Cir. 1978); *U.S. v. FMC Corp.*, 572 F.2d 902 (2nd Cir. 1978); *U.S. v. Apollo Energies, Inc.*, 611 F.3d 679 (10th Cir. 2010).

The MBTA applies to federal agencies as well as private persons. *See Humane Society v. Glickman*, No. 98-1510, 1999 U.S. Dist. LEXIS 19759 (D.D.C. July 6, 1999), affirmed, *Humane Society v. Glickman*, 217 F.3d 882, 885 (D.C. Cir. 2000) (“There is no exemption in § 703 for farmers, or golf course superintendents, or ornithologists, or airport officials, or state officers, or federal agencies.”). Following *Glickman*, FWS issued Director’s Order No. 131, confirming that it is FWS’s position that the MBTA applies equally to federal and non-federal entities, and that “take of migratory birds by Federal agencies is prohibited unless authorized pursuant to regulations promulgated under the MBTA.”

Notwithstanding these prohibitions, the MBTA authorizes the Secretary of the Interior to “determine when, to what extent, if at all, and by what means, it is compatible with the terms of the conventions to allow hunting, take, capture, [or] killing ... of any such bird.” 16 U.S.C. § 704. Consequently, FWS may issue a permit allowing the take of migratory birds if consistent with the treaties, statute and FWS regulations. *See* 50 C.F.R. pt. 21. Any such authorizations must be consistent with the conservation purposes of the statute and the underlying conventions.

Current regulations prohibit the taking, possessing, importation, exportation, transportation, selling, or purchasing of any migratory birds except as allowed by a valid permit. 50 C.F.R. § 21.11. While FWS has regulations authorizing incidental take by the U.S. military during military-readiness activities, 50 C.F.R. § 21.15, and has authorized incidental take in other limited circumstances through special use permits under 50 C.F.R. § 21.27, it does not currently

have regulations that are broadly applicable to incidental take.¹

B. Any Incidental Take Regime Must Comport with the Conservation Purposes of the MBTA

In light of the language and intent of the MBTA and the underlying conventions, any incidental take regime implemented by FWS must have as its primary purpose the conservation of migratory birds, rather than fostering or protecting the commercial or other activity resulting in take of such birds. We are concerned that the regulatory schemes being contemplated by FWS all suffer from an improper reversal of these priorities.

In its notice, FWS describes the need for action as follows:

We seek to provide legal clarity to Federal and State agencies, industry, and the public regarding compliance with the MBTA. At the same time, we have a legal responsibility under the MBTA and the treaties the Act implements to promote the conservation of migratory bird populations. We are considering actions, therefore, that can provide legal authorization for incidental take of migratory birds where authorization is appropriate, will promote adoption of measures to avoid or minimize incidental take, and will provide for appropriate mitigation, including compensation, for that take.

80 Fed. Reg. 30034.

While we generally agree with the goal of providing legal clarity, and appreciate that FWS recognizes its responsibility to promote conservation, this formulation seems to place the authorization of incidental take above the conservation mandate of the MBTA. An incidental take regime *may* in fact be an effective component of a regulatory scheme that furthers the conservation purpose of the MBTA, but such a regime must be treated as a *means* to that conservation end, *not the end goal itself*. FWS' failure to prioritize the conservation goal of the statute over its desire to effectuate an incidental take mechanism carries the risk of creating a process by which incidental take is authorized without sufficient concern as to whether such take authorization in fact serves the conservation mandate of the statute.

Any alternatives considered by FWS must be analyzed through a conservation-focused prism. As such, any incidental take regime should focus first and foremost on conserving migratory birds, and then provide for incidental take authorization only in such cases where all possible measures to avoid take have been implemented, take is still unavoidable, such take is limited to small numbers of individuals and has a negligible impact on bird populations, and the impacts of such

¹ Issuance of a permit under 50 C.F.R. § 21.27, is limited to “special purpose activities related to migratory birds,” where the applicant “makes a sufficient showing of benefit to the migratory bird resource, important research reasons, reasons of human concern for individual birds, or other compelling justification.” This regulatory provision rarely, if ever, can be applied to incidental rather than intentional take, and must provide benefit to the species at issue. See 724 FW 2 (Aug. 6, 2003) (“[A]pplicants [must] demonstrate a legitimate purpose for engaging in migratory bird-related activities that are not otherwise provided for by any standard permit. The applicant must make a sufficient showing of compelling justification such as benefit to the migratory bird resource, concern for individual birds, or important research reasons.”) Available at <http://www.fws.gov/policy/724fw2.html>

take can be offset such that a net conservation benefit accrues from the issuance of the take authorization. Additionally, for any permit regime that FWS develops, accurate and transparent monitoring and reporting of take that does occur is necessary to ensure that impacts, either project specific or cumulative, are not greater than anticipated. Only in such circumstance can take authorization under the MBTA be deemed consistent with the mandates of the statute and the underlying conventions.

C. Mandatory Permit Requirements are Preferable to MOUs and Voluntary Guidance

In the notice, FWS says it will consider several different approaches to incidental take authorization:

- General Conditional Authorization for Incidental Take Associated With Particular Industry Sectors
- Individual Permits
- Memoranda of Understanding With Federal Agencies
- Development of Voluntary Guidance for Industry Sectors

80 Fed. Reg. 30035.

While each of these mechanisms may have a useful role to play in bird conservation, only the first two can properly be used to authorize incidental take. We briefly discuss the benefits and limitations of each mechanism in turn.

General permits can be an efficient way of authorizing activities that are widespread and carried out by numerous different actors, but which have similar impacts on migratory birds. However, because of their potential widespread scope, general permits carry the risk of unexamined cumulative impacts, where numerous project have seemingly small impacts on migratory birds, but collectively the impacts are great. To avoid such impacts, general permits should be structured such that caps on allowable take of migratory birds are set and enforced, both at the level of the individual project, and cumulatively for all projects subject to an industry specific general permit.

FWS lists oil, gas and wastewater disposal pits, methane and other gas burner pipes at oil production sites, communications towers, and electric transmission and distribution lines as possible industry sectors for which general permits may be issued. The notice also mentions the possibility of wind energy facilities being covered under such permits. 80 Fed. Reg. 30035.

While we believe that general permits may be appropriate for some such operations, FWS should distinguish between activities where compliance with available mitigation measures virtually eliminates mortality (e.g. closed containment systems for wastewater), versus ones in which mitigation measure merely reduce the likelihood of take but for which significant levels of take can be anticipated to continue to occur (e.g. measures to reduce collisions with communications

towers). For those activities where mortality can be eliminated or reduced to extremely rare occurrence, general permits are likely appropriate. However, for industries in which fully effective take avoidance measures have yet to be developed, but for which the potential exists to minimize or reduce take, individual permits are likely necessary in addition to or in lieu of a general permit.

For many activities, effective mitigation measures are available, but significant take is still likely to occur even with such mitigation. Moreover, while it is virtually certain that some take will occur, the specifics of the timing, location and amount of take, as well as the species affected, are often unpredictable and vary greatly between seemingly similar projects. In such cases, a hybrid system may be appropriate where a general permit sets forth baseline avoidance and mitigation measures, but if the project is expected or demonstrated to result in take above a certain threshold, then an individual permit is required that incorporates additional measures to both reduce and offset such take. The wind industry is one such industry which presents this rather vexing problem and for which a hybrid permit system may be appropriate.

Because wind power generation is, and will likely continue to be, a significant contributor to the efforts to decrease greenhouse gas emissions, it is essential that this industry be included in the MBTA permitting process to ensure that renewable energy is developed in an environmentally sensitive way with the least impacts possible to migratory bird populations. There are numerous actions that wind projects can undertake to decrease bird mortality: avoiding building new turbines in migratory corridors, avoiding areas that appeal to raptors or their prey, micro-siting to avoid areas most used by raptors, changing heights of turbines to elevations that reduce collisions from birds flying, using different materials to construct the turbines (minimizing bird perch/nest areas, avoiding lights, underground electric power lines, etc.), curtailing or shutting down turbines during times when there are many birds in that area, and changing cut-in speeds to reduce impacts to birds.

While there has been significant research done on the impacts and possibly avoidance and minimization measures related to wind energy and birds, and some data has been collected through voluntary efforts, more clearly needs to be done. A clear and consistent regulatory process is needed to require that data on bird mortality be collected and reported, data and analysis on the efficacy of avoidance and minimization measures is collected and reported, and to ensure that the best practices are adopted for both existing wind generation projects and for new projects that are proposed and constructed.

As with wind energy, utility scale solar power generation is a significant contributor to the efforts to decrease greenhouse gas emissions, yet is linked to some level of bird mortality. There is emerging information about the impacts of various solar technologies on migratory birds populations. While solar power towers appear to have had the highest avian mortality from impact trauma and solar flux, new information is emerging that large-photovoltaic arrays may also cause significant mortality, although the mechanisms are not yet well understood. As a result, research into ongoing impacts and potential avoidance and minimization measures is critical. Such solar projects are probably suited for a general permit, with thresholds set (either by size of project, or by documented or projected mortality levels) that would result in certain projects being required to seek an individual permit.

Additional industries for which general permits may be appropriate are for fossil-fuel and nuclear power energy generating stations, farming and forestry activities, land destroying activities such as commercial and residential development, mining, vehicle collisions, window collisions, and fishing activities. Mitigation measures are available for each of these activities and permits should be required for the relevant entities most responsible for such mortality. As an example, any new building construction above a certain size threshold should be subject to permit requirements that includes measures to minimize birds colliding with windows.

One of the highest priorities for take reduction, and hence MBTA enforcement and permit requirements, is to address the significant bird bycatch that occurs in our nation's fisheries. While many different fisheries kill migratory birds, longline and gillnet fisheries are likely the worst offenders. Mitigation measure for many fisheries are readily available (e.g. bird scaring lines, net extenders, altered baits, etc.). Given most fisheries are either state or federally regulated, general or individual permits are likely appropriate, with the relevant fisheries management authority being the permittee.

Certain industries result in the widespread death of migratory birds, but are likely unsuitable for either general or individual permits, as authorizing such take would not be consistent with the conservation mandate of the MBTA. For example, numerous birds are killed by application of pesticides. Courts have held both pesticide manufacturers and applicators responsible for MBTA violations. *See, e.g. U.S. v. FMC Corp.*, 572 F.2d 902 (2nd Cir. 1978); *U.S. v. Corbin Farm Service*, 444 F. Supp. 510, 532-534 (E. D. Cal.), affirmed, 578 F.2d 259 (9th Cir. 1978). Rather than issue permits authorizing take from pesticide use, FWS should vigorously enforce the MBTA so as to prevent the approval and deployment of pesticides in a manner that harms migratory birds. Doing so would obviate the need for any permitting requirement for such activities.

Other industries, such as mountaintop removal mining, result in such massive killings of migratory birds and destruction of their habitat that it is difficult to foresee how authorizing take from such activities can *ever* be consistent with the purposes of the MBTA and the underlying conventions. Consequently, FWS should vigorously enforce the take prohibition of the statute regarding such activities until and unless these industries can somehow demonstrate minimization of impacts to protected birds.

In addition to permits, the notice notes that FWS is considering memorandums of understanding (MOUs) with other federal agencies as well as voluntary guidance for industry sectors. While both of these approaches can provide conservation benefit for migratory birds, they are no substitute for permits. We believe that FWS should strive to develop MOUs with each federal agency to encourage and require actions that will benefit migratory birds. The outcome of such an MOU would ideally be a reduction in take of migratory birds. However, any take that continues to occur should be authorized only under a general or individual permit.

Similarly, while industries should be encouraged to take all possible voluntary measures to avoid or reduce take of migratory birds, the fact remains that any take absent a permit is unlawful. Consequently, rather than continue the current system of voluntary guidance and promises of

enforcement discretion, FWS should implement a system that continues to encourage such measures by industry but requires permits (either general or individual depending on the situation) for any take that cannot be avoided by such measures.

For any take authorization scheme to work, permits cannot be viewed as voluntary. Industries and agencies that carry out or authorize activities that result in the death of migratory birds must be made plainly aware that any take that does occur absent a permit will be subject to civil or criminal fines or prosecution.

D. The NEPA Process for any Incidental Take Regime Must be Comprehensive

FWS frames its notice not as an advanced notice of proposed rulemaking but as a notice of intent to prepare a programmatic environmental impact statement (PEIS) under the National Environmental Policy Act (NEPA). A comprehensive NEPA analysis can and should inform the development of any incidental take regulations, but is not a substitute for the regulations themselves, nor would it obviate the need for additional NEPA analysis for specific general or individual permits issued under the adopted take regime.

In developing the PEIS, FWS should address, *inter alia*, the following issues:

- The environmental baseline, including local, regional, national and global population estimates and trends for all species of migratory birds covered by the MBTA
- All current sources of take of migratory birds, both authorized and not
- Threats to migratory birds and their habitats, both in the near term and over time (e.g. climate change)
- Methods of calculating take estimates and appropriate thresholds for allowable take (species-specific and overall)
- Industry specific avoidance and minimization measures
- Measures to offset authorized take so as to result in a net conservation benefit
- Monitoring and reporting requirements
- Existing agency capacity related to migratory birds and the additional resources necessary to actually implement and enforce an incidental take regime
- Permit scope, duration, and application and renewal processes

While a thorough PEIS can greatly inform an incidental take rulemaking process, it is unlikely to be an adequate substitute for permit-specific NEPA analysis that will need to be carried out for each general and individual permit that FWS may issue under the regulations. Consequently,

FWS should set out a clear process for permit review and issuance that incorporates sufficient time and opportunities for public involvement such that compliance with NEPA and other relevant statutes (e.g. Endangered Species Act, National Historic Preservation Act) can be assured prior to permit issuance.

We look forward to FWS expeditiously proceeding with the rulemaking and associated NEPA processes, while fully and faithfully implementing and enforcing the MBTA in the interim.

Sincerely,

A handwritten signature in black ink, appearing to read 'B. Cummings', with a stylized, flowing script.

Brendan Cummings
Senior Counsel
Center for Biological Diversity
P.O. Box 549
Joshua Tree, CA 92252

My name is Nancy Stocker. I am writing for the volunteer Conservation Committee of the Audubon Society of Greater Denver (ASGD), a grassroots conservation organization with nearly 3000 members. I attended the Denver, CO Public Scoping meeting representing ASGD.

As you already know, populations of many of our bird species are declining, some of them precipitously. We applaud and encourage your efforts to reduce the number of birds lost to human activity by creating an incidental take permit system under the Migratory Bird Treaty Act. This has great potential for increasing protections for our sensitive bird species while offering industry and others more certainty regarding the nature of their responsibilities.

We believe the broadest possible set of industries likely to cause incidental take of migratory birds should be required to obtain permits immediately. This would include traditional energy industries as well as wind and solar, mining industries that might have settling ponds or other hazards, companies that design and construct tall buildings with which migrating birds collide, those responsible for erecting and using tall towers with which birds collide, etc. There may currently be few best management practices (BMPs) for protecting birds for some of these industries, but including them now would allow USFWS to require BMPs on new projects as soon as the BMPs are developed. Solar energy is an example of an industry for which there are now few BMPs. Such BMPs will undoubtedly be developed over the next few years. If solar is already included, new BMPs could be required immediately for new projects rather than waiting for solar to be included during the next major review of the incidental take permit system.

Government agencies impact birds both directly by their own actions and indirectly by allowing industrial (mining, agriculture, etc.) activities on lands they manage. USFWS' Memoranda of Understanding (MOUs) with these other federal and state agencies should regulate both direct and indirect incidental take. For example, the Department of Agriculture's Wildlife Services uses poisons to kill predators, rodents, and other animals they believe impact farmers' and ranchers' productivity. There has long been concern about the secondary kill of birds of prey and other scavengers who feed upon the carcasses of these poisoned animals. Whether USDA's Wildlife Services manages such animals directly or the work is contracted by the agency or through a farmer or rancher, an incidental take permit should be required.

A permitting process must consider the needs of individual bird species as well as the number of species impacted: Where are their flyways? Which birds in each flyway are rare, sensitive and/or declining? In what sort of environment do they nest, forage, and live? This may suggest areas where disturbance is to be avoided to the greatest degree, and permitting should be limited or not allowed. General requirements for all projects within flyways as well as requirements based on the specific industry seem appropriate for smaller projects. For large scale projects, additional considerations will likely be needed. The particular populations of birds impacted must also be considered. A loss of 1000 red-winged blackbirds is not currently comparable to a loss of 1000 American kestrels. And a project that seriously impacts 5 declining species is more of a problem than one that impacts only one species with a slightly declining population. Yet tracking all populations, perhaps some less rare ones through volunteer bird counts, is critical. Who would have thought the passenger pigeon could become extinct, given the historic size of its population?

Frequent review of permits is needed. We encourage that permits generally be for 5 years. If great investment is involved for equipment with a much longer expected useful life, small projects should be authorized until the impact and, if needed, methods to avoid or minimize take are clear and methods of mitigation developed. Early wind energy projects killed many eagles, and set an example of what to

avoid. Permits must not be allowed for extended periods until we are confident that sensitive bird populations can tolerate the likely losses.

Mitigation is a challenge. It must be directed at supporting population maintenance or increases of the sensitive species impacted, not just birds generally. For lesser prairie chickens, for example, it is clear that preserving leks is critical to their survival, as is protecting nearby areas with vegetation appropriate for sheltering mothers and their young. Unnaturally high perches for their avian predators must be avoided near these critical areas. My understanding is that predation by mammals, such as raccoons, that didn't live on the open prairie in which these birds evolved, is a significant factor in their rapidly decreasing population. So figuring out how to make the land that is favorable for the lesser prairie chicken less favorable for their newer predators might be at least equally important. Some research indicates that seeding certain native plants in greater sage grouse habitat may support increases in its population; perhaps a similar approach could be tried with lesser prairie chickens. A lot of research may be needed to suggest mitigation for take of any given species.

Finally, we encourage you to include bats in the MBTA permits for incidental take. The white nose syndrome has been catastrophic for bat populations in many areas of our country. Please require a Bird Bat Conservation Strategy that outlines how applicants will avoid, minimize, mitigate and adaptively manage projects for birds and bats as part of the application for an MBTA permit.

Thank you for consideration of these comments.

Audubon Society of Greater Denver
9308 South Wadsworth Blvd.
Littleton, Colorado 80128
(303) 973-9530



desert conservation
PROGRAM

July 27, 2015

U.S. Fish and Wildlife Service
Public Comments Processing
Attention: FWS-HQ-MB-2014-0067
Division of Policy and Directives Management
5275 Leesburg Pike, MS-PPM
Falls Church, VA 22041-3803

RE: Comments on the Notice of Intent to Prepare a Programmatic Environmental Impact Statement for the Issuance of Incidental Take Permits under the Migratory Bird treaty Act (80 Fed. Reg. 30032 (May 26, 2015))

The Clark County Desert Conservation Program (DCP) appreciates the opportunity to comment on the U.S. Fish and Wildlife Service's (Service) Notice of Intent to Prepare a Programmatic Environmental Impact Statement for the Issuance of Incidental Take Permits under the Migratory Bird Treaty Act (MBTA). As the Plan Administrator for the Clark County Multi-Species Habitat Conservation Plan (MSHCP), the DCP has extensive experience with the issue of the interface between the ESA and the MBTA and provides the following comments aimed at better integrating the MBTA with Habitat Conservation Plans (HCPs) permitted under the Endangered Species Act (ESA).

The DCP encourages the Service to expand on its existing policy and begin issuing special purpose permits to HCP permittees for migratory bird species that are covered under an HCP. In the alternative, if the Service believes it does not currently have such authority, the Service should revise the MBTA regulations to clearly authorize the issuance of such permits.

To the extent the MBTA prohibits the incidental take of migratory birds as a result of otherwise lawful activities¹, there is a potential for the MBTA to conflict with incidental take permits issued under the ESA. To partially address the potential conflict between the ESA and MBTA, the

¹ Although the courts are divided on this issue, for purposes of this comment letter it is assumed that the Service is correct that the MBTA prohibits incidental take.

Service adopted a policy in 1996 that provided that MBTA special purpose permits should be issued to match the incidental take authorized for ESA-listed migratory birds covered by an HCP. The policy, and the legal opinion issued by the Solicitor's Office in support of the policy, focused only on the issue of whether MBTA take permits could be issued for migratory bird species that were also listed as threatened or endangered under the ESA. As such, the policy adopted by the Service only partially addressed the potential conflict between the MBTA and ESA.

To comprehensively address the potential conflict, the Service should issue MBTA special purpose permits to authorize the incidental take of unlisted migratory bird species covered under HCPs in the same manner that they are issued for ESA-listed migratory bird species covered under HCPs. Although the legal analysis provided by the Solicitor's Office was limited to ESA-listed birds, there is no suggestion that MBTA take permits could not be issued for unlisted migratory birds covered by an HCP. The Solicitor's opinion noted that "section 21.27 of the MBTA appears to be broad enough to encompass permitting of unintentional take for the purposes of the MBTA," and that "the use of section 21.27 to permit take in conjunction with an ESA section 10 permit is an acceptable approach." In noting that the legal analysis applied specifically to migratory birds that were also listed under the ESA, the Solicitor's memorandum further stated that the Service "should take steps to address the question of how to handle the incidental take of non-ESA listed migratory birds." The Service has yet to expand the current policy or develop a separate policy for unlisted migratory bird species covered under HCPs. There is no apparent basis for the disparate treatment; MBTA permit issuance criteria can be met for all migratory bird species covered under an HCP.

It is common in habitat conservation planning under Section 10 of the ESA to treat sensitive unlisted species as though they were already listed, which then allows for development of a comprehensive strategy for the unlisted species' long-term conservation in return for authorization to incidentally take such species should it become listed under the ESA in the future. The ESA encourages HCP applicants to include unlisted species during habitat conservation planning under Section 10, but in the case of unlisted migratory bird species, the absence of a comparable permit under the MBTA creates regulatory uncertainties, which acts as a disincentive for such inclusion. As a consequence, there is no incentive for local governments and other Section 10 permittees to undertake conservation measures and cover unlisted migratory bird species in HCPs. This disincentive frequently results in a decision not to cover the species under the HCP, which in turn results in less conservation being provided for unlisted migratory bird species compared to covering these species in the same manner as listed species.

The Service should expand its current policy of issuing MBTA special purpose permits for listed migratory birds covered under an HCP to include all migratory bird species (with the exception of bald and golden eagles). This approach would provide greater flexibility for incidental take,

which would create an incentive for local jurisdictions and other Section 10 permittees to cover the species. This result would lead to greater conservation benefits for such species.

We appreciate your consideration of our comments.

Sincerely,

A handwritten signature in blue ink that reads "Marci D. Henson". The signature is fluid and cursive, with the first name "Marci" being more prominent and the last name "Henson" following in a similar style.

Marci D. Henson

Assistant Director

Administrator of the MSHCP



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DEPUTY DIRECTOR

TY E. GRAY



July 14, 2015

Public Comments Processing
Attn: FWS-HQ-MB-2014-0067
Division of Policy and Directives Management
U.S. Fish and Wildlife Service
5275 Leesburg Pike, MS-PPM
Falls Church, VA 22041-3803

Re: Comment on Migratory Bird Permits,; Programmatic Environmental Impact Statement
[Docket No. FWS-HQ-MB-2014-0067]; AGFD Log No. M15-07131728

Dear Sir or Madam:

We appreciate the opportunity to comment on the proposed Programmatic Environmental Impact Statement (PEIS); the Migratory Bird Treaty Act needs to authorize incidental take on migratory birds. Not doing so has placed many law abiding citizens and industry in a vulnerable position in that they have no assurance that their conservation actions will be recognized and their actions could still result in prosecution under the Migratory Bird Treaty Act. Some means to obtain incidental take permits for migratory birds has the potential to inform and further conservation through minimizing that take.

In the Federal Register notice, the Service asks for comments on fifteen separate issues regarding the proposed approaches. Below, we address only those that we felt most qualified to address and that have the most potential to address bird conservation and industry needs. The numbers below refer to the questions listed on page 30036 of the register notice.

- 1) Our preferred approach of the four approaches described is the *general conditional authorization* because it will provide positive conservation benefit to migratory birds, can provide clear guidance to industry, and the tools for minimizing take for many industries have already been developed. However, we recommend that all four approaches: general conditional authorizations for specific industry sectors, individual permits for specific activities, Memoranda of Understanding (MOU) with Federal agencies, and voluntary guidelines for industry, be developed in concert to provide full evaluation of the incidental take of migratory birds. In combination, the four approaches will be able to

migratory bird take and provide a knowledge-based approach to developing effective conditional authorizations for those industries where bird take information is lacking.

- 2) Industries that could benefit from this include oil, gas, wastewater disposal, wind and solar power. As stated in the proposed EIS, oil and gas industries, mining, and wastewater treatment plants often produce ponds that may attract and kill birds. Wind and solar energy also may incidentally take migratory birds. All these industries would likely be willing participants to develop guidelines for managing their facilities to minimize migratory bird take. By adhering to the guidelines and receiving incidental take permits, both conservation and economic certainty for industry could be achieved.
- 3) Potential approaches to minimize and mitigate incidental take could include design considerations to minimize attractiveness to birds, hazing techniques to keep birds away, and conservation actions to mitigate take. To make the approaches useful and assure their implementation, the approaches need to be both general and specific. That is, there should be general categories (e.g., hazing) and specific categories that could be applied should the general categories not be applicable or effective. Offsite mitigation measures should also be available if effective approaches to minimize take are available.
- 4) The four approaches offered under the proposed EIS are adequate. How those approaches are developed and implemented will be the key to their success or failure. The Service and the States should work closely with industry to assure that the regulations are both workable and effective for conservation.
- 6) Although some distinction between new facilities and existing ones is necessary, caution should be used to avoid penalizing either case. Imposing costly regulation (through general conditional authorization or individual permits) on new facilities could hurt industries and the public by stopping or delaying new facility development. Any delay could also result in higher bird take because new technologies may not be employed in older facilities. Penalizing existing facilities because substantial investment in design changes would be required to obtain a permit could also impose an unfair financial burden on existing industry. Every effort should be made to weigh both the cost to industry and the benefit to migratory birds.
- 10) The benefit to a permitting system would be a more accurate estimate of incidental take of migratory birds, mechanisms to minimize that take, and in some cases, mitigation of that take through additional conservation actions. Currently, there are only poor estimates of the incidental take of migratory birds and for only a few industries. A permitting system would allow for more precise estimates which would better inform conservation. All the approaches suggested in the PEIS would reduce current take. And finally, in cases

will be able to minimize both incidental take and liability for well-meaning individuals and industries that wish to comply with the migratory bird regulations. Individuals or industry should not be required to use all four of the approaches to receive permits, but different situations will likely require different approaches and having all four available would make the policy flexible.

The goal of issuing general conditional authorizations should be to provide conservation benefit for migratory birds while minimizing the regulatory burden on industry. Providing clear guidance on best management practices to minimize take will enable industry to build mitigation practices into their planning and thus reduce risk of future migratory bird regulation violations. Many industries have already developed tools to minimize migratory bird take. The Service, with help from the States, should work with industry leaders to adopt or further develop these management practices into solid tools that industries can apply to their operations as a condition to receiving incidental take permits.

Individual permits may be necessary for situations not covered by general conditional authorizations. Clearly the administrative burden for issuing large numbers of individual permits is high, so individual permits should only be issued when incidental take cannot be covered any other way. But it would be inequitable to require industry to comply under conditional authorizations and let other activities that also take migratory birds, persist without regulation. Therefore there must be a method to authorize incidental take outside the general conditional authorization process intended for established industry where the take of migratory birds is predictable and known.

Memoranda of Understanding could be effective for minimizing incidental take of migratory birds by Federal agencies, and the Service should consider similar mechanisms to permit incidental take for State agencies as well. State Forestry, agriculture, and wildlife agencies all manage large landscapes and that management can affect migratory birds. Having negotiated MOUs in place with State and Federal agencies could conserve birds and provide assurance that responsible activities would not be vulnerable to prosecution under the MBTA.

Many states also have regulatory authorities over migratory birds. Crafting MOUs with the state could avoid requiring that industry obtain permits from both the FWS and the state for incidental take. Alternatively, some states could chose to retain those authorities and require permits. In either case, MOUs could make it clear to all parties what is required for incidental take in each state and reduce uncertainty in the regulations.

Voluntary compliance for industry sectors would be useful as a transitional tool to minimize or mitigate take and could then be used to develop general authorizations once those tools are developed. It is difficult to see how voluntary compliance, without a transition to conditional authorization, would be useful to industry since it offers no mitigation of liability under the MBTA. A process to develop conditional authorization after a 'learning period' of voluntary compliance would offer valuable information on

where take could not be addressed through better management, mitigation is a reasonable alternative.

- 11) Potential costs are a real concern and every effort should be made to make the permitting process as efficient as possible. Offering general authorizations to as many industries as possible would be a reasonable approach to minimizing costs. Developing those authorizations could be streamlined by reaching out to industry for suggestions of reasonable approaches. Issuing large numbers of individual permits, although likely to be necessary in some cases, will have the greatest administrative burden.

In conclusion, we think the general conditional authorization would be most effective for bird conservation and minimize burden on industry but all four approaches outlined in the PEIS have the potential to improve conservation of migratory birds. Some form of permitting system is long overdue. We are pleased that the Service is proposing to issue permits that can benefit both conservation and industry and we look forward to the continued development of the EIS.

Sincerely,

A handwritten signature in black ink, appearing to read "Jim DeVos", written in a cursive style.

Jim deVos

Assistant Director, Wildlife Management Division



National Headquarters

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July 27, 2015

Public Comments Processing
Attention: FWS-HQ-MB- 2014-0067
Division of Policy and Directives Management
U.S. Fish and Wildlife Service
5275 Leesburg Pike, MS-PPM
Falls Church, VA 22041-3803

Re: Incidental Take of Migratory Birds (Docket No. FWS-HQ-MB-2014-0067)

Submitted electronically at: <http://www.regulations.gov>

On behalf of our more than 1.2 million members and supporters, Defenders of Wildlife appreciates the opportunity to comment on the U.S. Fish and Wildlife Service's (Service) Notice of Intent (NOI) to prepare a programmatic environmental impact statement (PEIS) pursuant to the National Environmental Policy Act to evaluate the potential environmental impacts of a proposal to authorize incidental take of migratory birds under the Migratory Bird Treaty Act (MBTA). 80 Fed. Reg. 3032 (May 26, 2015).

We believe the Service has the legal authority to develop an incidental take permitting program under the MBTA and recognize the significant effort that the Service is undertaking to create such a program. We further believe that an effective MBTA permitting program could play an important role in the conservation of migratory birds. We would be pleased to offer more detailed suggestions through a follow-up meeting or conversation.

The concerns and recommendations described below center on the need for a legally sound, scientifically credible, and operationally workable framework for authorizing incidental take of migratory birds. Such a framework must be consistent with the overarching intent of the MBTA, which is "designed to prevent the destruction of certain species of birds." *Andrus v. Allard*, 444 U.S. 51, 52-53 (1979). At present, more than 1036 bird species are protected under the MBTA and four migratory bird treaties, ranging from waterfowl and shorebirds, to a wide variety of songbirds, owls and raptors, including Golden Eagles and Bald Eagles.¹ Any permitting program must further their conservation.

¹ FWS, Revised List of Migratory Birds, 78 Fed. Reg. 65,844 (Nov. 1, 2013), *available at* <http://www.fws.gov/migratorybirds/regulationspolicies/mbta/MBTA%20List%20of%20Brds%20Final%20Rule.pdf>.

Legal Background

The Service has a “federal trust responsibility” to conserve, protect, and enhance migratory birds.² The MBTA is a national conservation statute which is premised on the “important public policy behind protecting migratory birds,” *United States v. FMC Corp.*, 572 F.2d 902, 908 (2d Cir. 1978), and prohibits both intentional and incidental take. The MBTA prohibits the unauthorized taking or killing of migratory birds, as well as any attempt to take or kill migratory birds or any part, nest, or eggs of any such bird, “at any times, by any means, or in any manner.” 16 U.S.C. § 703; *see also Andrus*, 444 U.S. at 56, 57, 59–60 (describing the MBTA’s prohibitions as “comprehensive,” “exhaustive,” “carefully enumerated,” “expansive,” and “sweepingly framed”).

Regulations implementing the statute explain that the term “take” means to “pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect.” 50 C.F.R. § 10.12. The MBTA is a strict liability statute, i.e. one can be held liable for take of migratory birds regardless of intent or motive.³ Numerous courts agree the MBTA’s broad take prohibition prohibits both intentional take, such as hunting, and incidental or unintentional take, such as bird mortality due to collision with wind turbines. *See, e.g., Ctr. for Biological Diversity v. Pirie*, 201 F. Supp. 2d 113 (D.D.C. 2002) (military training exercises of the Department of the Navy resulting in incidental take of migratory birds without a permit violated the MBTA); *United States v. Apollo Energies, Inc.*, 611 F.3d 679, 684 (10th Cir. 2010) (failure to bird-proof oil drilling equipment resulting in incidental take of migratory birds is a violation of the MBTA); *United States v. Moon Lake Elec. Ass’n*, 45 F. Supp. 2d 1070 (D. Colo. 1999) (failure to install protective equipment on power poles by electrical association resulting in incidental take of migratory birds is a violation of the MBTA); *FMC Corp.*, 572 F.2d 902; *United States v. Corbin Farm Serv.*, 444 F. Supp. 510 (E.D. Cal. 1978) (both cases holding that bird deaths related to pesticide use resulting in incidental take is a violation of the MBTA).

As discussed further below, the Service has the statutory mandate to protect “public trust resources” protected under the MBTA and may only authorize take of such resources in accordance with Section 704(a), through “suitable regulations.” In the absence of such authorization, any activities that take or have the potential to take protected birds are unlawful.

Authority for Incidental Take Regulations

Section 703 of the MBTA affirms that take of listed migratory birds “at any time, by any means or in any manner” is flatly prohibited “unless and except as permitted by regulations.” 16 U.S.C. § 703. Under Section 704 of the MBTA, the Service is “authorized and directed” to determine the exceptions to the MBTA’s take prohibition consistent with the statute and the various migratory bird treaties. In other words, the Service has the sole authority and responsibility “to determine

² FWS, Recommendations to Avoid Adverse Impacts to Migratory Birds, Federally Listed Species, and Other Wildlife from Communication Towers & Antennae (2000) (“Migratory birds are a federal trust resources responsibility, and the Service considered migratory bird concentration areas environmentally significant.”).

³ Notably, unlike BGEPA’s take prohibition, the MBTA also prohibits “attempt” to take. Compare BGEPA, 16 U.S.C. § 668c and 50 C.F.R. § 22.3 with MBTA, 16 U.S.C. § 703 and 50 C.F.R. § 10.12.

when, to what extent, if at all, and by what means” taking of migratory birds is permissible, and to “adopt suitable regulations permitting and governing the same.” 16 U.S.C. § 704(a).⁴

Such regulations are crucial because in the absence of regulations authorizing incidental take of migratory birds, activities that kill or have the potential to kill migratory birds are “otherwise wholly unlawful.” *United States v. Catlett*, 747 F.2d 1102, 1105 (6th Cir. 1984); *see also, e.g., Pirie*, 201 F. Supp. 2d 113 (enjoining military training exercises). In addition, under Section 712 of the MBTA, the Service is also expressly authorized to issue implementing regulations related to the four international migratory bird treaties into which the U.S. has entered. 16 U.S.C. § 712(2).

Courts have held that the Service’s permitting authority is “greatly flexible,” *Fund for Animals v. Norton*, 365 F. Supp. 2d at 419, and should be “construed liberally.” *Bailey v. Holland*, 126 F.2d 317, 322 (4th Cir. 1942). Moreover, in at least one instance Courts have already approved a Service regulation aimed at avoiding and minimizing incidental take under Section 704 of the MBTA. *Nat’l Rifle Ass’n of Am. v. Kleppe*, 425 F. Supp. 1101 (D.D.C. 1976), *affirmed sub nom Nat’l Rifle Ass’n of Am. v. Andrus*, 571 F.2d 674 (D.C. Cir. 1978) (upholding regulations requiring the use of steel shot in 12-gauge or larger shotguns for hunting).

Similarly, Congress has recognized the Service’s inherent authority to develop regulations permitting take of migratory birds. In the National Defense Authorization Act of FY 2003 Congress directed the Secretary of the Interior to “*exercise the authority* of that Secretary under [Section 704(a) of the MBTA] to prescribe regulations to exempt the Armed Forces for the incidental taking of migratory birds during military readiness activities[.]” Pub. L. No. 107-314, § 315, 116 Stat 2458 (Dec. 2, 2002). (emphasis added). The Act clearly indicates that Congress did not bestow new authority on the Service to regulate incidental take, but directed it to exercise its existing authority under the MBTA to allow incidental take by the Armed Forces.

In summary, there should be no doubt that the Service has the authority to establish permitting regulations for particular activities that are otherwise legitimate but that have adverse impacts on migratory birds. Although the MBTA does not expressly contemplate the issuance of “incidental take permits” the broad language of Sections 703 and 704 of the statute gives the Service ample authority to develop a permitting program for activities that impact migratory birds.

The Need for a MBTA Permitting Program

Unlike the Endangered Species Act, the MBTA does not include an express provision for addressing incidental take of listed species nor does it have a citizen suit provision. Accordingly, the Service has the primary responsibility for ensuring compliance with the statute’s strict prohibitions. The Service has pursued industries such as resource and energy facilities, as well as individuals, for illegal take of migratory birds. *See, e.g., Moon Lake Electric Ass’n*, 45 F. Supp. 2d 1070 (prosecution of an electric company); *United States v. Stuarco Oil Co.*, 73-CR-129 (D. Colo. 1973) (prosecution of oil company for death of birds resulting from design of oil sump pits). Recently, the Service settled a case against Duke Energy for take of migratory birds at two wind farms. *See Duke Energy Renewables Reaches Agreement with Department of Justice Regarding Bird Mortalities at Two Wind Facilities*, *available at*

⁴ At present, the Service issues MBTA take permits for a range of activities such as import/export, scientific collecting, taxidermy, waterfowl sale and disposal, educational use, game bird propagation, salvage, falconry, raptor propagation, rehabilitation, control of depredating migratory birds, and special purpose activities. *See* FWS, Manual: Migratory Bird Permits, 724 FW 2 (Aug. 6, 2003).

<https://www.duke-energy.com/news/releases/2013112203.asp>. The Service also prosecuted PacificCorps for take of Golden Eagles and migratory birds at a wind project. *See* Utility Company Sentenced in Wyoming for Killing Protected Birds at Wind Projects, *available at* <http://www.justice.gov/opa/pr/utility-company-sentenced-wyoming-killing-protected-birds-wind-projects>.

The Service, of course, has significant discretion when it comes to bringing prosecution for violations of federal wildlife laws. Nonetheless, when an agency engages in a “pattern of nonenforcement of clear statutory language” this can amount to “an abdication of its statutory responsibilities” in violation of the Administrative Procedure Act (APA). *Heckler v. Chaney*, 470 U.S. 821, 833 n.4 (1985); *see also id.* at 839 (Brennan, J., concurring) (“It may be presumed that Congress does not intend administrative agencies, agents of Congress’ own creation, to ignore clear jurisdictional, regulatory, statutory, or constitutional commands[.]”). To the extent the Service does not enforce the MBTA against certain industries or practices, the Service itself may be in violation of the APA.

From a conservation standpoint, however, after-impact prosecution – while often necessary – only goes so far. Much more valuable are policies that protect migratory birds from adverse impacts in the first instance. The trinity of avoidance, minimization, and as a last resort, mitigation, is most effective up front before impacts to wildlife occur.

For many activities, including large-scale energy projects, siting is the most important determinant of impacts to migratory birds. A poor location decision can result in significant take of wildlife. If the Service’s only recourse is prosecution, many species will be lost before any action is taken to remedy the situation. What is more, if the Service cannot be counted on to enforce the MBTA against such projects, the statute’s conservation purpose is wholly frustrated.

A clearly defined permitting program will aid the Service in carrying out its statutory mandate to protect migratory birds while providing regulatory certainty to affected industries. It will require involvement of the Service early on when the agency can best provide its conservation expertise and will allow the Service to regulate the siting of projects and their impacts on migratory birds. This will force industries to operationalize conservation practices at the front end – from siting to design – when they are most important. A well-designed permit system will also create efficiencies for industry by removing regulatory uncertainty for developers and investors. Permit holders would have no risk of prosecution provided they comply with the terms of the permit. Further, it will discourage actors who fail to avoid, minimize or mitigate for the impacts of their activities from gaming the system and taking advantage of the Service’s limited prosecutorial resources.

A permitting mechanism that anticipates incidental take and works to ensure that projects are well-sited and impacts minimized and mitigated will further the purpose of the MBTA and the Service’s responsibility to conserve, protect, and enhance migratory birds.

Objectives of the Rulemaking

Having established that the Service has the legal authority to establish incidental take regulations for migratory birds, and that compelling conservation reasons exist for doing so, it is important to define the overall objectives and expectations for any permitting program. The overarching frame for this action must be the conservation, protection and enhancement of migratory birds covered under the MBTA. Absent this outcome, any “take” authorization is and should remain

inappropriate. This goal must be clearly articulated and accounted for throughout all decision documents.

To that end we specifically recommend that the “Purpose and Need” section of the Programmatic Environmental Impact Statement and all associated decision documents should reflect the MBTA’s principal goal of conserving migratory birds and explain how permit issuance prioritizes the conservation, protection and enhancement of migratory birds.

Defenders strongly believes that any permitting program must achieve migratory bird conservation by encouraging avoidance of impacts and adoption of minimization measures where such impacts are unavoidable. The program should also establish a regulatory mechanism for providing compensatory mitigation, including funding of habitat replacement, restoration, or, in certain circumstances, acquisition.

To benefit migratory birds and be maximally responsive to affected potential permittees, the program must also be workable. The Service must have the ability – including the financial and personnel resources – to effectively manage any new permitting regime. And it must have the authority and wherewithal to enforce permits and address substantive violations of the MBTA by permittees and non-permittees alike. Finally for the program to be effective, it also must provide appropriate regulatory certainty to permittees and affected industries.

Scope of Rulemaking

The Service must also define the scope of the permit program and provide a reasoned explanation of which industries and activities will require permits in the future. The NOI states that the permitting program “will focus on industries and activities that involve significant avian mortality and for which reasonable and effective measures to avoid or minimize take exist.” 80 Fed. Reg. at 30,034.

Given that the MBTA is a strict liability statute and potentially applies to a myriad of activities, Defenders understands the Service’s desire to limit the application of a permitting regime to the activities that are most likely to impact migratory birds and for which effective conservation practices exist. Nonetheless, Defenders does not believe that any industry should necessarily be given a “pass.” The permit system should be broad enough to cover a wide range of activities that impact migratory birds. Any exceptions must be consistent with the Service’s obligations and authorities under the statute.

Four Potential Approaches

The NOI lays out four potential approaches for authorizing incidental take: (1) General Permits; (2) individual permits, (3) MOUs with federal agencies, and (4) voluntary guidance. We will address each in turn.

As an initial matter, however, Defenders is concerned that the Service appears to be focusing entirely on operational measures rather than issuing specific take limits and tracking actual mortality of birds. During the scoping sessions, Service personnel indicated that they intended potential MBTA permits to take a different approach than with Endangered Species Act (ESA) and Bald and Golden Eagle Protection Act (BGEPA) permits in that they may not contain any species specific take limits. Although we understand that permitting under the MBTA, because it covers so many

species, may pose different challenges we strongly believe that any permitting program must include robust mortality monitoring requirements.

Effective monitoring is important to ensure compliance with the permit and with best management practices. But it is also critical that the Service obtain better avian impact and mortality data to assess effectiveness of best management practices (BMPs) and improve them over time via adaptive management. We recommend incorporating a strategy for adaptive management to learn more about migratory bird populations and build off existing BMPs.

Moreover, avoidance and minimization measures must incorporate siting concerns, not just operational issues. We place extreme importance on continuing to incorporate sound, smart from the start planning and siting prior to addressing the standard for and requirements stemming from the actual “take” of the species.⁵

1. General Permits

Under the NOI, the Service has proposed issuing general permits for industries that are 1) known to incidentally take birds; 2) where the Service has substantial knowledge to prevent or reduce bird deaths; and 3) where the Service has a history of working with the industry sector to address associated hazards to birds by issuing guidance and reviewing projects at the field level or by engaging in collaborative efforts to establish BMPs. 80 Fed. Reg. at 30,035. The Service has further identified four industries that it feels meet these criteria: 1) oil, gas, and wastewater disposal pits; 2) methane or other gas burner pipes at oil production sites; 3) communications towers; and 4) transmission distribution. *Id.*

We do not believe this is an appropriate standard for issuing general permits. For one, the Service’s history of past engagement with certain industries should not set the boundary for future engagement with other industries that impact migratory birds. Even under the Service’s proposed standard, however, we believe the Service’s list of potentially affected industries is too narrow. For example, the Service has a history of working with wind companies with respect to the land-based Wind Energy Guidelines and BGEPA permitting. The Service should consider adding any industry that is known to incidentally take significant numbers of migratory birds. The Service will need to consider meaningful criteria – such as siting/avoidance, operational/minimization practices, and impacts – for including (or excluding) certain industries from eligibility for general permits. We note that there are numerous examples of other Federal agencies, States and organizations with policy documents and guidance to reduce a variety of threats to migratory birds, including but not limited to transportation projects, buildings, pipelines, and mining operations.⁶ We urge the Service to examine these guidance documents to develop robust criteria.

⁵ For example, the Service recognizes the importance of siting through existing guidance documents, including its interim guidance on siting, construction, operation and decommissioning of communication towers (FWS 2015); *see also* USFWS Land-Based Wind Energy Guidelines (2012); Suggested Practices for Avian Protection on Power Lines, prepared for the Avian Power Line Interaction Committee (2006).

⁶ *See* Federal Highway Administration Best Management Practices for Sustainable Road Design and Construction; BLM Instructional Memorandum 2013-033 on Fluid Minerals Operations-Reducing Preventable Causes of Direct Wildlife Mortality; FWS Arkansas Best Management Practices for Fayetteville Shale and Natural Gas Activities (includes reduction of noise activities during nesting

We are concerned that the Service appears to be limiting permitting to only some hazards from large infrastructure projects that have a variety of impacts to migratory birds. At this time, we do not see a principled basis for limiting general permits to a subset of industries or hazards created by those industries. We note that Federal and State agencies often require large infrastructure projects to reduce migratory bird take through a number of actions, including, fencing, noise reduction and using anti-perching devices.⁷ As mentioned previously, to the extent the Service does not enforce the MBTA against certain industries or practices the Service itself may be in violation of the APA.

2. Individual Permits

The Service needs to give additional thought to eligibility for individual permits. The NOI states only that the Service “will focus on industries and activities that involve significant avian mortality and for which reasonable and effective measures to avoid or minimize take exist.” 80 Fed. Reg. at 30,034. The Service must explain how it will evaluate what are “reasonable and effective measures.” As noted previously, there are several federal and state agencies, and other entities that have put forth practices intended to reduce avian mortality. Given the Service’s obligations to conserve, protect, and enhance migratory birds, the Service must be able to explain why certain measures will be adopted for an individual permit versus a programmatic permit, should the Service make both types of permits available.

The Service further indicates that individual permits will be available for projects that require Section 10 or Section 7 permits under the ESA. Availability of individual permits, however, should not be limited to projects with ESA implications, but should be available whenever the specific impacts of a project require a tailored permit with specific take authorizations and conservation requirements. It is not clear why overlap with ESA or BGEPA should be a factor at all in determining whether to issue an individual permit.

In addition, should the Service decide to develop an individual permitting process, the Service must commit the requisite resources to effectively manage such a process over the long term. This includes appropriate training of staff, monitoring and oversight. The conservation benefit to be gained through a permitting program will be undermined if the Service lacks the resources to review, issue, monitor, and provide effective oversight of individual permits.

3. MOUs With Federal Agencies

The Service has also proposed relying on memoranda of understanding (MOUs) with federal agencies that permit activities likely to impact migratory birds. We oppose this approach.

Executive Order 13,186 directs the Service to develop MOUs with all federal agencies that authorize activities that impact migratory birds. 66 Fed. Reg. 3853 (Jan. 17, 2001). Although the Service has negotiated some agreements with federal agencies, it has failed to complete agreements with others, including the Environmental Protection Agency (EPA). The Service’s failure with respect to the EPA is particularly baffling given that the Service pledged to complete an MOU in a consent decree

seasons); New Mexico Game and Fish Habitat Guidelines for Mine Operations and Reclamation; Florida Department of Environmental Protection Best Management Practices for the Enhancement of Environmental Quality of Florida Golf Courses; Leadership in Energy & Environmental Design certification credits for deterring bird collisions.

⁷ *See id.*

with our organization more than five years ago in a case in which EPA authorization of rodenticides was taking eagles, hawks, and other migratory birds. *Defenders of Wildlife v. EPA*, CV 09-1814, 2011 U.S. Dist. LEXIS 62461 (D.D.C., June 14, 2011). In February 2014, EPA announced an opportunity for public comment on a draft MOU, with an intention that the MOU would be signed by April 2014. Defenders submitted comments detailing a number of serious flaws in the document. In particular Defenders expressed concern that the MOU was “riddled with ambiguous and vacuous phrasing” and that “the nebulous language of this MOU completely negates the intent of EO 13,186 which calls for a strong interagency collaboration to address the negative effects of rodenticides to migratory birds.” Comments of Defenders of Wildlife, EPA-HQ-OPP-2013-0744, March 7, 2014, available at www.regulations.gov. EPA and the Service have taken no further action. To date, fourteen years since the signing of the Executive Order – and four years since the consent decree – EPA and the Service have not finalized an MOU.

This experience does not give us confidence that the Service and its sister agencies will be able to negotiate cooperative agreements that will conserve migratory birds sufficiently to comply with the MBTA and Executive Order 13,186.

But the Service is not merely suggesting that it complete MOUs with other agencies to encourage conservation of migratory birds. That overdue task should be completed irrespective of any process to authorize incidental take. Rather, in the NOI, the Service is proposing to expand existing MOUs and complete others in a way that could insulate those agencies from MBTA liability for their own activities. Moreover, the Service suggests it will consider whether MOUs with Federal agencies “might provide appropriate vehicles for authorizing take by third parties regulated by those agencies.” 80 Fed. Reg. at 30,035.

We strongly disagree that the Service has the legal authority to delegate to other federal agencies the ability to authorize take pursuant to the MBTA. Enforcement of the MBTA is a Service responsibility. The Service has expertise in ESA, BGEPA, and MBTA issues that most other agencies lack. Issuance of permits or determinations of liability should be made by the Service. Past efforts by the Service to delegate ESA consultation and permitting responsibilities for wildlife protection to other agencies has not fared well in the courts. *See, e.g., Defenders of Wildlife v. Salazar*, 842 F. Supp. 2d 181 (D.D.C. 2012) (striking down Joint Counterpart Consultation Regulations for National Fire Plan Projects); *Washington Toxics Coal. v. U.S. Dep’t of Interior*, 457 F. Supp. 2d 1158 (W.D. Wash. 2006) (striking down joint EPA/FWS/NMFS counterpart regulations for approval of pesticides). Attempts to delegate the Service’s MBTA permitting authority will likely be met with similar legal challenges.

4. Voluntary Guidance

This appears to be the “no action” alternative. We note that many of the voluntary programs established in recent years were created when the Service declined to exercise its regulatory authority under the MBTA. As noted above, we believe the Service has the legal authority to create an incidental take permitting program under the MBTA. We believe such a program is the most effective way to fulfil the intent of the MBTA and ensure the conservation of migratory birds. To the extent the Service continues to utilize voluntary conservation agreements, the Service should commit to a schedule for working with other industries to develop approved best management practices, including smart from the start siting principles.

Ensuring an Effective Permitting Program

The concerns and recommendations described below center on the need for a legally sound, scientifically credible, and workable framework for authorizing take of migratory birds under the MBTA. Our general recommendations are as follows:

1. Use a regional conservation strategy or framework

Permit decisions should be guided by a multi-scaled, ecologically-based approach. Such an approach provides the foundation for developing and monitoring population goals, objectives; and is relevant for defining compensatory mitigation service areas (i.e., the geographic area within which compensatory mitigation can occur to offset impacts from a particular project). This approach is consistent with the Department's Strategy for Improving the Mitigation Policies and Practices of the Department of the Interior (DOI Mitigation Strategy Report) and Secretarial Order 3330. Key characteristics of such an approach include:

- Applicable at a variety of spatial scales (e.g., local populations, migratory flyways);
- Developed through a standardized approach that is based on the best available science and incorporates the appropriate level of uncertainty and risk;
- Refined periodically based on monitoring and population status and trends;
- Developed within a collaborative, peer-reviewed process; and
- Representative of population parameters, such as sex or age ratios, genetic characteristics, etc.
- A standardized research and monitoring framework.

Specifically, research and monitoring efforts should be developed to:

- Collect regional baseline population data;
- Evaluate trends in population status;
- Understand risk factors for take and improve risk assessment methodologies;
- Identify and quantify threats to regional populations and the opportunities to reduce threats through compensatory mitigation;
- Refine avoidance strategies;
- Identify and assess the effectiveness of Best Management Practices; and
- Identify and assess the effectiveness of compensatory mitigation measures.

Consistent with Secretarial Order 3330 and the above elements, we recommend that the Service develop a regional conservation strategy to inform permitting and mitigation decisions. We note that Migratory Bird Joint Ventures provide the structure for much of the information referenced above

and we urge incorporation of the Joint Venture's Strategic Habitat Conservation framework into any permitting program that the Service develops.

2. Ensure transparent and electronic reporting

The Service should require that all monitoring data be submitted electronically to a publically available database. Federal agencies are moving towards electronic reporting as evidenced by the Environmental Protection Agency's (EPA) "Next Generation Compliance" initiative. The EPA has identified several important benefits of publicly available electronic reporting, some of which may also be applicable for the Service's MBTA permitting program. These benefits may include:

- Simplifying data aggregation and analysis for the Service, states, local governments and other researchers;
- Improving transparency, which will in turn reduce misinformation and mistrust within communities;
- Incentivizing responsible development and operation, which could result in reduced migratory bird take;
- Leveraging Service compliance and enforcement resources by facilitating "citizen" oversight; and
- Encouraging the development of innovative GIS monitoring tools.

3. Permit Duration

When evaluating permit applications, the Service must ensure that it can justify all permit terms and conditions based on regional conservation goals, best available science, the duration of the take to migratory birds, and the effectiveness of mitigation, including avoidance, minimization and compensatory mitigation measures. The Service must approach permit duration cautiously and retain its discretion to decline to issue a permit, revoke a permit, or issue a permit for a reduced length of time.

4. Mitigation

Use a regional conservation strategy or plan to inform mitigation: Mitigation actions should be guided by a regional conservation strategy as described above and should target the highest priority conservation actions based on specific regional threats. It is essential that compensatory mitigation actions occur where they are likely to provide the greatest benefit to local and regional migratory bird populations and reduce the greatest threats to be effective. Compensatory mitigation projects must be implemented at the appropriate scale to avoid the creation of population sinks.

We recommend that the Service use a regional mitigation strategy. As noted previously, the Migratory Bird Joint Ventures may provide a framework for such a strategy.

Mitigation Hierarchy/Avoidance: Compensatory mitigation is only appropriate for unavoidable impacts, and the preservation benefits of avoidance and minimization are more assuredly matched to the take threats at a site than are compensatory mitigation measures. We place extreme importance

on continuing to incorporate sound, smart from the start planning and siting prior to addressing the standard for and requirements stemming from the actual “take” of the species.

A permitting program should emphasize and incentivize avoidance and minimization measures, including siting, development, and operational practices that have the cumulative effect of reducing migratory bird take. This can be done through clear standards and guidelines for avoidance/minimization requirements. Compensatory mitigation requirements should also incorporate market-based incentives such as dis-incentivizing development in important migratory bird use areas and other high-risk areas through increased scrutiny and higher costs. Similarly, the Service should also incentivize development in the right places through streamlined permitting and regulatory certainty.

5. Compensatory Mitigation

The Service should identify a clear and consistent framework for compensatory mitigation that identifies key principles and elements to provide clarity for applicants and ensure that conservation objectives are met.

Mitigation Standard: We stress that the Service must require compensatory mitigation that at a minimum fully offsets take for MBTA species. For certain populations that require increases in numbers to achieve population objectives, the Service should require that compensatory mitigation achieve a net conservation benefit. Furthermore, even where populations are achieving population objectives, the Service should aspire to a net benefit standard for all compensatory mitigation and impose higher scrutiny on permits/projects that only aim to achieve no net loss.

While there is room for flexibility, instituting minimum standards for sound compensatory mitigation is not equivalent to minimal restrictions on the selection of requirements or the use of general mitigation funds. We strongly suggest the Service clearly identify standard elements and principles for compensatory mitigation as outlined below.

Duration (time-lag to success): The desired conservation outcomes from compensatory mitigation should be achieved within a timeframe commensurate with predicted impacts to be offset. Given that the Service cannot predict when take will occur, benefits of proposed compensatory mitigation actions should accrue as early in the life of the project as possible.

Effectiveness (probability of success): Compensatory mitigation actions should be proven to be likely to deliver expected conservation benefits. While research is incredibly important for migratory bird conservation, it should not be considered as an appropriate action for compensatory mitigation as it does not offset actual impacts to migratory birds.

Measurability: Compensatory mitigation should be based on biological conditions and upon reliable, repeatable, and quantitative science-based methods to measure benefits.

Additionality: Actions proposed as compensatory mitigation should provide benefits beyond those that would be achieved if the mitigation actions had not taken place. The Service must also provide evidence that the mitigation does more than require permittees to complete actions that a third party is otherwise legally required to complete under federal, state, or local law.

Durability: Compensatory mitigation needs to be durable. This means that the length of time that the measurable benefits of compensatory mitigation persist should meet or exceed the length of time

of the projected impacts. Duration includes the time extent of the direct, indirect, and cumulative effects of an impact as well as the time period of an impact site to be fully restored. In addition, compensatory mitigation related to habitat preservation, restoration, enhancement, etc. is not effective if it occurs in areas impacted by a development project (i.e. on site), where future development is likely to occur, or in areas where benefits are likely to be reduced over time by incompatible land-uses. It is important that compensatory mitigation programs clearly define how durability will be addressed. Lastly, the Service should require sufficient financial assurances connected to each compensatory mitigation project to ensure a high level of confidence that the compensatory mitigation will be successfully completed.

Adaptive Management: Verification, monitoring and adaptive management are important components of compensatory mitigation to ensure success. The Service should establish a standardized process for reporting and monitoring of compensatory mitigation actions to ensure compliance and the delivery of migratory bird benefits. The Service should also establish clear thresholds to trigger future adjustments to compensatory mitigation projects based on monitoring data and project objectives. Unfortunately, too often federal agencies proclaim their commitment to adaptive management but then fail to either monitor actual results or exercise and impose tougher management and regulatory controls if their original impact assumptions turn out to be false. The Service needs to avoid both of these unacceptable results.

In sum, consistent with the above descriptions, the Service should clearly identify standard elements and principles for compensatory mitigation. For certain populations that require increases in numbers to achieve population objectives, the Service should require that compensatory mitigation achieve a net conservation benefit. Even where populations are achieving population objectives, the Service should aspire to a net benefit standard for all compensatory mitigation and impose higher scrutiny on projects that only aim to achieve no net loss.

Conclusion

Thank you for your thorough consideration of these comments. If you have any questions, please contact Julie Falkner at jfalkner@defenders.org or Jason Rylander at jrylander@defenders.org.

Sincerely,

A handwritten signature in black ink, appearing to read 'JR Clark', with a long horizontal line extending to the right.

Jamie Rappaport Clark
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July 27, 2015

Attention: Public Comments Processing
FWS-HQ-MB-2014-0067;
Division of Policy and Directives Management
U.S. Fish and Wildlife Service
5275 Leesburg Pike, MS-PPM,
Falls Church, VA 22041-3803

Dear Michael Bean:

Thank you for the opportunity to comment on the U.S. Fish and Wildlife Service's stated intent to prepare a programmatic environmental impact statement to evaluate the potential environmental impacts of a proposal to authorize incidental take of migratory birds under the Migratory Bird Treaty Act (MBTA). Such a rulemaking is a significant undertaking that will require extensive analysis and careful assessment to balance the need for conservation of migratory bird populations and the need for transparent, effective, efficient, and most of all, reasonable regulation of human activities and development.

Ducks Unlimited (DU) was founded in 1937 by concerned and farsighted sportsmen conservationists. Our mission is to conserve, restore, and manage wetlands and associated habitats for North America's waterfowl, and for the benefits these resources provide other wildlife and the people who enjoy and value them. DU has grown from a handful of people to an organization of over 1,000,000 supporters who now make up the largest wetlands and waterfowl conservation organization in the world. With our many private and public partners we have conserved more than 13.4 million acres of habitat for waterfowl and associated wildlife in the U.S., Canada, and Mexico.

A regulatory regime that provides clarity and certainty to the public is long overdue and Ducks Unlimited commends the U.S. Fish and Wildlife Service for this effort. In the absence of some clear legal guidance from the language and legal history of the MBTA, interpretation of the "take" provision has, by default, fallen to the judgment of the law enforcement officials, U.S. Attorney's Offices, and ultimately judges. This is a far cry from the goal of good government to be transparent and have regulations well-understood by an accepting public who seeks to comply with them. Frankly, it is irresponsible for such an important and fundamental environmental law to continue to be implemented in this fashion. We place no blame on any party relative to the current situation, but we recognize there must be a better way to use and implement this law in the 21st century. The world has evolved greatly since the days when this law was first signed into law in 1918, yet the law has not kept pace with the industrial and social developments over the past 97 years. The regulated public and the migratory bird populations deserve better; and taking steps to use the public process to establish criteria and promulgate reasonable regulation to authorize incidental take is critical and is to be commended. In the absence of such reasonable regulation, individuals and companies will continue to be left without a clear understanding of the prosecutorial risks associated with a multitude of activities and developments. Ducks

Unlimited believes the focus of the criteria used should be the activity's or development's impacts at a population level. While individual birds have and will continue to be "taken" by human activities, it is unreasonable to consider the MBTA as a law that prevents every unintended and incidental "taking" of a migratory bird. By forgoing prosecutions of technical violations of the law, the Federal government and the judicial system have recognized that for decades. It will be very important that decisions in these regulations be based upon good scientific information and sound biological monitoring systems. The challenge in moving forward is to make sure that such monitoring systems stay strong and current to provide the best data possible to making important decisions about impacts at the population level.

The Notice of Intent invited comments on some particular aspects. Below are responses to many, but not all, of the considerations:

1. The approaches we are considering for authorizing incidental take;

It seems appropriate to focus the most oversight on those activities and developments that have the highest potential to have cumulative impacts at the population level. In doing so, many activities can be effectively excluded from regulatory oversight, and general conditional authorizations for incidental take of some sectors can be used where good standards exist. Focus should be placed on recognizing that when these best management practices and monitoring are deployed, the entity would be authorized to "take" species that are covered under the MBTA. Work should continue to include establishing and refining reasonable best management practices to keep pace with technology. The use of individual permits should be minimized due to the agency capacity and workload, as well as potential for unreasonable burdens on the regulated community, and only used for those activities that have a high potential to have population impacts and are not covered by a general authorization. The use of memoranda of understanding (MOU) for Federal agencies seems to be a reasonable approach and those MOU's should include the best management practices established for the activities. Critically important to all of these approaches is the use of adaptive management to continually establish objectives, monitor effects and make adjustments as information emerges. Good monitoring programs at various scales (continentally, regionally, and locally) will be necessary to inform decisions on conditions and mitigation needed.

2. The specific types of hazards to birds associated with particular industry sectors that could be covered under general permits;

Recent scientific studies have suggested that there are a number of activities and sectors that "take" a disproportionately high number of birds. Those are the activities and sectors that ought to be the focus of the effort particularly related to the taking of species of conservation concern. Priority and vulnerable species should be considered in the development of the conditions and use of general permits.

3. Potential approaches to mitigate and compensate for the take of migratory birds;

Mitigation efforts should center on reducing or minimizing impacts first through improved project design, timing, etc. and then as necessary compensating for the effects on bird populations with long term strategies that improve habitat.

4. Other approaches, or combination of approaches, we should consider with respect to the regulation and authorization of incidental take;

A combination of tools described in the NOI would seem appropriate in addressing the broad issues associated with incidental take, including but not limited to broad categorical exclusions, general conditional permits, individual permits as necessary, and MOU's.

5. Specific requirements for the NEPA analyses related to these actions;

The analyses should be scientifically sound and driven by the potential for population impacts relative to incidental take. There should be good use of existing data and current understanding of populations, while identifying gaps in data that would be important to resolve. The analyses should include the adequacy of current monitoring programs.

6. Whether the actions we consider should distinguish between existing and new industry facilities and activities;

There is a practical side to the development of such regulations. Specifically, it would be reasonable to assume that where best management practices can be incorporated into conditions those should address new facilities. There should be some consideration given to permitting existing facilities based upon reasonable efforts to retrofit facilities. The costs of such retrofitting must be taken into consideration and opportunities for mitigation provided.

7. Considerations for evaluating the significance of impacts to migratory birds and to other affected resources, such as cultural resources;

It would seem reasonable that some level of taking is to be expected given the activity/industry/facility, and the critical question to answer is, "What is the population impact of the activity/industry/facility and at what scale?" Population impacts for some species (species of conservation concern) may be significant at a local or state-wide scale, while others won't be significant until those impacts can be measured on a broader scale.

10. The benefits provided by current Federal programs to conserve migratory birds and the additional benefits that would be provided by a program to authorize incidental take;

The administration of the MBTA has brought much conservation and scientific information to management over the decades. Species have responded positively to cooperative management practices and regulation of takings. As this new program is implemented, it is critical that regulators continually test the hypothesis that there is a conservation benefit to this new regulatory framework. The success of the program will be measured based upon the additional clarity/certainty provided to the regulated public and the conservation benefit realized by the resource. The goal should include benefitting bird populations and habitat as a direct result of this increased administrative burden. Additionally, the new program should point us in the direction of new and improved monitoring programs to ensure the goals are realized. We should expect to see measurable improvements in some populations that previously had been affected by the activities/facilities under scrutiny under this program.

11. The potential costs to comply with the actions under consideration, including those borne by the Federal government and private sectors;

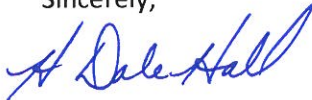
There should be some shared responsibility in bearing the costs of this new program. There is some basic scientific and population monitoring capability that is a fundamental responsibility of the Federal government. Those programs form the basis for good decision-making on behalf of the public.

15. How to integrate existing guidance and plans, such as Avian Protection Plans, into the proposed regulatory framework;

Avian Protection Plans and similar instruments should help inform the conditions by which a permit (general or individual) are issued.

We appreciate the opportunity to comment on the Notice of Intent and look forward to participating in future steps in the process.

Sincerely,



H. Dale Hall
Chief Executive Officer



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July 27, 2015

Public Comments Processing
Attention: FWS-HQ-MB-2014-0067
Division of Policy and Directives Management
U.S. Fish and Wildlife Service
5275 Leesburg Pike, MS-PPM
Falls Church, VA 22041-3803

Submitted via regulations.gov

Subject: **Scoping Comments on the Migratory Bird Permits; Programmatic
Environmental Impact Statement [Docket No. FWS-HQ-MB-2014-0067]**

To Whom It May Concern:

Please find below our timely comments on the Fish and Wildlife Service's Notice of Intent: Migratory Bird Permits; Programmatic Environmental Impact Statement on incidental take permits under the Migratory Bird Treaty Act [Docket No. FWS-HQ-MB-2014-0067; FF09M29000-156-FXMB1232090BPP0]. 80 Fed. Reg. 30032 (May 26, 2015). The deadline for comments is July 27, 2015.

We appreciate the opportunity to comment on the future of migratory bird regulation. The Conservation Law Center (CLC) is a not-for-profit public interest law firm located in Bloomington, Indiana, and operates the Conservation Law Clinic under an agreement with Indiana University Maurer School of Law. The CLC represents non-profit environmental organizations and governmental entities in conservation matters and works to improve conservation law and policy.

The Migratory Bird Treaty Act (MBTA) is one of our country's oldest conservation laws. Designed to halt the destruction of bird species, the Act makes it unlawful to "pursue, hunt, take, capture, kill, attempt to take, capture, or kill" a bird listed under the act. 16 U.S.C. § 703(a). Despite this strong statutory mandate, the MBTA's history of enforcement is spotty. FWS has primarily relied on voluntary guidelines to reduce and offset the incidental take of migratory birds. This approach has left migratory birds without meaningful protection and creates significant regulatory uncertainties for industries that kill protected birds.

We support the creation of a permitting program for the incidental take of birds protected under the Migratory Bird Treaty Act. A properly designed ITP program can further opportunities for migratory bird conservation and increase the use of avoidance, minimization, and mitigation measures to protect birds. General incidental take permits can establish feasible take reduction and offsetting measures in industries where the science shows that a proven solution to bird take exists. Individual permits will provide essential protections for birds from industries that



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currently lack known bird-safe measures or where these measures are so varied as to require individualized attention. If properly designed and enforced, an ITP program can provide crucial for protections for birds.

We divide our comments into three sections. The first section discusses the features an effective ITP program should have to protect migratory birds. The second section examines the need for individual permits for wind energy facilities given the varied reasons for bird collision and various ways to avoid it through avoidance, minimization, and mitigation measures. The last section urges the Service to develop a general permit for the incidental take of migratory birds by ponds containing coal combustion or mining waste in light of the known danger to migratory birds that these ponds pose.

PART I: INCIDENTAL TAKE PERMIT DESIGN COMMENTS

Comment I.1: FWS should follow its mitigation sequencing policy when designing ITPs to ensure that migratory birds experience the lowest feasible levels of incidental take.

To rephrase a common aphorism, a bird in the wild is worth two in the mitigation bank. Compensatory mitigation is inherently uncertain and does not always offset a project's incidental take. Accordingly, FWS established a mitigation hierarchy that requires applicants to avoid, then minimize, and finally perform compensatory mitigation for impacts.¹ In designing authorizations for the incidental take of migratory birds, FWS should require applicants to comply with this mitigation hierarchy. The regulations should ensure that applicants reduce take under each stage of the hierarchy to the maximum extent practicable before moving on to the next stage of mitigation. For example, an individual must avoid and minimize bird take to the maximum extent practicable before the FWS can authorize the use of compensatory mitigation.

Comment I.2: FWS should make the take of individual birds the focus of permitting.

FWS should ensure that every individual migratory bird is protected under an ITP program to minimize the take of these protected species rather than focusing on population-level effects. FWS regulations allow the Armed Forces to take birds incidental to military readiness activities without any minimization or mitigation measures unless the activity “may result in a significant adverse effect on a population of a migratory bird species.”² Likewise, FWS has granted some permits under the Endangered Species Act when the applicant demonstrated her project would cause insignificant population-level effects, instead of minimizing and mitigating the take of listed species to the maximum extent practicable.³ These practices allow the take of

¹ 46 Fed. Reg. 7656 (Jan. 23, 1981).

² 50 C.F.R. § 21.15(a)(1).

³ See, e.g., *Union Neighbors United, Inc. v. Jewell*, __ F.Supp.3d __, 2015 WL 1285741 (D.D.C. Mar. 18, 2015), *appeal docketed*, No. 15-5147 (D.C. Cir. May 27, 2015) (FWS issued permit allowing wind energy facility to take endangered Indiana bats when it concluded the project would have insignificant effects on the bat's population).

protected birds that could be practicably avoided and increase the risks to protected species. If an applicant can feasibly avoid, minimize, or mitigate the take of an individual bird, FWS should not issue a permit until the applicant implements the feasible bird-safe measure. Any ITP program under the MBTA should reflect that the law prohibits the take of an individual bird.

Gauging the effectiveness of mitigation measures on an individual bird basis, instead of using a population effects analysis, provides more certainty that cumulative effects will be avoided. If FWS based a project's compliance with the MBTA on whether a project would result in significant population-level effects, many individually insignificant projects could quickly have significant cumulative effects on bird populations. Ensuring that the applicant has reduced and offset the take of individual birds to the maximum extent practicable ensures that the fewest birds are impacted by a project, reducing the likelihood that cumulative effects could occur. Population-level analysis should remain an important part of the permitting process to determine whether an individual project would be too damaging even after implementation of minimization and mitigation measures, but the absence of population-level effects should not serve as a threshold below which the agency will not regulate.

Comment I.3: FWS should allow a maximum of five year permit terms for individual permits.

FWS should avoid issuing individual permits with long permit terms. Long permit terms lock in minimization and mitigation measures that could grow obsolete. Creating shorter permit terms and allowing projects to apply for permit renewals would let FWS ensure that projects continue to employ the best available and feasible take reduction and offset strategies. General permits for industries with known bird safe measures can likely have longer permit terms because established mitigation measures are less likely to change. For example, a fifteen year

permit term for a wastewater disposal site could likely be justified by requiring applicants to fence and net the site to prevent migratory birds from gaining access.

Adaptive management is unlikely to reflect improvements in take reduction and offset measures over the life of a project. Adaptive management plans are designed when the permit is issued. Plans generally impose stricter mitigation measures when a project causes more take than expected or relax those measures if the project takes fewer protected individuals. Thus, adaptive management is usually unable to impose stricter take reduction or offset measures if a project causes the permitted amount of take. But technological developments that could not have been anticipated when the permit was first issued may dramatically decrease the take from a project at little to no cost. FWS should ensure that novel minimization and mitigation measures are used at as many projects as possible by creating shorter permit terms.

Comment I.4: FWS should require incidental take permits for habitat destruction that directly takes a migratory bird.

Killing or wounding migratory birds and eggs by felling trees, filling wetlands, and other habitat modification falls under the MBTA's definition of "take" when it directly takes a listed bird or egg.⁴ FWS should examine whether seasonal restrictions on migratory bird nesting habitat destruction could reduce the direct take of migratory bird species. Limiting logging or restricting the dredging and filling of wetlands to times when birds are not nesting could avoid the direct take of tens of thousands of migratory birds.⁵

⁴ See *Sierra Club v. Martin*, 933 F.Supp. 1559 (N.D. Ga. 1996) (holding that timber cutting during nesting season that would directly kill migratory birds violated MBTA) *rev'd on other grounds*, 110 F.3d 1551 (11th Cir. 1997).

⁵ See *id.* (estimating that logging during nesting season would directly kill 2,000–9,000 migratory birds); Steven L. Van Wilgenburg, *Estimated Avian Nest Loss Associated with Oil and Gas Exploration and Extraction in the Western Canadian Sedimentary Basin*, 8 *Avian Conservation and Ecology* 2 141–158 (2013) (estimating that the destruction of nests by oil and gas exploration and extraction caused a loss of 10,000–40,000 potential recruits into the migratory bird population).

Comment I.5: FWS should not authorize take by federal agencies or private individuals regulated by other federal agencies through memoranda of understanding.

FWS is considering authorizing incidental take by federal agencies using memoranda of understanding (MOUs). Although MOUs would reduce FWS' regulatory burden, they would not provide sufficient protections for migratory birds in most instances. MOUs for specific activities by federal agencies may be proper if those activities have well-known causes of take and well-established strategies to avoid, minimize, and mitigate that take. If FWS does decide to authorize take of migratory birds by federal agencies using MOUs, that general authorization should not extend to States or private individuals seeking permits from federal agencies operating under MOUs.

Executive Order 13186 directed federal agencies whose actions negatively affect migratory birds to develop MOUs that promote migratory bird conservation, but that executive order never contemplated authorizing the take of migratory birds via MOUs.⁶ The executive order specifically notes that the MBTA and the international conventions it incorporates impose substantive obligations on federal agencies.⁷

An MOU that authorizes take operates like a watered-down general permit and should be treated as such. Presumably, an MOU would outline requirements and actions federal agencies must take to avoid, minimize, and mitigate the take of migratory birds and instruct federal agencies to take migratory birds into consideration when planning projects. As FWS has recognized in the general permitting context, such a system is effective at protecting birds only when there are known bird hazards from an activity and proven bird-safe measures to reduce or

⁶ Exec. Order No. 13,186, 66 Fed. Reg. 3853 (Jan. 10, 2001).

⁷ *Id.*

offset that hazard.⁸ However, MOUs are less enforceable than individual or general permits and could have greater monitoring and reporting difficulties. It is also unclear what oversight and recourse FWS would have against other federal agencies if the authorized take became excessive. Because MOUs offer fewer protections than general permits, FWS should consider using MOUs only when the causes of take and measures to avoid, minimize, and mitigate take have been well-established.

If FWS does authorize take by federal agencies through MOUs, the agency should not allow private individuals or States to fall under that general take authorization. For example, if an individual seeks to fill a wetland and the project would kill birds, she should not be covered by an MOU authorizing incidental take by the U.S. Army Corps of Engineers. Likewise, the Army Corps should not be able to issue her a permit for the incidental take of migratory birds. Instead, the private individual should apply to FWS for a permit to incidentally take migratory birds. Only FWS has the expertise, experience, and statutory authority to permit the take of migratory birds.

Comment I.6: FWS should establish more protective compensatory mitigation ratios for birds of conservation concern to ensure imperiled species are protected.

The MBTA covers a wide range of migratory birds. Some birds, like resident Canada geese, have such high populations that FWS has authorized depredation permits to prevent birds from causing harm. Others, like the Whippoorwill, are likely to become candidates for listing under the ESA without additional conservation actions.⁹ An ITP program should take note of these differences and impose stronger compensatory mitigation ratios where necessary to

⁸ Charisa Morris, Branch Chief, Division of Migratory Bird Management, “Exploring Incidental Take of Migratory Birds Webinar” (July 8, 2015) available at <http://birdregs.org/process/meetings/> (stating that general permits would be issued only for industries with known causes of bird take and proven measures to reduce that take).

⁹ U.S. Fish and Wildlife Serv. Division of Migratory Bird Management, Birds of Conservation Concern 2008 (Dec. 2008).

account for vulnerable populations, birds with slow development and reproductive rates, and other circumstances where birds require additional protections. Regardless of the strength of the compensatory mitigation ratio, applicants should still avoid and minimize impacts to all birds covered by the MBTA to the maximum extent practicable.

SECTION II: FWS SHOULD CONSIDER ONLY INDIVIDUAL PERMITS FOR NEW AND EXISTING WIND ENERGY FACILITIES

Wind energy is surging in popularity as the nation searches for carbon-free sources of energy to avert climate change. Despite the common perception of wind energy as an environmentally-friendly energy source, wind turbines have significant impacts on migratory birds and other species. Studies estimate that wind farms cumulatively kill anywhere from 200,000–500,000 birds each year.¹⁰ This number is sure to grow as more wind facilities are constructed. FWS should play an active role in governing the public impacts of this industry by developing individual ITPs to ensure birds are protected.

Our comments on incidental take of birds by wind energy facilities focus on the need for individual, rather than general, permits. During the July 8, 2015 webinar on the proposed action, FWS staff stated that the agency would consider general permits for industrial sectors with known hazards to birds and proven operational measures to reduce take.¹¹ FWS has already recognized that collision risk to birds involves complex interactions among a wide variety of factors such as species distribution, behavior, weather conditions, and site characteristics.¹² Location of wind facilities is critical – some sites will have low impacts to birds and others will be very high. Operational measures to reduce take are highly variable and many remain

¹⁰ K. Shawn Smallwood, *Comparing Bird and Bat Fatality Rate Estimates Among North American Wind-Energy Projects*, 37 Wildlife Soc’y Bull. 1, 19–33 (Mar. 2013) (estimating over 500,000 annual bird deaths from wind turbines); Scott R. Loss, Tom Will, Peter P. Marra, *Estimates of Bird Collision Mortality at Wind Facilities in the Contiguous United States*, Biological Conservation 168, 201–209 (2013) (estimating over 200,000 bird deaths per year from wind turbines).

¹¹ Charisa Morris, *supra* note 9.

¹² U.S. Fish and Wildlife Serv., Land-Based Wind Energy Guidelines 22 (2012).

unproven. FWS should not consider issuing general permits for wind energy facilities in light of the highly variable risks to birds and lack of proven take reduction measures.

Individual permits for wind energy facilities will provide additional benefits for the future of migratory bird conservation. These benefits include greater sharing of information on impacts and take reduction strategies, an incentive for industry to develop more effective take reduction measures, and participation by the public in the management of migratory birds.

Comment II.1. The reasons for collision across bird species are so variable as to require an individual permit.

Although collision is the predominant cause of direct incidental take from wind turbines, the reasons for collision are highly variable across bird species. In this section we will briefly discuss some of the different ways bird species are exposed to collision. As part of its NEPA review, FWS should examine all the ways bird species are at risk of collision with wind turbines.

Nocturnal migratory birds are often attracted to or disoriented by lights on wind turbines. Birds may collide with the lit structure or face exhaustion or starvation as they fly near the lights instead of continuing on their migratory route.¹³

A bird's flight behavior influences its risk of collision. Large soaring birds rely on updrafts to gain altitude and lack the maneuverability to escape collision with turbines in their path.¹⁴ Kiting flight in strong winds and hovering behavior while hunting also increase the risk of collision.¹⁵ Birds engaged in aerial displays are also at heightened risk of collision because

¹³ Allan L. Drewitt and Rowena H.W. Langston, *Collision Effects of Wind-power Generators and Other Obstacles on Birds*, 1134 N.Y. Acad. Sci. 233–266, 234–235 (2008).

¹⁴ Ana Teresa Marques et al., *Understanding Bird Collisions at Wind Farms: An Updated Review on the Causes and Possible Mitigation Strategies*, 179 Biological Conservation 40–52, 41 (2014).

¹⁵ *Id.* at 44.

they are not paying as much attention to their surroundings.¹⁶ Lastly, birds fly at different altitudes, so different heights of wind turbines could affect different bird species.¹⁷

Poor weather increases the chances that birds will collide with wind turbines. During periods of low visibility such as rain or fog, birds are less able to distinguish and avoid turbines. Some birds fly lower during strong winds, placing them in the path of wind turbines.

Given the many factors that affect an individual bird's risk of colliding with wind turbines, a general permitting scheme is inappropriate. Different minimization measures are necessary to address the different factors contributing to collision. An individual permitting program will adequately encompass the variable risks to migratory birds and ensure that the incidental take of birds is minimized and mitigated to the maximum extent practicable.

Comment II.2: Siting is the most important measure to reduce the impact of wind farms, and the fact-specific nature of siting requires individual permits.

Properly siting wind turbines is the most important way to reduce a wind facility's impact to migratory birds. Studies have found that individual turbines in a wind farm have highly variable mortality rates, "suggesting that factors affecting the risk of collision are related to local conditions, such as small scale topographical features and wind patterns at individual wind turbines."¹⁸ Landforms such as ridges, steep slopes, valleys, shorelines, and peninsulas have been associated with increased collision risks at various sites.¹⁹ But these landforms may pose little risk at other sites depending on the bird species that are present. Although basic siting principles including avoidance of migration bottlenecks or breeding sites are generally applicable across all sites, the only way FWS can ensure that applicants avoid incidental take to the

¹⁶ For example, Sprague's Pipit (*Anthus spragueii*), a listed migratory bird, engages in lengthy aerial displays at 50 to over 100 meters above the ground, placing the bird at risk of collision with modern wind turbines. See Mark B Robbins, *Display Behavior of Male Sprague's Pipits*, 110 Wilson Bull. of Ornithology 435 (1998).

¹⁷ Marques, *supra* note 15, at 45.

¹⁸ Manuela de Lucas et al., *Griffon Vulture Mortality at Wind Farms in Southern Spain: Distribution of Fatalities and Active Mitigation Measures*, 174 Biological Conservation 184–89 (2012).

¹⁹ Marques *supra* note 15, at 44.

maximum extent practicable is through the rigorous exchange of information that accompanies an individual permitting process.

It is impossible to account for the unique characteristics of every proposed wind facility site across the country through a general permitting process where the permittee agrees to follow best management practices. For example, FWS' recent Land-Based Wind Energy Guidelines merely direct applicants to "avoid locating wind energy facilities in areas identified as having a demonstrated and unmitigatable high risk to birds and bats."²⁰ This instruction provides no information to guide siting decisions. More importantly, the guidelines improperly state that siting considerations end once the risk to birds can be mitigated, instead of requiring applicants to avoid incidental take through proper siting to the maximum extent practicable. Individual permits for wind facilities will let FWS ensure that applicants properly site wind facilities in a way that results in the lowest feasible amount of incidental take.

Comment II.3: Wind energy facilities require individually tailored minimization strategies.

Once wind turbines are operational, there are no set measures to reduce all the causes of bird mortality. Take reduction measures depend on the characteristics of each wind facility and the diversity of birds occurring there.²¹ There have been many proposals for reducing take from wind facilities and FWS should investigate each method's effectiveness at reducing take of all types of birds.

While spinning, turbine blades can create a motion blurring effect that prevents birds from effectively navigating through or away from the blades.²² Painting patterns on the turbines

²⁰ FWS *supra* note 13, at 49.

²¹ Marques *supra* note 15, at 41; R. May et al., *Mitigating Wind-Turbine Induced Avian Mortality: Sensory, Aerodynamic and Cognitive Constraints and Options*, 42 *Renewable and Sustainable Energy Rev.* 170–181, 177 (2015).

²² May et al., *supra* note 22, at 171.

may reduce incidental take by improving birds' ability to recognize individual blades.²³

However, improving the detectability of individual blades would not be effective at night unless the turbines were lit, which could attract birds and increase mortality. Patterned blades also provide few benefits to bird species that are not paying attention to where they are flying, such as birds engaged in aerial displays or birds looking at the ground while hunting.

Changing the color of lights or using highly intermittent lights may reduce take of nocturnal migratory birds. One study found that nocturnally migrating birds were less disoriented by green and blue light compared to red and white light.²⁴ UV lasers, which are invisible to the human eye, may also reduce take during the night.²⁵ However, some studies have shown no difference in take between lit and unlit turbines,²⁶ and lighting will not reduce take during the daytime.

Increasing the cut-in speed of turbines so that the blades do not turn at lower wind speeds could minimize take to soaring birds that rely on vertical air currents. Griffon vultures rarely collided with turbines when wind was blowing more than 8 m/s but regularly collided with turbines at lower wind speeds.²⁷ However, feathering turbines at low wind speeds is unlikely to reduce the take of birds with different flight models.

Lastly, temporary shutdowns during periods of high bird activity, bad weather, or when individual birds approach turbines could minimize take by removing the risk of spinning turbines altogether. Stopping turbines when griffon vultures approached reduced vulture mortality by

²³ Hugh P. McIsaac, *Raptor Acuity and Wind Turbine Blade Conspicuity*, (2012), available at http://altamontsrc.org/alt_doc/raptor_acuity_and_wind_turbine_blade_conspicuity_mcissac.pdf (finding that painting high-contrast patterns on turbine blades increased visual acuity of raptors); W. Hodos, *Minimization of Motion Smear: Reducing Avian Collisions with Wind Turbines*, National Renewable Energy Laboratory (2003) (applying solid black pattern to a single blade decreased motion blur).

²⁴ Hanneke Poot et al., *Green Light for Nocturnally Migrating Birds*, 13 *Ecology Soc'y* 47 (2008).

²⁵ May et al, *supra* note 22, at 176.

²⁶ *Id.* at 176.

²⁷ Luis Barrios and Alejandro Rodriguez, *Behavioural and Environmental Correlates of Soaring-Bird Mortality at On-Shore Wind Turbines*, 41 *J. Applied Ecology* 72–81 (2004).

50% in one year while sacrificing energy production by only 0.07%.²⁸ It is unclear whether this system would be effective for smaller migratory birds that could escape detection or if detection systems could be devised that work in all weather conditions.

There is no one-size fits all solution to reduce take by wind turbines. Although different minimization methods show promise, each wind facility requires individually tailored minimization strategies. Permitting projects that promise to adhere to a list of best management practices is insufficient to protect the wide range of migratory birds from the variable threats posed by wind facilities. Because minimization measures must be tailored for each project, the FWS should require individual incidental take permits for wind energy facilities.

Comment II.4: Compensatory mitigation cannot support general permits for wind facilities.

The FWS mitigation policy and FWS' comments during the July 8 online webinar for the proposed action both emphasize that an applicant must avoid and minimize take before engaging in compensatory mitigation. Allowing the wind industry to obtain a general permit on the grounds that compensatory mitigation could offset or replace any birds killed by turbines ignores this important mitigation hierarchy and ignores the site- and species-specific attributes that influence bird take. Issuing a general permit based on compensatory mitigation also provides no incentive for applicants to avoid or minimize bird deaths.

Comment II.5: Individual permits are more likely to force developments in technology that reduce wind energy's impact on migratory birds.

The wind industry is still discovering how best to avoid, minimize, and mitigate for the incidental take of migratory birds. Minimization measures such as patterned turbine blades and radar-activated shutdowns may reduce the take of migratory birds. However, these minimization measures have not been proven and require more research and development. Individual permits

²⁸ de Lucas et al. *supra* note 19.

would provide a greater opportunity for consultation and collaboration between FWS and the industry in devising and improving measures to reduce and offset incidental take.

General permits would not provide incentives for the wind industry to improve avoidance or minimization measures. Under a general take authorization, an applicant may take birds so long as she follows a list of best management practices. From the industry's perspective, there is no need to develop better BMPs because they already have permission to take birds. On the other hand, FWS oversight through an individual permitting process can push industry to develop more effective avoidance and minimization measures.

Comment II.6: Individual permits will enhance public participation and provide avenues for judicial review.

As the wind industry continues its explosive growth, the public deserves opportunities to comment on projects. As the beneficiaries of this federal trust resource,²⁹ the public should have the opportunity to protect its interests in these birds. A general permitting process for incidental take by wind turbines would not give the public adequate information to comment on an individual project's treatment of migratory birds. General permits would seriously hinder meaningful judicial review of permits that are not protective enough. FWS should allow the public to participate in the management and conservation of this essential trust resource by promulgating individual permits for wind facilities.

Comment II.7: FWS should require individual permits for both new and existing wind facilities.

Migratory birds will remain at risk from existing wind facilities after FWS promulgates an ITP program. Indeed, some research has shown that new wind facilities with larger turbines

²⁹ U.S. Fish and Wildlife Serv., A Blueprint for the Future of Migratory Birds: Migratory Bird Program Strategic Plan 2004–2014, 4 (2004), available at <http://www.fws.gov/Migratorybirds/Aboutus/Mbstratplan/finalmbstratplan.pdf> (“The U.S. Fish and Wildlife Service has the legal mandate and the trust responsibility to maintain healthy migratory bird populations for the benefit of the American public.”).

can provide the same amount of power with fewer wind turbines, potentially decreasing the risk to migratory birds.³⁰ As turbine technology improves, bird mortality may further drop. Any ITP program for wind facilities must address existing turbines because they will likely pose the greatest risk to birds going forward if no minimization or mitigation measures are put in place.

FWS does not need to start the permitting process from scratch for existing facilities. Instead, it could mandate minimization and mitigation measures to reduce and offset the take by turbines that cannot feasibly be relocated. For example, painting turbines to increase recognition of individual blades could be a low-cost minimization measure for existing wind farms.³¹ If certain turbines at existing sites cause excessive amounts of take, FWS should consider the feasibility of relocating individual turbines.

SECTION 3: FWS SHOULD PROMULGATE GENERAL PERMITS FOR COAL COMBUSTION AND MINING WASTE PONDS

FWS should analyze the effects of ponds containing coal combustion waste (“coal ash”) and coal mining waste (“coal slurry”) on migratory birds. Birds are exposed to heavy metals in these wastes by consuming insects, other invertebrates, or plants in or near these ponds and discharges from these ponds. Selenium poisoning is the greatest threat to birds because it bioaccumulates and birds can pass it on to their eggs, causing serious deformities and mortality. FWS should require general permits for incidental take of birds by new and existing ponds containing coal ash and slurry and should require simple measures such as covers, fences, or other devices to prevent migratory birds from being poisoned.

³⁰ K. Shawn Smallwood, *Avian and Bat Fatality Rates at Old-Generation and Repowered Wind Turbines in California*, 73 J. Wildlife Mgmt. 7, 1062–1071 (2009). *But see* de Lucas et al. *supra* note 19 (taller wind facilities resulted in more take of griffon vultures).

³¹ Hodos *supra* note 23.

Comment III.1: FWS can regulate coal waste ponds under the MBTA.

FWS has the authority to regulate incidental take caused by coal ash and coal slurry under the MBTA. Courts have upheld criminal prosecutions under the MBTA for the take of migratory birds caused by the storage of toxic material.³² Storage of coal combustion and mining wastes in open ponds is analogous to the unsafe storage of poisonous and toxic substances that FWS has previously prosecuted. FWS can regulate these ponds even though the primary impacts are felt by migratory bird eggs because the MBTA criminalizes the unauthorized take of “any migratory bird, any part, nest, or egg of any such bird.”³³

Comment III.2: Coal waste ponds contain toxic chemicals, including selenium, that harm birds.

Coal ash and coal slurry both contain heavy metals, but the specific contents of each disposal pond are generally unique due to varying metal concentrations in the source coal. Coal ash can contain arsenic, cadmium, chromium, copper, lead, mercury, selenium, strontium, and other heavy metals.³⁴ These metals can prove fatally toxic to birds individually and often have synergistic effects that cause toxic effects to a greater extent than would exposure to a single substance.

Of the metals in coal ash and slurry, selenium is the greatest concern to migratory birds. Coal fly ash contains 1.8–18 mg/kg of selenium and bottom ash contains up to 4.2 mg/kg.³⁵ Discharge from a coal fly ash pond into Belews Lake, a noted case of selenium poisoning in fish,

³² See *United States v. FMC Corp.*, 572 F.2d 902 (2nd Cir. 1978) (upholding conviction when migratory birds died of pesticide poisoning in a waste water storage pond); *United States v. CITGO Petroleum Co.*, 893 F.Supp.2d 891 (S.D. Tex. 2012) (upholding conviction of oil company for deaths of migratory birds in open oil tanks).

³³ 16 U.S.C. § 703(a).

³⁴ Electric Power Research Institute, “Coal Ash: Characteristics, Management and Environmental Issues” (Sept. 2009) available at <http://www.epri.com/abstracts/Pages/ProductAbstract.aspx?ProductId=000000000001019022>.

³⁵ *Id.*

measured 150–200 µg/L.³⁶ Fly ash ponds near the Pigeon River and Pigeon Lake in Michigan contained a mean selenium concentration of 70 µg/L.³⁷ Coal cleaning process water associated with coal mining can contain concentrations of selenium up to 63 µg/L.³⁸

The concentrations of selenium in coal ash and slurry ponds often exceed aquatic life safety thresholds. EPA’s current water quality criterion for selenium is 5 µg/L. EPA is proposing a selenium water quality criterion of 1.3 µg/L in lentic aquatic systems and 4.8 µg/L in lotic aquatic systems.³⁹ Although bird impacts are not covered under these criteria, EPA recognizes that selenium poses threats to birds.⁴⁰

FWS learned the dangers that selenium poses to birds at the Kesterson Reservoir, where agricultural drainwater containing selenium caused the deaths of adult waterfowl, dramatically reduced bird hatching success, and killed large proportions of the nestlings that hatched.⁴¹ Water entering the reservoir had an average selenium concentration of 300 µg/L⁴² and the average aquatic concentration of selenium within the reservoir was .076 µg/ml, or 76 µg/L.⁴³ Studies found that hatchability in nests of eared grebes (*Podiceps nigricollis*), a listed bird under the MBTA, was only 58%, and one-third of the eggs in nests (that successfully hatched an egg) contained dead, deformed, or underdeveloped embryos that failed to hatch due to

³⁶ A. Dennis Lemly, *Symptoms and Implications of Selenium Toxicity in Fish: the Belews Lake Case Example*, 57 *Aquatic Toxicology* 39–49 (2002).

³⁷ John M. Bessner, et al., *Selenium Bioaccumulation and Hazards in a Fish Community Affected by Coal Fly Ash Effluent*, 35 *Ecotoxicology Env'tl. Safety*, 7–15 (1996).

³⁸ A. Dennis Lemly, “Aquatic Hazard of Selenium Pollution From Coal Mining” in *COAL MINING: RESEARCH, TECHNOLOGY AND SAFETY*, Gerald B. Fosdyke ed. (Nova Science Publishers, Inc. 2008).

³⁹ U.S. E.P.A. Office of Water Office of Science and Technology, External Peer Review Draft Aquatic Life Ambient Life Water Quality Criterion for Selenium – Freshwater 2014 (May 2014) available at <http://water.epa.gov/scitech/swguidance/standards/criteria/aqlife/selenium/upload/seleniumdraft2014.pdf>.

⁴⁰ *Id.* at 140.

⁴¹ Harry M. Ohlendorf et al., “Bioaccumulation and Effects of Selenium in Wildlife” in *SELENIUM IN AGRICULTURE AND THE ENVIRONMENT*, L.W. Jacobs, ed. 133–177 (American Society of Agronomy, Inc. and Soil Science Society of America, Inc. 1989).

⁴² *Id.* at 156.

⁴³ Carol A. Schuler et al., *Selenium in Wetlands and Waterfowl Foods at Kesterson Reservoir, California, 1984*, 19 *Archives Env'tl. Contamination Toxicology* 845–853 (1990).

embryotoxicosis.⁴⁴ The same study found that embryotoxicosis was responsible for the failure 29% of eggs in successful nests of American Coots (*Fulica americana*), another listed migratory bird.⁴⁵

Comment III.3: Coal waste ponds have caused the take of migratory birds.

Fly ash ponds expose migratory birds and their offspring to selenium in dangerous concentrations. Common grackle (*Quiscalus quiscula*) eggs and nestlings near coal ash ponds in North Carolina had elevated levels of selenium, which sometimes approached levels of ecotoxicological significance.⁴⁶ The nestlings also experienced elevated levels of arsenic, cadmium, and strontium.⁴⁷ Fish in a lake and river that received effluent from a coal ash pond had selenium concentrations that exceeded the lowest observable effect concentrations for birds.⁴⁸ Following the massive release of coal ash in Kingston, TN, barn swallows (*Hirundo rustica*) nesting along the impacted streams passed selenium, strontium, and copper to their eggs, reducing hatching success by 12%.⁴⁹ The reduced hatching success associated with the Kingston disaster is concerning because the EPA concluded that aquatic values of selenium in that case were below levels of concern, indicating possible synergistic effects.⁵⁰

Coal mining waste poses similar risks to birds. American dippers (*Cinclus mexicanus*) nesting downstream from mines passed elevated levels of selenium to their eggs that may have

⁴⁴ Harry M. Ohlendorf et al., *Nest Success, Cause-Specific Nest Failure, and Hatchability of Aquatic Birds at Selenium-Contaminated Kesterson Reservoir and a Reference Site*, 91 *The Condor* 787–796 (1989).

⁴⁵ *Id.*

⁴⁶ A.L. Bryan et. al., *Coal Fly Ash Basins as an Attractive Nuisance to Birds: Parental Provisioning Exposes Nestlings to Harmful Trace Elements*, 161 *Envtl. Pollution* 170–177 (2012).

⁴⁷ *Id.*

⁴⁸ John M. Besser et al., *Selenium Bioaccumulation and Hazards in a Fish Community Affected by Coal Fly Ash Effluent*, 35 *Ecotoxicology and Environmental Safety* 7–15 (1996).

⁴⁹ Suzanne J. Walls et al., *Effects of Coal Fly Ash on Tree Swallow Reproduction in Watts Bars Reservoir, TN*, 11 *Integrated Environmental Assessment and Management* 1 56–66 (2014).

⁵⁰ U.S. E.P.A. Science Panel, *Review of Potential Selenium Issues Following a Coal Ash Spill at the Tennessee Valley Authority Kingston Fossil Plant* An EPA Science Review Paper (Dec. 2009) available at <http://www.epakingstontva.com/Selenium%20Reports/Forms/AllItems.aspx>

exceeded toxicity thresholds.⁵¹ Simulated hatch failure rates in American dippers and Harlequin Ducks (*Histrionicus histrionicus*) on a stream draining a recently-closed coal mine were predicted to be 12% and 8% higher than in reference streams.⁵²

Comment III.4: FWS has already acted to protect birds from coal waste ponds, but more action is necessary.

FWS has already taken action to prevent migratory bird exposure to coal wastes, but a more proactive approach is necessary. For example, Duke Energy dumps water used to transport coal ash into Gibson Lake, a cooling pond on the company's coal plant property in southwestern Indiana.⁵³ In 2007, Gibson Lake discharged water containing 11 to 14 parts per billion of selenium into a least tern (*Sternula antillarum*) management unit at Cane Ridge, a part of the Patoka River National Wildlife Refuge.⁵⁴ In 2008, FWS stopped the flow of water from the cooling pond into Cane Ridge, drained Gibson Lake, removed approximately four tons of fish, and disked the soil to redistribute sediment and reduce the surface concentrations of selenium.⁵⁵ Although the selenium measures proved successful, preventing the discharge of selenium-laden water could have prevented this costly clean-up and avoided possible damage to the terns. Least terns in southwest Indiana are still at risk from coal waste ponds. A colony of terns began nesting on a coal slurry pond in Francisco, Indiana in 2015. Covering and fencing the slurry pond could have prevented this possibly toxic exposure and avoided possible tern egg or chick mortality.

⁵¹ Mark Wayland et al., *The American Dipper as a Bioindicator of Selenium Contamination in a Coal Mine-Affected Stream in West-Central Alberta, Canada*, 123 *Envtl. Monitoring and Assessment* 285-298 (2006).

⁵² Mark Wayland et al., *Selenium is a Trace Element of Concern in the McLeod River Basin Downstream from Two Recently-Closed Coal Mines in West-Central Alberta, Canada*, 13 *Human and Ecological Risk Assessment* 4, 823–842 (2007).

⁵³ Dan Sparks, U.S. FWS Contaminants Specialist, “50 Years After Silent Spring: Lessons Learned at Indiana’s Cane Ridge” (May 11, 2015), available at <http://www.fws.gov/midwest/es/ec/silentspring/CaneRidge.html>.

⁵⁴ *Id.*

⁵⁵ *Id.*

Comment III.5: FWS should promulgate a general permit for incidental take of migratory birds by new and existing coal waste ponds.

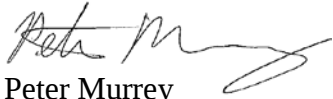
CLC urges FWS to analyze the effects of coal waste ponds and their discharges on migratory birds. The heavy metal content, especially selenium, of these ponds has caused migratory bird mortality and will continue to do so unless the Service exercises its authority under the MBTA. Given the similar methods of exposure across coal ash and coal slurry ponds and across different migratory bird species, CLC proposes that FWS develop a general permit program to regulate the incidental take of migratory birds from coal ash and coal slurry ponds. A general permit is appropriate because simple measures such as fencing and covering the pond to exclude birds or restricting discharges into migratory bird habitat can adequately protect migratory birds. This general permit scheme should apply to both new and existing coal waste ponds because coal waste ponds can remain hazardous to birds for years and possibly decades.

CONCLUSION

An incidental take permit program has the potential to increase the conservation of birds protected under the MBTA if properly designed and enforced. Individual permits will ensure that industries minimize and mitigate the take of birds, spur development in technologies that reduce the incidental take of listed birds, and increase monitoring. General permits will ensure that industries with proven measures to reduce take implement those measures. FWS should promulgate general permits only for industries that have known and proven measures to avoid and minimize bird death. As shown above, the wind energy industry should not be eligible for a general incidental take permit due to the myriad causes of take and the varied and unproven strategies to reduce that take. FWS should issue a general permit for incidental take by coal combustion and mining waste ponds because fencing and covering these ponds will protect a wide range of migratory birds from being poisoned.

We appreciate the opportunity to comment on this matter and look forward to further participation as FWS develops regulations. Please add CLC to the notification list, using the names and contact information below.

Sincerely,

A handwritten signature in black ink, appearing to read "Peter Murrey".

Peter Murrey
Graduate Fellow Attorney
Conservation Law Center
116 S. Indiana Avenue
Bloomington, IN 47401
Office: (812) 855-3688
Email: jpmurrey@indiana.edu

A handwritten signature in black ink, appearing to read "W. William Weeks".

W. William Weeks
Director
Conservation Law Center
116 S. Indiana Avenue
Bloomington, IN 47401
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**TOURISM, ARTS AND HERITAGE CABINET
KENTUCKY DEPARTMENT OF FISH & WILDLIFE RESOURCES**

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Commissioner

July 10, 2015

Public Comments Processing
Division of Policy and Directives Management
U.S. Fish and Wildlife Service
5275 Leesburg Pike, MS-PPM
Falls Church, VA 22041-3803

RE: FWS-HQ-MB-2014-0067

To whom it may concern:

The Kentucky Department of Fish and Wildlife Resources (KDFWR) would like to provide comments on the Notice of Intent (NOI) issued on May 26th, 2015. This NOI announces the intent to prepare a programmatic environmental impact statement (PEIS) pursuant to the National Environmental Policy Act (NEPA) to evaluate a proposal to authorize incidental take of migratory birds under the Migratory Bird Treaty Act (MBTA).

In general, we support the idea behind this PEIS because we see a need for better consistency in implementation of preventative measures to avoid take of migratory birds across the United States. We agree that this regulatory process would provide a greater consistency and greater certainty for entities that undergo efforts to reduce incidental take. We also believe it would benefit bird conservation by promoting implementation of proven conservation measures to avoid or reduce avian mortality.

We support Approach #1 which involves a general authorization of incidental take of migratory birds for certain industry entities that meet conditions and standards for the protection and mitigation of incidental take of migratory birds. We feel that Approach #2 (establishing individual permits) would be too cumbersome for the USFWS and industry and would not result in greater conservation benefit. Industries should be held to equal standards and be using similar approaches based on current research; thus, the need for individualized permits would likely not provide significant additional benefit. We think that Approach #3 (utilizing MOUs with federal agencies) would likely not provide for enough consistency for regulating the private sector across industries and regions.

Although we see a need for this type of program, we also see the need to minimize administrative burden caused by this regulatory process on federal agencies and affected industries. We think that this program provides an opportunity to reward entities that are going above and beyond in implementing good management practices with a sense of security, without a significant increase in administrative burden. Hence, the authorization system should deemphasize detailed individual permits, especially for industries with well-researched best management practices. We believe this would be possible, if industry standards were carefully worded to apply universally and entities were encouraged to keep records on their efforts to avoid take. It may be possible that permits or other authorization could be automated through a "check-in" system that would be subject to regular audits.

Overall, we would like to see this program operate similar to an endangered species safe harbor program, where some sense of regulatory assurance is provided to entities which implement sufficient preventative measures for take of migratory birds. We think the program should be voluntary and that entities that do not sign up can operate under the status quo (they may be at risk for a violation unless they have paid compensatory mitigation). We understand that at this time it would be imprudent to permit incidental take for industries where more research is needed on best management practices. However, after more research, permits could become available for additional industries. We understand that a rule-making would be necessary for the USFWS to authorize any incidental take and to develop a program like this.

In addition, we offer the following suggestions on the design of this program:

- It would be difficult to implement this endeavor in the absence of any required monitoring. We suggest that a system similar to the powerline [Bird Fatality/Injury Reporting Program](#) be expanded to include industries other than the power industry.
- A reasonable timeframe should be developed for existing facilities to update their infrastructure and equipment. This may be different for different activities.
- We encourage the inclusion of capping vertical hollow pipes in best management practices for relevant industries. Although this is more relevant for industries that aren't currently listed in the DOI (mining and pipelines), it is a simple action that reduces a lot of take.
- We request clarification on, if in the future, this might affect activities for habitat management conducted by state and federal agencies, as well as private landowners (e.g. prescribed fire and forest stand improvement).
- We encourage the inclusion of other MBTA countries in the coordination and design of this program.
- We caution the reliance on state governments to assist in the implementation of this program, due to limited staff levels.

We support the inclusion of compensatory mitigation for losses past a given threshold that cannot be avoided or minimized through best management practices. We would support a system that ranked species of concern as more valuable for compensatory mitigation. Compensatory mitigation could be used to motivate industry to meet deadlines on best management practices. (If a facility was working on, but unable to fully implement best management practices by the deadline, they would pay compensatory mitigation). Individuals/companies that are not able to implement best management practices due to very specialized situations (e.g. safety concerns or emergencies) might also be eligible for

compensatory mitigation. We think that mitigation funds should be considered for use in three areas: habitat management, habitat protection (land acquisition) and research on methods to reduce incidental take.

We encourage careful inclusion of the industry best management practices in this rulemaking, as management practices will no doubt change with research and advances in technology. Perhaps using a system similar to the Bald Eagle Management Guidelines, where guidance is given in a document separate from the rule-making, would be more easily revised.

Again, KDFWR applauds the USFWS for starting this conversation which we believe is needed to lead to better consistency in the interpretation and implementation of the Migratory Bird Treaty Act. With careful planning, this effort may lead to better bird conservation nationwide. If you have any questions about our comments, please do not hesitate to contact our office at 1-800-858-1549.

Sincerely,

A handwritten signature in black ink, appearing to read "Steve Beam". The signature is fluid and cursive, with the first name "Steve" and last name "Beam" clearly distinguishable.

Steve Beam
Wildlife Division Director

SB:slc/kh



City of Phoenix
OFFICE OF ENVIRONMENTAL PROGRAMS

July 20, 2015

Public Comments Processing
Division of Policy and Directives Management
U.S. Fish and Wildlife Service
5275 Leesburg Pike, MS-PPM
Falls Church, VA, 22041-3803

Attn: FWS-HQ-MB-2014-0067

Re: City of Phoenix Comments on the Migratory Bird Permits Programmatic Environmental Impact Statement (PEIS); Notice of Intent in the Federal Register May 26, 2015

Dear USFWS:

Thank you for the opportunity to provide comments on the proposed PEIS to evaluate approaches to authorize incidental take of migratory birds under the Migratory Bird Treaty Act of 1918 (MBTA), as amended. The City of Phoenix (City) supports this effort to minimize the administrative burden of compliance while encouraging efforts to reduce impacts to covered species.

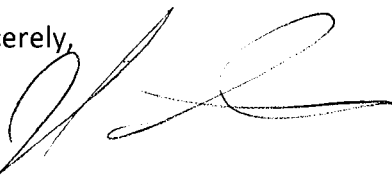
The City is pleased that the USFWS is seeking input on areas to be considered in the PEIS. We encourage the USFWS to include regular municipal maintenance activities in the PEIS as an area for which an individual incidental take permit may be appropriate. The City would also encourage the USFWS to extend the opportunity to enter into a Memorandum of Understanding to local entities in addition to federal agencies.

The City is home to several species covered by the MBTA, predominately the western burrowing owl (*Athene cunicularia*) but also others including cliff swallows (*Petrochelidon pyrrhonota*), red-winged blackbird (*Agelaius phoeniceus*), mourning dove (*Zenaida macroura*) and several species of hummingbird. Compliance with the MBTA is an important issue that arises frequently on City maintenance activities. The City regularly undertakes essential maintenance activities that could impact nesting habitat in order to maintain facilities, keep streets and sidewalks clear, improve flow conveyance in drainage channels, minimize flood risk, minimize airport bird strike risks, minimize safety risks from storm damage, and upkeep vacant lots, just to name a few. The City is currently evaluating additional methods and means to minimize maintenance impacts on species covered by the MBTA.

The City also supports the reasonable limitation of the permit system and MBTA enforcement to industries or activities that are likely to have large-scale, recurring impacts on migratory birds without requiring each individual citizen or business that may inadvertently or occasionally take a migratory bird to obtain a permit.

Thank you in advance for your consideration. The City of Phoenix is committed to minimizing our impacts on our valued natural resources and wildlife and welcomes your efforts to streamline compliance requirements. The City looks forward to continuing to provide input throughout the PEIS process. If you require additional information or have any questions, please contact Tricia Balluff, Office of Environmental Programs, at (602) 534-1775.

Sincerely,

A handwritten signature in black ink, appearing to read 'Joe Giudice', with a stylized, flowing script.

Joe Giudice, Environmental Programs Manager
City of Phoenix

Public Submission Posted: 05/29/2015 ID: FWS-HQ-MB-2014-0067-0005

Submitter Name: Justin Meyer

I support strengthening the protections for migratory birds.

Public Submission Posted: 06/01/2015 ID: FWS-HQ-MB-2014-0067-0007

Submitter Name: Anonymous Anonymous

Dear Sir or Madam:

I strongly support this change to the MBTA to control or mitigate the current harm to migratory birds from oil and gas waste pits, communication towers, and electric transmission towers. This change will allow the Act to evolve to meet current threats to migratory birds in the US.

Thank you very much.

Submitter Name: Anthony Gutierrez

1.The proposal letter is about to make awareness on environmental , this organization who is U.S Fish and Wildlife Service is purposing to make a program that will come in effect for the National Environmental Policy Act. They want to plan immediately urgent request of protecting the wild animals and birds. They want to prevent no more striking causes to migratory birds they want a policy to go in affect. Also asking the Federal and State agencies to analyze this problem and other members to take action for PEIS.

2.Desirability of Solution

a.Yes, we need this without birds and animals we would not have an environment that exist today. The fish that are swimming on the rivers or birds that are migrating from country or state. We would not able to see them anymore if hunters are killing them.

b.Why, this is justified solution because policies or Act that is able to run in action to save the wildlife from extrusion.

c.Yes, it will solve the problem with the Protection of Wildlife and having established a standard to provide hunters and people those dumping hazard chemicals to stop killing animals on restricted areas without permission.

d.Why, of this tact that the U.S Fish and Wildlife Services is providing is an justified proposal to get environmentalist and public to be aware of instinct animals and birds that are been dying off.

3.Qualifications of the Proposer

a.Yes agree that the writer or his/her company can deliver because it can try to get the Government to join in with the organization to provide safety for the migratory birds.

b.Why, I know that it can be justified because on this article states that In 1916, the United States and Great Britain (on behalf of Canada), signed a treaty to protect migratory birds. In 1918, Congress passed the Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703 711) to implement the treaty with Canada. Among other things, the MBTA, as enacted, prohibited unauthorized killing and selling of birds covered by the treaty. I know for in fact they can do that again making agreement with.

4.Return on Investment

a.Yes is necessary for return on investment to protect and make human-kind to be cautious of not killing animals and birds when they interact with them or dumping dangerous equipment or liquids.

b.Why, I agree with this section on the article: authorization program alone will not address all of the conservation needs of bird populations, but it could provide a framework to reduce existing human-caused mortality of birds and help avoid future impacts by promoting practical actions or conservation measures that will help industries and agencies avoid and minimize their impacts on birds, I know that it will minimize the damage that this industrial has cause can decrease over time.

Public Submission Posted: 07/07/2015 ID: FWS-HQ-MB-2014-0067-0014

Submitter Name: Anonymous Anonymous

Completely in favor of this. At least if this passes incidental take will have to be acknowledged to some degree instead of ignored. Not all agency offices are as strict as some, as evident by the other comments here.



July 23, 2015
Public Comments Processing
Attn: FWS-HQ-MB-2014-0067
Division of Policy and Directives Management
U.S. Fish and Wildlife Service
5275 Leesburg Pike, MS -PPM
Falls Church, VA 22041-3803

**National Wild Turkey Federation Comments:
Migratory Bird Permits; Programmatic Environmental Impact Statement
Docket No. FWS-HQ-MB-2014-0067**

The National Wild Turkey Federation appreciates the opportunity to provide comments to the USFWS as you define the scope of your Programmatic Environmental Impact Statement related to incidental take under the Migratory Bird Treaty Act (MBTA). The National Wild Turkey Federation is supportive of the Services efforts to clearly define conservation measures to protect those migratory birds that are often subject to take as a result of otherwise lawful practices and actions. When conservation measures are in place, and mitigation guidelines are clearly defined and followed, we believe that the issuance of permits for incidental take will provide clarity for both industry and the appropriate federal and state agencies. These standards and guidelines will assure the public that MBTA is being enforced appropriately while still allowing otherwise lawful management of natural resources, as well as delivery of important social services such as energy development.

As outlined by the USFWS in the Federal Register, we believe that the energy sector is a good place to focus this effort as there are specific actions and examples that regularly occur during energy development and delivery that have implementable remedies. Providing specific parameters for incidental take in these situations will allow for these activities to take place in a more timely manner, with clear mitigation needs known in advance. The National Wild Turkey Federation encourages the USFWS to consider MOU's with the USFS and the BLM to extend incidental take authorities to these agencies for activities that involve active management of habitat. We believe that this will help to expedite the implementation of important habitat management activities by assuring the public that MBTA is being considered and take is properly being mitigated. Given the planning process that includes public input, consultation under other laws, and the common practice of mitigating for their management actions, we believe that an MOU with these agencies outlining incidental take is a natural extension of statutory authority. This action will provide certainty to the federal agencies and those entities conducting activities on USFS and BLM properties that the activities they are undertaking will not be subject to undue legal challenges, at least under

National Wild Turkey Federation

P.O. Box 530 • 770 Augusta Road • Edgefield, South Carolina 29824 • Phone: (803) 637-3106 • Fax: (803) 637-9180

www.nwtf.org

the MBTA. We believe that this will increase the pace of implementing important projects that will provide a net benefit to many species of wildlife and migratory birds without jeopardizing the protection of our migratory bird resources.

Thank you for the opportunity to provide comments. We look forward to working with the USFWS as you develop the PEIS regarding this important issue.

Sincerely,

A handwritten signature in black ink, appearing to read "Rebecca A. Humphries". The signature is fluid and cursive, with the first name "Rebecca" and last name "Humphries" clearly distinguishable.

Rebecca A. Humphries
Chief Conservation Officer



Advocacy Department

Six Beacon Street, Suite 1025 ▲ Boston, Massachusetts 02108
tel 617.962.5187 ▲ fax 617.523.4183 ▲ email jclarke@massaudubon.org

July 27, 2015

Public Comments Processing
Attention: FWS-HQ-MB-2014-0067
Division of Policy and Directives Management
U.S. Fish and Wildlife Service
5275 Leesburg Pike, MS-PPM
Falls Church, VA 22041-3803

Submitted electronically via: www.regulations.gov

**Re: Notice of Intent to Prepare a Programmatic Environmental Impact Statement (EIS)
to Evaluate Authorization of Incidental Take Under the Migratory Bird Treaty Act**

Dear U.S. Fish and Wildlife Service (USFWS):

On behalf of Mass Audubon, I submit the following comments for consideration as you begin evaluating potential regulations providing for authorization of incidental take under the Migratory Bird Treaty Act. Mass Audubon supports the preparation of a Programmatic EIS on this topic, and recommends that the first step be establishment of a comprehensive framework that addresses all major human-induced causes of bird mortality in areas subject to the law.

The Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703– 711) is a vitally important law and one of the cornerstones of national and international environmental law. It prohibits the killing or sale of migratory birds unless permitted by regulation. This geographic scope of this federal statute extends throughout North America, Russia, and Japan through international treaties. While the law provides strong protections for birds and imposes strict penalties for violations, in practice numerous common activities that result in the killing of millions of birds annually have been allowed to take place without the USFWS taking enforcement action. Any new regulations should be designed to achieve greater compliance and strengthen protections of birds and their habitats. Any incidental take program needs to provide for protection and restoration of native bird populations at all geographic scales from hemispheric to regional to the state level. The EIS should address the full range of human activities that cause bird deaths, and should establish a systematic approach to monitoring bird population trends. It should establish a framework for reducing bird mortality and protecting and restoring bird populations and their habitats. All industries and categories of human activity that contribute significantly to bird mortality should be held accountable and required to avoid and minimize those impacts as much as possible. The regulatory program should also provide for funding of effective mitigation programs for necessary and unavoidable takings.

Mass Audubon was founded in 1896 in response to the extensive slaughter of birds for the millinery trade. The first major action the organization was involved in was the adoption by Congress of the Migratory Bird Treaty Act in 1918. Today, Mass Audubon is the largest non-profit conservation and environmental education organization in New England. Together with over 100,000 members we care for 35,000 acres of conservation land, provide school, camp, and other education programs for 225,000 children and adults annually, and advocate for sound environmental policies at state, local and federal levels. Mass Audubon maintains the most comprehensive public database of bird distribution, abundance and trend information for the Commonwealth, a resource that is used by conservation partners and concerned citizens alike. This wealth of information is kept current through our long-term monitoring and research programs. This includes information on Massachusetts' breeding birds and the status and trends of their populations, as summarized in Mass Audubon's State of the Birds report (<http://www.massaudubon.org/our-conservation-work/wildlife-research-conservation/statewide-bird-monitoring/state-of-the-birds>).

Birds are Valuable Natural Assets

Birds provide important benefits for people including pest control, pollination, seed dispersal, and other ecosystem services. They also have many other economic benefits, contributing to multi-billion dollar industries such as recreation and tourism. In 2011, 47 million bird watchers spent \$41 billion on travel, equipment, and other related expenses¹. Many bird species are declining, and in numerous instances the causes or scope of those declines are not well-documented.

Impacts of Human Activities on Birds

Although more and better data is needed to more fully understand bird population trends and the causes of those trends, it is known that many common human activities cause bird mortality on a regular basis. While the expansion in recent years of certain industry sectors such as wind turbines, communications towers, and oil and gas extraction has focused attention on those sectors and led to the development of Best Management Practices (BMPs) and standards, many other ongoing categories of land use and human activity cause the death of hundreds of millions of birds annually (<http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/Mortality-Fact-Sheet.pdf>).

Common causes of bird mortality include:

- collisions with buildings, windows, and other structures;
- collisions with cars and trucks;
- domestic and feral cats;
- pesticides;
- oil spills and waste pits; and
- land management activities such as cutting or mowing for land clearing, forestry, agriculture, or aviation field maintenance.

Many activities also reduce breeding success, thereby further impacting bird populations.

¹ USFWS, *Birding in the United States: A Demographic and Economic Analyses, Addendum to the 2011 National Survey of Fishing, Hunting and Wildlife Recreation* (Report 2011-1).

Need for Improved Monitoring and Data Tracking

Effective regulation of migratory birds requires far more data and ongoing monitoring than is presently available. Any new regulatory structure should create dedicated monitoring system funded by sectors that contribute to significant bird mortality. Rules and BMPs should be periodically updated based on new and improved information.

The regulation of bird hunting provides an example of relatively effective monitoring and management of bird populations through a program funded by the associated use sector.

Regulatory Framework: Avoid, Minimize, Mitigate

Any incidental take system should provide BMPs for the way industries and people go about their regular business, with an aim of reducing known major sources of bird mortality. This would be an effective and efficient way to apply the law, and would also avoid costly individual permits for common activities or an uneven playing field and unequal application of the law. The Land-Based Wind Energy Guidance that USFWS developed with input from Mass Audubon, scientists, industry and conservation groups, and other agencies is one example of science-based BMPs for a particular industry sector.

The regulatory framework should focus first and foremost on avoiding, reducing, and minimizing bird mortality from human activities and structures. When impacts are unavoidable, an effective mitigation program should be employed, funded by sectors causing unavoidable impacts. Any regulatory BMPs and mitigation programs should address bird populations at both large geographic scales (hemispheric, national), and smaller scales (regional, state, local). Habitat protection, restoration, and management should be provided through mitigation programs administered by USFWS in collaboration with other agencies and private organizations such as conservation nonprofits and private landowners. Habitat mitigation should be required to be at a greater than 1:1 ratio, e.g. 1:2 or 1:4 due to temporal and special habitat losses and the likelihood that restoration efforts will not be 100 percent successful in replacing lost or damaged habitat, especially in the short term.

BMPs should generally be mandatory, and could be administered as general permits for various industries and activity sectors. Individuals, companies, or agencies seeking to undertake different approaches could have an option of applying for an individual permit. This is potentially costly and time-consuming for the applicant and the USFWS, and should be the exception rather than the rule.

Pre-existing structures and operations should be provided with a timeframe for coming into compliance. The timelines and requirements should be tailored to each sector, taking into account the degree of impact and the feasibility of retrofitting structures or revising operating methods and procedures. Cost-effective measures that also have ancillary additional benefits should be employed as much as possible (e.g. Lights Out programs have significant energy efficiency benefits to building owners; reducing use of toxic pesticides has associated environmental and public health benefits that extend well beyond bird protection).

The USFWS should work with other federal agencies to bring all national programs and public land management practices under an umbrella designed to optimize bird protection while enabling other essential government functions to be carried out. One example is the need for a

better approach to the management of grasslands around military airfields, where the current directive is not optimal either for birds or aviation safety. The USFWS should also work with other agencies such as the Federal Aviation Administration and U.S. Department of Agriculture to improve their programs and establish scientifically based BMPs to protect birds.

Thank you for considering these comments.

Sincerely,



John J. Clarke
Director

Mass Audubon works to protect the nature of Massachusetts for people and wildlife. Together with more than 100,000 members, we care for 35,000 acres of conservation land, provide school, camp, and other educational programs for 225,000 children and adults annually, and advocate for sound environmental policies at local, state, and federal levels. Founded in 1896 by two inspirational women who were committed to the protection of birds, Mass Audubon has grown to become a powerful force for conservation in New England. Today we are respected for our science, successful advocacy, and innovative approaches to connecting people and nature. Each year, our statewide network of wildlife sanctuaries welcomes nearly half a million visitors of all ages, abilities, and backgrounds and serves as the base for our work. To support these important efforts, call 800-AUDUBON (283-8266) or visit www.massaudubon.org.

Protecting the Nature of Massachusetts



July 27, 2015

Public Comments Processing, Attention: FWS-HQ-MB-2014-0067
Division of Policy and Directives Management
U.S. Fish and Wildlife Service
5275 Leesburg Pike, MS-PPM
Falls Church, VA 22041-3803

RE: Incidental Take of Migratory Birds, Docket No. FWS-HQ-MB-2014-0067

Dear Sir or Madam:

The Arizona Department of Transportation (ADOT) provides the following comments in response to the May 27, 2015 Federal Register notice of intent by the US Fish and Wildlife Service (USFWS) to prepare a Programmatic Environmental Impact Statement (PEIS) to evaluate a proposal to authorize incidental take of migratory birds.

General comments

ADOT reviews and assists with transportation projects planned at state, county and city levels. Many utilize federal funding (typically from US Department of Transportation agencies such as the Federal Highway Administration, Federal Railroad Administration or Federal Transit Administration) for design and construction, but almost all maintenance activities are completed using state and local funding sources. Issues related to incidental take of migratory birds arise in both construction and maintenance activities.

ADOT strongly supports the proposal to establish a more general authority to permit incidental take through general authorizations, individual permits, or interagency memoranda of understanding. The absence of clear rules for permitting incidental take increases the regulatory uncertainty for agencies and industries whose land-use activities may include actions that may involve technical violations of MBTA, but where pursuit of prosecution is at the discretion of the USFWS and Department of Justice. The reliance on uncertain prosecutorial discretion to avoid criminal liability for an otherwise-lawful land use is problematic for agencies such as ADOT.

The federal register posting states “we would not expect every person or business that may incidentally take migratory birds to obtain a permit”. ADOT strongly encourages USFWS to ensure any new rules clearly define when a permit is required. Leaving room for law enforcement discretion does not address the regulatory uncertainty facing agencies and industries with respect to MBTA.

Current strategies for compliance with the Migratory Bird Treaty Act (MBTA) without an allowance for incidental take creates uncertainty for transportation construction and maintenance scheduling and in some circumstances may result in negative impacts to migratory bird habitat in an effort to avoid liability. Personnel or contractors may make overly generous estimates of the amount of vegetation that needs to be removed during the non-breeding season in order to avoid the potential for delays during the working season, which can result in loss of vegetation and habitat for migratory birds beyond the minimum necessary for the planned work.

In Arizona, Western burrowing owls commonly utilize burrows and infrastructure including pipes, culverts, and storm drains within transportation rights-of-way (ROWS). ADOT and local government agencies regularly encounter them during construction and repair activities. As a result of the number of times that ADOT was submitting requests to the regional Migratory Bird Office, ADOT has been issued a Special Use Permit for relocating Western burrowing owls. The permit was originally approved for a 3-year period with annual reporting but was changed to require reapplication on an annual basis in 2013. This permit has greatly expedited the process for relocating burrowing owls when their burrows cannot be avoided during transportation construction and maintenance activities. ADOT has standard language used in contracts to specify the procedure for relocating burrowing owls using a licensed wildlife rehabilitator, including survey for the owls within 96 hours of starting ground disturbing activities in areas where it is likely for burrowing owls to occur. This time frame is typically sufficient to engage the rehabilitator to relocate owls from burrows with little to no delay to the planned project.

Approaches for Authorizing Incidental Take of Migratory Birds

For the reasons outlined above, ADOT fully supports the effort undertaken by the proposed PEIS to develop methods to allow incidental take of migratory birds. Any of the four options proposed for consideration in the PEIS could be beneficial to the transportation industry depending on the implementation details. Based on the information provided in the Notice of Intent and webinar, an industry authorization for linear transportation projects that allows state and local transportation agencies to opt to participate would be the most preferred option; the other options could also be helpful but are less desirable for the reasons outlined in the comments below. An additional option that ADOT suggests for consideration is establishing a framework for a programmatic migratory bird incidental take permit.

General Conditional Authorization for Incidental Take Associated with Particular Industry Sectors

ADOT suggests that a general conditional authorization be developed that includes linear transportation projects as one of the industry sectors. An important aspect would be streamlining the documentation requirements for use of the authorization, perhaps with a model similar to the Nationwide Permit system established by the US Army Corps of Engineers, which allows internal documentation of compliance for effects below specific thresholds. Another streamlining option might be to enable USFWS Ecological Services Offices to review incidental take of migratory birds for certain species or up to certain thresholds if the project is also undergoing review under Section 7 of the Endangered Species Act (ESA). Combination of MBTA compliance with Section 7 or Section 10 requirements under the ESA would reduce the number of separate approvals by USFWS that might otherwise be required.

Individual Permits

Issuance of individual permits authorizing incidental take from particular projects or activities would be beneficial in that it could allow more reliable scheduling and estimation of activity costs but would require a fair amount of extra effort for DOTs and USFWS to review individual permits. This approach would be most appropriate for large or complex transportation projects or those that affect more sensitive species of migratory birds that are not otherwise protected under laws such as the Endangered Species Act or Bald and Golden Eagle Protection Act. If this were the only mechanism available to the transportation industry, it would likely cost more and require additional review time than a

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programmatic permit or general authorization. Depending on how review of the permits is assigned, there is the potential for requirements to differ across states or regions over time, which makes developing and sharing best practices industry-wide less useful. As mentioned above, development of a programmatic framework for incidental take permits that transportation agencies could opt to establish would be more beneficial in terms of efficiency, cost, and streamlining in general than having only individual incidental take permits available.

Memoranda of Understanding (MOU) with Federal Agencies

Development of MOU with Federal agencies authorizing incidental take from those agencies' operations and activities would be beneficial for linear transportation projects funded or planned in conjunction with a federal agency; however it is not clear that such an MOU would apply to projects funded only with state dollars (in state parks, for example) or to maintenance and operation activities related to transportation facilities, which are generally not eligible for federal funding. This approach would not cover transportation projects developed and funded solely by local government agencies or private projects in most cases.

Development of Voluntary Guidance for Industry Sectors

Development of voluntary guidance for industry sectors regarding operational techniques or technologies that can avoid or minimize incidental take could be helpful but does not address the need for a standardized, streamlined approach for compliance with the MBTA. State transportation agencies have developed a fair amount of knowledge on how to avoid and minimize take for linear transportation-related construction, operation and maintenance. ADOT is happy to provide our approaches and methods for complying with the MBTA if that information would be used to support this effort.

We appreciate the opportunity to provide comments on the Service's proposed consideration of incidental take for migratory birds. Should you have any questions, please contact me at (602) 399-3233 or jwhite@azdot.gov or Kris Gade at (602) 292-0301 or kgade@azdot.gov.

Sincerely,



Justin White
Biology Program Manager
Environmental Planning Group

July 27, 2015

Public Comments Processing
Attention: FWS-HQ-MB-2014-0067
Division of Policy and Directives Management, U.S. Fish and Wildlife Service
5275 Leesburg Pike, MS-PPM
Falls Church, VA 22041-3803

Re: Incidental Take of Migratory Birds (Docket No. FWS-HQ-MB-2014-0067)

Submitted electronically at: <http://www.regulations.gov>

On behalf of the National Audubon Society and the Natural Resources Defense Council, and our millions of members and supporters, please accept and fully consider these comments on the U.S. Fish and Wildlife Service's (Service) Notice of Intent (NOI) to prepare a programmatic environmental impact statement (PEIS) to evaluate the potential environmental impacts of a proposal to authorize incidental take of migratory birds under the Migratory Bird Treaty Act (MBTA), Docket No. FWS-HQ-MB-2014-0067.

For many years, our organizations have been deeply engaged in efforts to protect the publicly-owned resources under the jurisdiction of the Department of the Interior and animals and plants, including migratory birds, protected by federal laws and treaties. We appreciate the opportunity to comment on this docket and the Service's efforts to engage stakeholders and consider a range of approaches thus far. Audubon and NRDC support a process to clarify the full extent of the authority of the Service to authorize "incidental" take under the MBTA.

This is a crucial turning point in implementing the MBTA and a new direction regarding migratory bird conservation in North America and with our treaty partners. We are cautious and concerned about how the Service will justify authorizing "take" for such a wide range of species—for many of which there is little data and knowledge. We are equally optimistic, though, at the prospects for offering tangible conservation gains and greater certainty for migratory bird species as well as those industries employing best practices to avoid, reduce and offset impacts to migratory bird populations.

Given the breadth and wide-potential reach of this action, we recommend that the Service initially focuses on providing a thorough and transparent analysis of an overarching authorization framework, broadly applicable across all industries, to clearly articulate how the primary goal of protection and conservation of migratory birds will be met. Once an overarching framework for authorization and a clear and compelling, science-based conservation standard are established through this rulemaking and PEIS, the Service could then tier analyses of more tailored, industry-specific general authorizations to the PEIS. We believe that this will be the most efficient and defensible, both legally and biologically, method of addressing this important issue.

Audubon, NRDC, and our millions of members and supporters, appreciate the Service's efforts to address incidental take under the MBTA and our comments herein highlight priority issues that we believe should be immediately addressed through this rulemaking. It is critical for the Service to set forth a science-based conservation standard and framework for this program prior to moving forward with implementation on an industry- or project-specific basis.

History, Interest and Potential Benefits of Authorization

The histories of the MBTA and Audubon have been entwined for over one hundred years. Three lady cousins founded Audubon in 1905 to end the slaughter of herons, egrets and other birds for women's hats and the plume trade. This action led to the creation of early Audubon societies and prompted the eventual passage of the MBTA in 1918. Almost a century later, the statute remains one of the strongest laws protecting North American birds today. Any attempts to update, improve, repeal or weaken the MBTA have been met with the strongest response in numbers and fervor in Audubon's history, as well as the broader conservation community. Members and supporters of Audubon and NRDC are deeply invested and engaged in any clarifications and potential changes to this bedrock environmental law that might in any way affect the protections that migratory birds enjoy today.

The sole purpose and intent of the MBTA is to protect migratory birds, and the origin of the statute to implement the international treaties signed for migratory bird conservation must not be overlooked.¹ In 2001, President Clinton signed Executive Order 13186, *Responsibilities of Federal Agencies to Protect Migratory Birds*, which underscores the national importance of migratory birds and substantive treaty obligations that are implemented through the MBTA. Executive Order 13186 states,

Migratory birds are of great ecological and economic value to this country and to other countries. They contribute to biological diversity and bring tremendous enjoyment to millions of Americans who study, watch, feed, or hunt these birds throughout the United States and other countries. The United States has recognized the critical importance of this shared resource by ratifying international, bilateral conventions for the conservation of migratory birds...These migratory bird conventions impose substantive obligations on the United States for the conservation of migratory birds and their habitats, and through the Migratory Bird Treaty Act (Act), the United States has implemented these migratory bird conventions with respect to the United States.²

Not only does this Executive Order recognize the critical importance of migratory bird species and the United States' obligations to conserve populations and their habitats, but it also defines and describes critical components of the MBTA as the primary mechanism carrying out these obligations. The Executive Order states that "take" includes both "intentional" and "unintentional" take, and it purposefully underscores the importance of habitat conservation throughout—including defining "migratory bird resources" as migratory birds and the habitats upon which they depend, as well as directing agencies to inventory and monitor bird habitat and populations, promote research and information exchange related to the conservation of migratory bird resources, and provide training and information to staff on methods and means of avoiding or minimizing the take of migratory birds and conserving and restoring migratory birds habitat.³

¹ 16 U.S.C. § 703 *et seq.*

² Exec. Order No. 13186, 66 Fed. Reg. 3853 (Jan. 17, 2001). Conventions include the Convention for the Protection of Migratory Birds with Great Britain on behalf of Canada 1916, the Convention for the Protection of Migratory Birds and Game Mammals-Mexico 1936, the Convention for the Protection of Birds and Their Environment- Japan 1972, and the Convention for the Conservation of Migratory Birds and Their Environment-Union of Soviet Socialist Republics 1978.

³ *Id.* at 3853, 3855.

Although directed at federal agency action and coordination, the Executive Order outlines and prioritizes many of the same principles that we are urging the Service to consider as it examines options for authorizing incidental take. It states that agencies should “support the conservation intent of the migratory bird conventions by integrating bird conservation principles, measures, and practices into agency activities” and “restore and enhance the habitat of migratory birds, as practicable.”⁴ The Executive Order also references the mitigation hierarchy when it directs agencies to avoid and minimize, to the extent practicable, adverse impacts on migratory bird resources. And with respect to unintentional take, specifically, it states,

...identify where unintentional take reasonably attributable to agency actions is having, or is likely to have, a measurable negative effect on migratory bird populations, focusing first on species of concern, priority habitats, and key risk factors. With respect to those actions so identified, the agency shall develop and use principles, standards, and practices that will lessen the amount of unintentional take, developing any such conservation efforts in cooperation with the Service. These principles, standards, and practices shall be regularly evaluated and revised to ensure that they are effective in lessening the detrimental effect of agency actions on migratory bird populations. The agency also shall inventory and monitor bird habitat and populations within the agency’s capabilities and authorities to the extent feasible to facilitate decisions about the need for, and effectiveness of, conservation efforts.⁵

As the highest priority, the overarching purpose and conservation mandate of the MBTA must not be lost and any authorization or permitting program must first and foremost guarantee the conservation and protection of important migratory bird species. We believe that this can only be accomplished by setting forth and adhering to a science-based conservation framework with an established conservation standard for management decisions—principals of which are described in more detail below—and incorporating proven avoidance, minimization and effective compensatory mitigation measures, with an emphasis on avoidance and minimization measures as directed by the mitigation hierarchy, as well as established and defined adaptive management and oversight regimes. This type of framework has already been established by Executive Order for federal agencies, and we believe that it is imperative that the Service take similar steps in creating a broad authorization program for all incidental take of migratory bird species.

Recommendation: Purpose and Need should be to conserve migratory birds.

Audubon and NRDC have commented previously on applications for energy projects on public lands that the “Purpose and Need” should be aligned with the regulatory standard of the law under which the permit has been applied for. The Need and Purpose statement for these projects has been “to respond to an application.” In this PEIS, the “Purpose and Need” should focus on the overarching statutory mandate of the MBTA and be “to conserve migratory birds under the MBTA.” This environmental review should focus on the overarching conservation aim, and this “Purpose and Need” should be carried throughout all subsequent authorizations and analyses.

Recommendation: Commit to a science-based conservation framework that incorporates measurable conservation outcomes and benefits to populations being impacted.

Without a measurable conservation outcome, any permit authority would be meaningless and little more than a rubber-stamp approval. Incidental take permitting must provide a demonstrable and

⁴ *Id.* at 3854.

⁵ *Id.* at 3855.

measurable conservation benefit to the species being impacted, and these benefits and measurements thereof should be spelled out clearly in the PEIS. We urge the Service to adopt a science-based conservation framework for authorization, starting with the “Purpose and Need” and committing to measurable conservation outcomes resulting from any authorizations. The Service should consider and analyze the use of mitigation funds/banks and aggregating compensatory mitigation dollars in order to achieve highest benefits and use for the species being impacted, in accordance with landscape-scale mitigation strategies and priorities.

Recommendation: Establish a science-based conservation standard to guide all management decisions.

The Service must clarify the regulatory standard that it will follow in order to determine when authorizations are appropriate and sufficiently protective of migratory bird populations. Incidental take authorizations may reduce uncertainty by providing a clear and committed path to avoiding, minimizing and mitigating effectively for population level impacts on sensitive species of birds. General authorizations may also provide a mechanism enabling the transparent sharing of data, increased stakeholder engagement and legal certainty regarding liability for take of migratory birds. For these reasons and because this effort provides an opportunity to strengthen the overall framework for bird conservation, we are extremely supportive of the Service’s efforts to clarify this regulatory authority under the MBTA.

However, incidental take authorizations cannot guarantee tangible and meaningful benefits for birds without adhering to a science-based conservation standard guiding all permitting and management decisions. The Service must articulate a regulatory standard for determining when authorizations are appropriate (or inappropriate) and ensure that decisions are sufficiently protective of migratory bird populations. Examples of regulatory standards in the context of other wildlife laws include the preservation standard under the Bald and Golden Eagle Act⁶ and the jeopardy standard under the Endangered Species Act (ESA).⁷

We urge the Service to immediately establish a science-based conservation standard to guide all decisions on permitting and authorizations of incidental take under the MBTA. We suggest that the Service ensure that populations of species of conservation concern, and species or populations whose status may foreseeably change to a species of concern or candidate for listing under the ESA, remain stable or increasing. In adhering to such a standard, authorizations for incidental take should also provide a net benefit for all species being measurably impacted by the activity authorized. We must remember the core goal of the MBTA is to protect and maintain the abundance and diversity of all migratory birds, including keeping common birds common, and a net benefit standard for population-level impacts will help meet this aim.

Recommendation: In the PEIS, provide updated information on population trends and status of migratory birds as well as the effects of environmental changes and human impacts, and commit to a regular and transparent review of such information.

We must underscore that the Service has an existing requirement to gather and evaluate information about nongame bird populations under the Fish and Wildlife Conservation Act, which states:

⁶ 16 U.S.C. § 668a.

⁷ 16 U.S.C. §1536(a)(2).

(a) Conservation activities

The Secretary shall undertake the following research and conservation activities, in coordination with other Federal, State, international and private organizations, to assist in fulfilling his responsibilities to conserve migratory nongame birds under existing authorities provided by the Migratory Bird Treaty Act and Migratory Bird Conservation Act (16 U.S.C. 701–715) and section 8A(e) of the Endangered Species Act [16 U.S.C. 1537a (e)] implementing the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere:

- (1) monitor and assess population trends and status of species, subspecies, and populations of all migratory nongame birds;
- (2) identify the effects of environmental changes and human activities on species, subspecies, and populations of all migratory nongame birds;
- (3) identify species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act of 1973, as amended (16 U.S.C. 1531–1543);
- (4) identify conservation actions to assure that species, subspecies, and populations of migratory nongame birds identified under paragraph (3) do not reach the point at which the measures provided pursuant to the Endangered Species Act of 1973, as amended (16 U.S.C. 1531–1543) become necessary; and
- (5) identify lands and waters in the United States and other nations in the Western Hemisphere whose protection, management, or acquisition will foster the conservation of species, subspecies, and populations of migratory nongame birds, including those identified in paragraph (3).⁸

The Service similarly gathers annual information on migratory game species under the MBTA,⁹ and therefore should prioritize including updated information in the PEIS as a basis and starting point for the overarching conservation framework—such information is a necessary precursor to establishing science-based conservation standards, assessing current and expected impacts, and proposing and approving meaningful mitigation measures. As part of any incidental take authorization program, the Service should further commit dedicated resources to a regular and transparent review of such information.

Focus on the Overarching Authorization Framework

It is our recommendation that the PEIS should focus entirely on establishing the framework for general authorizations and permitting, rather than attempting to address each individual industry that may apply for a permit or general authorization at the onset. The Service must first and foremost establish the basis, standards and expected impacts associated with authorizing incidental take under the MBTA, in general. This is critical because there is not only a statutory mandate to protect migratory birds, but we also have established commitments to do so in cooperation with other countries. There is currently a delicate balance of conservation protections in place for migratory bird populations, including state conservation mandates, and any efforts under this

⁸ 16 U.S.C. § 2912. Federal conservation of migratory nongame birds.

⁹ See U.S. Fish and Wildlife Service, *Issuance of Annual Regulations Permitting the Hunting of Migratory Birds*, Final Environmental Impact Statement (May 2013). [Available at: <http://www.fws.gov/migratorybirds/PDFs/FSEIS%20Issuance%20of%20Annual%20Regulations%20Permitting%20the%20Hunting%20of%20Migratory%20Birds.pdf>]

rulemaking must carefully consider and ensure that existing conservation efforts are not undermined or inadvertently changed.

Recommendation: Analyze the following key components of a science-based conservation framework.

The Service should initially focus on explaining what the authorization process would look like across all industries, to ensure consistent application and establish priorities for moving forward. Adaptive management prescriptions should be established, as well as guarantees for continued public engagement and expected conservation gains. As an initial matter and at a minimum, we believe that the Service must include detailed analysis of the following list of key components within the scope and range of alternatives in the PEIS:

Baseline Impacts Analysis – Calculation of the **baseline** of current activities and estimated (mitigated and unmitigated) “take” of migratory birds that includes all sources, not just industries. These sources include but are not limited to human-induced predators, current climate change impacts and models for the future,¹⁰ loss of habitat, window collision and other impacts for which there are statistical or other data gathered or analyzed in a scientifically defensible methodology. The Service can provide this analysis using the “best available science” and existing information.

Oversight Capacity and Process for Review – Demonstration that the Service has not only **the authority but also the capacity** to assume the obligation to issue general industry authorizations as well as individual project permits, where warranted, while also effectively overseeing and monitoring the compliance of the permit terms, adaptive management regimes and mitigation strategies on a regular basis, and at least every 5 years. The Service must delineate a defined review process for all authorizations, permits and/or MOUs, which should include guarantees for public engagement and transparency, required reporting and an ongoing process to consider and make changes based on changed circumstances or new information.

Conservation Plans for Guilds of Birds within Each Flyway – Rather than a scope that is general in nature (e.g. “all migratory birds”) the Service should frame the analysis regionally by the four flyways, and by guilds of birds (seabirds, raptors, songbirds, etc.) in each flyway. The Service should also consider linkages to other flyways outside of the continental United States, especially those of international treaty signatory countries. This will enable the Service to establish priorities for conservation and a conservation “plan” for each flyway and its priority species, with requisite population-level take limits for at-risk species and mitigation options for expected impacts. Each science-based conservation plan should incorporate a provision for updating that analysis in authorizations and/or permits that may tier off of the PEIS.

Population-level Impacts for Species of Concern – Analysis of a methodology for determining population-level impacts on species of birds that the Service has identified as Species of Concern, and species or populations whose status may foreseeably change to a species of concern or candidate for listing under the ESA. Conservation of populations of these species, not protected by

¹⁰ Audubon scientists have used hundreds of thousands of citizen-science observations from Christmas Bird Counts and Breeding Bird Surveys and sophisticated climate models to predict how birds in the U.S. and Canada will react to climate change. The work defines the climate conditions birds need to survive, then maps where those conditions will be found in the future as the Earth’s climate responds to increased greenhouse gases. These models should be included in the analysis of current and future impacts in the DEIS. [Available at: www.climate.audubon.org]

other statutory authorities, should be prioritized in the analysis and in the authorizations, with regular reviews and updates. Population-level impacts on these species must be a priority for determining adaptive management or mitigation measures in any permitting regime, and avoidance of those impacts must be prioritized. In addition, mitigation that provides for protection, creation or restoration of habitat for species that are impacted on the population level in their breeding and wintering grounds should be analyzed and included in the PEIS.

Proven Conservation Measures and Process for Identifying New Measures – Identification of proven, science-based conservation measures that increase the viability of populations of birds protected under MBTA, especially Birds of Conservation Concern,¹¹ including protection, creation, or restoration of their wintering or breeding areas if they are migratory. Prioritization of measures should be analyzed, considering those with the highest conservation gains, and methods for ensuring that conservation measures are linked to the species being impacted.

Approved Mitigation Measures – Incorporation of a detailed list of mitigation measures with a science-based conservation benefit that are proven to provide a measurable conservation outcome by flyway and guilds of birds protected under the MBTA. Mitigation measures should include avoidance, minimization and compensatory mitigation and discussion of determining appropriate use and relevance to particular scenarios (mitigation equivalency). Mitigation should be considered for all expected impacts, including direct mortality, collision and habitat loss and degradation, and the scope of the mitigation requirements should correlate to the level of impact. Processes should also be established for updating and approving new mitigation measures, as well as conducting effectiveness monitoring.

Transparency, Adaptive Management and Coordination with States, Tribes and Local Governments – Ensure mechanisms that enable states, tribes, local governments and stakeholders to have opportunities to coordinate and engage with the Service to protect Species of Concern and other important migratory birds. The Service must guarantee fully transparent processes for oversight, data gathering and decision-making, and incorporate clear adaptive management prescriptions to address changed circumstances and new information.

Each of the aforementioned principles will be fundamental to any analysis for authorization of incidental take and we suggest that the Service focus on addressing these essential components in the PEIS. Following the PEIS and establishment of a science-based framework and process to authorize “incidental take” under the MBTA—including thorough analysis of the impacts of such a program on the current status of migratory birds, prioritization of conservation outcomes regarding population level impacts, and coordination with state wildlife agencies, tribes and local governments—the Service will be better equipped to begin to analyze the impacts and best management practices of each industry.

Recommendation: Industry- and project-specific authorizations should undergo individual NEPA analyses tiered to the framework established in the PEIS.

Given the limited resources of the Service, we believe that the Service should focus immediately on setting up the framework and regulatory standard for an incidental take authorization program, and provide a detailed baseline environmental analysis of the status of and impacts affecting all species, subspecies, and populations of migratory birds covered under the MBTA. Industry- and

¹¹ U.S. Fish and Wildlife Service. *Birds of Conservation Concern 2008*. 85 pp. [Available at: <http://www.fws.gov/migratorybirds/pdf/grants/BirdsofConservationConcern2008.pdf>]

project-specific authorizations could then tier to this PEIS and analysis, which would provide consistency and efficiency across impacts. The PEIS could further delineate a timeline and priority for those industry-specific authorizations that it expects to address.

Such an approach would be consistent with the Council on Environmental Quality's *Final Guidance For Effective Use Of Programmatic NEPA Reviews*.¹² The Guidance states that Programmatic NEPA reviews "address the general environmental issues relating to broad decisions, such as those establishing policies, plans, programs, or suite of projects, and can effectively frame the scope of subsequent site- and project-specific Federal actions."¹³ It also states that programmatic reviews can provide a "more comprehensive picture" and "starting point for analyzing direct, indirect, and cumulative impacts," while also avoiding "repetitive broad level analyses in subsequent tiered NEPA reviews."¹⁴

Recommendation: Consider staff resource allocation issues as well as science-based conservation criteria in defining and examining MOUs, voluntary guidance, general authorizations and individual permits.

Applying this type of broad framework analysis at this stage will also provide an opportunity for the Service to analyze and compare the various options and criteria for authorization options, prior to attempting to apply them. With respect to project-level permits, the Service should consider reserving use for limited and special circumstances—simply based on the extremely limited resources that the Service has to dedicate to this program and the fact that resources may be better dedicated towards broader authorizations, with a larger impact, and/or oversight and monitoring of those activities.

In general, though, the Service must also provide a rational reason and science-based criteria for why certain activities and impacts may not be appropriate for certain types of authorizations. Limiting general authorization to only those industries with best management practices that have been approved for fully offsetting impacts is not a science-based criterion and may end up increasing the need for individual permits for those industries and impacts outside this narrow range. The Service must fully consider and analyze potential mechanisms for compliance for the entire suite of activities that may fall under MBTA authorities—including wind and solar energy development, aviation, agriculture and activities under the jurisdiction of other federal agencies.

The Service should also consider and evaluate on-going application of MOUs and voluntary guidance, but should note that neither appear to be appropriate mechanisms for authorization of take due to lack of enforcement capabilities and limited clarity on terms and conditions. There is little opportunity for the public to engage and understand the status of actions under either of these mechanisms, and as an initial recommendation, the Service should define additional oversight, effectiveness monitoring and transparency measures to allow for public engagement and access to information throughout the full duration of an activity. The Service should describe the staff resources and process dedicated to monitoring and oversight for each of these options.

¹² Council on Environmental Quality, *Final Guidance For Effective Use Of Programmatic NEPA Review*, 79 Fed. Reg. 76986 (Dec. 23, 2014). [Available at: https://www.whitehouse.gov/sites/default/files/docs/effective_use_of_programmatic_nepa_reviews_final_dec2014_searchable.pdf]

¹³ *Id.* at 10.

¹⁴ *Id.*

Recommendation: Evaluate a robust set of the “Benefits of Interactions” for calculating a net benefit for mitigation.

In preparation of the authorization to permit “incidental take,” the PEIS should analyze the impact of a permit with or without a conservation framework standard on the benefits associated with migratory birds protected under the MBTA. Those tangible benefits, which should be incorporated into any net benefit calculation for mitigation, should include but are not limited to:

- pollination of forests and other ecosystems, as well as agriculture;
- seed dispersal for forests and plants;
- removal of insects that are pests in urban and suburban developments, and agriculture;
- economic value of bird watching – 47 million bird watchers spent almost \$41 billion dollars in trip and equipment expenditures including hospitality, food, entrance fees, etc. in 2011;¹⁵ and
- as scientific indicators of the health of an ecosystem in ecosystem monitoring and planning.

Conclusion

We appreciate the opportunity to comment on this proposal and urge the Service to fully consider the importance of setting forth a science-based conservation framework and regulatory standard for incidental take authorizations under the MBTA—with particular emphasis on providing robust information on migratory bird population status and current and expected impacts; detailed consideration of staff resources and oversight capabilities; clear processes for integrating transparency and adaptive management prescriptions, and prioritization of science-based conservation and proven mitigation measures.

Our organizations are fully committed to working with the Service, industries, and other stakeholders to identify and incorporate a collaborative, legally sound and scientifically credible framework for addressing authorizations for incidental take under the MBTA and to above all, provide meaningful benefits to migratory birds. Please do not hesitate to contact us for any additional information or clarifications.

Thank you for your consideration of these comments.

Sincerely,

Mike Daulton
Vice-President of Government Relations
National Audubon Society

Katie Umekubo
Staff Attorney, Western Renewable Energy Project
Natural Resources Defense Council

¹⁵ U.S. Fish & Wildlife Service, *Birding in the United States: A Demographic and Economic Analysis*, Addendum to the 2011 National Survey of Fishing, Hunting and Wildlife Recreation (Report 2011-1).

DEPARTMENT OF TRANSPORTATION**OFFICE OF BIOLOGICAL STUDIES**

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July 27, 2015

U.S. Fish and Wildlife Service
Attn: Docket No. FWS-HQ-MB-2014-0067
Division of Policy Directives Management
5275 Leesburg Pike, MS-PPM
Falls Church, VA 22041-3803

U.S. Fish and Wildlife Service:

As owner-operator of the State Highway System (SHS), the California Department of Transportation (Caltrans) works to avoid and mitigate impacts to birds protected under the Migratory Bird Treaty Act of 1918 (MBTA) as part of our project development process. Caltrans also acts as the Federal Highway Administration (FHWA) under a National Environmental Policy Act (NEPA) Assignment Memorandum of Agreement with FHWA effective October 1, 2012, which identifies Caltrans' participation in the Surface Transportation Project Delivery Program, pursuant to, 23 USC 326 and 23 USC 327, as amended by Moving Ahead for Progress in the 21st Century Act (MAP-21).

We appreciate the opportunity to comment on the Notice of Intent to evaluate the potential environmental impacts of a proposal to authorize incidental take of migratory birds under the MBTA. The USFWS is soliciting comments and Caltrans is providing comments on the following numbered items:

(1) The approaches we are considering for authorizing incidental take;

Comment: The California Department of Transportation (Caltrans) would support the Individual Permitting and Memoranda of Understanding (MOU) approaches to permitting under MBTA. Nesting birds protected under the MBTA and California Fish and Game Code are typically addressed through Caltrans' project development process, which includes processing NEPA and California Environmental Quality Act (CEQA) reviews for maintenance, operations, and construction activities. Subsequent MBTA permitting could be conducted after environmental review of a project, through either the MOU or Individual Permitting process. Ideally, Caltrans would envision a process similar to the section 7(a)(2) of the Federal Endangered Species Act process, which is conducted concurrent with NEPA or the U.S. Army Corps of Engineers Nationwide Permitting process (noted below), which is conducted after the NEPA process is complete.

(2) The specific types of hazards to birds associated with particular industry sectors that could be covered under general permits;

Comment: Please include coverage of the transportation industry under the possible permitting regulations. Birds protected under the MBTA frequently utilize transportation structures and areas adjacent to these structures for breeding, nesting, feeding, and cover. Avoidance measures for nesting birds are often implemented for our construction and maintenance projects. However, in some situations construction must cease or is delayed and the regulatory or enforcement agencies must be consulted due to potential conflicts with nesting birds. A permitting program that allows minimal incidental take after all feasible and practicable avoidance and minimization measures are considered, would benefit delivery of projects through incorporating appropriate conservation measures into the project planning, design, and construction.

(3) Potential approaches to mitigate and compensate for the take of migratory birds;

Comment: The effects and subsequent avoidance, minimization, and other mitigation measures are contextual. When the project may have significant impacts to nesting migratory birds pursuant to the CEQA, mitigation may be required based on the project actions/activities and the significance of the impact that has a potential to take protected birds. If the impacts have the potential to take federal or state listed birds, those potential impacts should be analyzed and addressed under NEPA, CEQA, section 7 or 10 of the Federal Endangered Species Act, and/or the state endangered species act and mitigated appropriately.

It is noted that the definition of take under the MBTA does not include 'harm' or 'harass', where the definition of take under the federal Endangered Species Act includes harm and harass. If the impacts are to non-listed species, then the definition of take under MBTA and the effects/impacts associated with the amount of take in relationship to the overall species population should be considered when determining if mitigation in the form of compensation is appropriate. For example, if a breeding season is partially disrupted by exclusion measures, it may not be an impact that requires compensatory mitigation.

In contrast, large breeding colonies that may be regionally significant and have very specific nesting locations and requirements, are clearly a different case that requires detailed analysis to assess the impacts of take and associated loss of habitat. Effects of take (as defined in MBTA) and the loss of habitat should be assessed and addressed in the NEPA or CEQA document, prior to permitting the project for incidental take. Compensatory mitigation for loss of habitat for migratory birds should be addressed under the impact analyses required by existing statutes, laws, and regulations, such as NEPA and CEQA. Mitigation would be best implemented through in-lieu fee or conservation banking programs.

(4) Other approaches, or combinations of approaches, we should consider with respect to the regulation and authorization of incidental take;

Comment: General comment/suggestion. The Corps of Engineers streamlines their Nationwide Permit program around activities and subsequent impacts from an action/activity; their entire program must have a less than significant impact under NEPA. It would make sense to have a similar streamlined permit process for projects that have a limited number of nests/habitats impacted, where no impacts to Threatened or Endangered species would occur. Some classes of streamlined permits could be sorted into reporting and non-reporting actions/projects, since there are standard avoidance (i.e. exclusionary or avoidance measures) that are successfully used on a consistent basis. Subsets of species (i.e. swallows, raptors, shorebirds, songbirds, etc.) could be identified as reporting or non-reporting programmatic permit, with conditions on compliance and thresholds for impacts. There should be specific exemptions for take of invasive, non-native, and nuisance species provided under the permitting program. The permitting program should be consistent with and not duplicative of the permitting process under the Bald and Golden Eagle Protection Act and the federal Endangered Species Act.

(5) Specific requirements for NEPA analyses related to these actions;

Comment: See Comment on item 3.

(6) Whether the actions we consider should distinguish between existing and new industry facilities and activities;

Comment: Please see comment on Item 4. Programmatic permit categories such as maintenance on existing structures; linear transportation projects; projects with minimal impacts; etc. could be included in a programmatic type of permit.

(7) Considerations for evaluating the significance of impacts to migratory birds and to other affected resources, such as cultural resources;

Comment: Caltrans recommends that the USFWS consider conducting coordination and outreach with the state wildlife departments on this PEIS, to promote consistency within each state. There have been past efforts within the California Department of Fish and Wildlife to provide implementing regulations for incidental take of birds and nests, protected under the state Fish and Game Code.

(8) Information regarding natural resources that may be affected by the proposal;

Comment: In some cases, species protected under the MBTA can be invasive species, non-native species, or nuisance species, such as common ravens, that have adverse effects on populations of listed species such as desert tortoise and must be managed appropriately. Certain exemptions for take of these types of species should be considered for the proposed permit program.

July 27, 2015

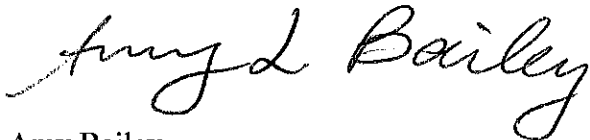
Page 4

(10) The benefits provided by current Federal programs to conserve migratory birds and the additional benefits that would be provided by a program to authorize incidental take;

Comment: Currently, Caltrans utilizes avoidance measures such as work windows and exclusion methods to avoid conflicts with birds and construction and maintenance activities. Avoidance includes stopping construction for weeks or months at a time, creating increased cost and substantial changes in scope and schedule. Additional benefits that could be provided include predictability in project cost, scope, and schedule and benefits from conservation measures that could be incorporated from project planning through construction and subsequent maintenance.

Thank you for the opportunity to comment on the Notice of Intent. If you have questions regarding these comments, please contact me at (916) 651-8166 or James Henke at (916) 653-6121.

Sincerely,

A handwritten signature in cursive script that reads "Amy Bailey". The signature is written in dark ink and is positioned above the printed name and title.

Amy Bailey
Office Chief, Biological Studies

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July 27, 2015

Submitted electronically on July 27, 2015 to <http://www.regulations.gov>

Public Comments Processing
Attention: FWS-HQ-MB-2014-0067
Division of Policy and Directives Management
U.S. Fish and Wildlife Service
5275 Leesburg Pike, MS-PPM
Falls Church, VA 22041-3803

Re: Comments on "Migratory Bird Permits: Environmental Impact
Statement" Docket No. FWS-HQ-MB-2014-0067

Dear Principal Deputy Bean:

Thank you for the opportunity to comment on the above-referenced notice of intent (NOI) to prepare a programmatic environmental impact statement (PEIS) to inform rulemaking to regulate the incidental take of migratory birds, and the important issues it raises concerning the obligations imposed by the Migratory Bird Treaty Act, 16 U.S.C. §§ 703-711 (MBTA), as implemented by the regulations adopted by the U.S. Fish and Wildlife Service (FWS), 50 C.F.R. Chapter I, Subchapter B, Part 10, Subpart B, Part 13, and Part 21.

Preliminarily, I wish to express my respect for the FWS' decision to undertake the challenging and controversial task of balancing the need to improve the nation's efforts to conserve its avian resource and the everyday effects of our industrialized society on migratory birds. I am hopeful that if the contemplated rulemaking faithfully adheres to the process mandated by the National Environmental Policy Act, 42 U.S.C. §§ 4321-4335 (NEPA),

and the product is truthfully informed by its results and not unduly influenced by outside interests, then the resulting program to permit incidental take under the MBTA will serve the nation's dual interests of conserving its migratory bird resource and accommodating the development and operation of certain industrial activities and infrastructure.

I have both a personal and professional interest in the conservation of migratory birds in general, and the development of a program to permit incidental take under the MBTA in particular. In the article *Dying for a Solution: Incidental Taking Under the Migratory Bird Treaty Act*, 38 WILLIAM & MARY ENVIRONMENTAL LAW & POLICY REVIEW 1 (2013) ("Article"),¹ I discussed the legal authority for the FWS to implement a program to permit incidental take by regulation, the legal and practical issues that may arise from the implementation of such a program, and several potential structural schemes for such a program, including requiring individual permits in some instances and providing for "permits-by-rule" for certain activities and infrastructure. In this comment, I have attempted to focus on those specific aspects of concern to me that were raised either in the NOI or in discussions with FWS staff at the public Scoping Open House held on June 18, 2015 in Denver, Colorado.

Approaches to Regulating Incidental Take

As discussed in the Article,² when considering the different approaches to regulating incidental take, I believe that a useful distinction exists between anthropogenic threats created by "active" types of industrial activities where the potential hazard is created by both the existence of infrastructure and the activity itself (such as wind energy or collected solar energy facilities), and "static" activities where the potential hazard is created primarily by the existence of the infrastructure and not the conduct of an industrial activity. Therefore, I endorse the development of a permitting program that utilizes both a general authorization for certain "static" infrastructure/activities with defined limits on impacts and other considerations, and individual permits for "non-static" or "active" infrastructure/activities.

¹ Available at <http://scholarship.law.wm.edu/wmelpr/vol38/iss1/2/>. A copy of this article is attached to this comment that the author requests be incorporated in this comment by reference.

² See Article at 77 – 79.

As discussed below, I also endorse building upon the current process of developing MOUs for addressing issues of incidental take by federal departments, agencies and other entities, and possibly using MOUs as the starting point for permitting incidental take by federal actors and regulated third parties.

In addition, I believe that the creation of a program to permit incidental take under the MBTA would be an appropriate time to consider adding a regulatory definition of “take” specifically applicable to the statute that would include “incidental take,”³ and a clearly-articulated “conservation standard” for conservation and permitting goals (*e.g.* permitted take must be compatible with maintaining stable breeding populations at relevant geotemporal scales).⁴

General Authorizations. As noted above, I generally endorse this permitting approach for certain types of “static” infrastructure and industrial activities. Therefore, a “general authorization” approach would be appropriate for the “static” activities identified in the NOI, such as certain oil and gas extraction and production activities, communications towers, and electric transmission and distribution lines. However, I believe that a general authorization should be limited not only by the type of infrastructure and/or industrial activity, but also by parameters of size/footprint/impact or geographical location which, if exceeded, would trigger a requirement for additional tiered analysis under NEPA and possibly the need to obtain an individual permit (*e.g.* an high-capacity interstate electric transmission line *v.* a low-capacity intrastate/local transmission facility). An “MBTA-Enhanced IPAC” could be used to specify potentially affected species by region and approved mitigation techniques and practices for such species, and when the presence of certain species in a given region (*e.g.* those of conservation concern, regional/cultural significance, or other criteria) require further NEPA analysis to comply with the general authorization. It will be an issue how to establish a maximum take threshold for a general authorization that, if exceeded, would trigger a permit review and possible revocation. Standards for monitoring (both third-party and self-monitoring) and reporting should be specified, buttressed by a citizen reporting system of potential violations as discussed below. A general authorization would require compliance with industry-specific guidelines for

³ See Article at 62 (suggested definition based upon 50 C.F.R. §§ 22.3 and 17.3).

⁴ See Article at 63 (suggesting a “net-zero taking policy” for MBTA permitting actions).

“static” infrastructure/activities to be developed for certain industry sectors as discussed below.

In addition, as discussed below, I believe that consideration should also be given to developing a general authorization for certain buildings and other structures that create a significant potential hazard to migratory birds.

Individual Permits. Generally speaking, individual permits with tiered site/project-specific NEPA review (building on a sector/activity-specific programmatic NEPA analysis where appropriate) should be required for all activities of an “active” or “non-static” nature (*e.g.* wind energy), and for any “static” infrastructure/activity that, based upon triggered additional NEPA analysis, has impacts that exceed those contemplated by a general authorization. Individual permits should be subject to full NEPA analysis and process, be specific as to species and take thresholds, and have a limited duration (*e.g.* 5 years) with renewals granted to permittees who are within the permit requirements or able to implement appropriate design/operational changes to mitigate take beyond permitted levels. Standards for monitoring (both third-party and self-monitoring) and reporting should be specified, buttressed by a citizen reporting system of potential violations as discussed below. Issuance of an individual permit would require compliance with mandatory industry-specific guidelines for “non-static” or “active” activities/infrastructure will need to be developed for certain industry sectors as discussed below.

Industry-Specific Guidelines. As discussed in the Article,⁵ I support the creation of industry-specific standards that would serve as baseline requirements for the issuance of a permit for incidental take, whether under a general authorization or as an individual permit. These standards should address the full range of issues necessary to avoid and minimize take, taking a cradle-to-grave approach for new projects and infrastructure with measures addressing planning, siting, development, construction, operation and decommissioning of new projects, and for upgrading/retrofitting of existing projects and infrastructure. Such required standards should include specified Best Management Practices (BMPs), the use of Best Available Technology (BAT) or Best Available Demonstrated Technology (BADT) to be deployed during project development and at certain operational

⁵ See Article at 65 – 66, 68 – 72.

benchmarks/authorization compliance reviews, and other standards and measures as necessary to mitigate take. As discussed below, compensatory mitigation should only be available when all other measures have been implanted and take reduced to an “unavoidable” level. Industry-specific guidelines should be implemented as regulations and subject to full NEPA analysis and process.

I believe that the PEIS should also consider as appropriate for a general authorization permit/industry-specific guidelines the significant “static” anthropogenic threat created by buildings and other structures that, because of their size, height, type (*e.g.* bridges and non-communications towers) and/or location are the cause of significant bird mortality.⁶ It is well documented that the threat created by many types of structures could be mitigated through standards for building design and materials (*e.g.* “bird-safe” glass and lighting standards).⁷ Such a general authorization could specify industry specific design and operational standards tailored by region for weather, siting, affected species and other considerations which would be applicable to new construction or major renovation/retrofitting of existing structures.

I believe that it is generally acknowledged that the existing Wind Energy Guidelines (WEG)⁸ are insufficient to serve as a model for industry guidelines for the development and operation of wind energy projects. I believe that certain aspects of the WEG, such as the “tiered approach” for assessing impacts, site evaluation, etc., are useful and could be incorporated into more comprehensive BMPs for the wind energy industry, which should address issues of development, construction, operation, management, monitoring, and decommissioning during all phases of a wind energy project’s life.

Citizen Reporting. Finally, given the highly disbursed nature of the types of infrastructure and industrial activities that may be subject to a general authorization approach, I believe that enforcement could be enhanced significantly with the creation of a “citizen reporting hotline” or other mechanism where ordinary people

⁶ See Article at 79.

⁷ See generally AM. BIRD CONSERVANCY, “Bird-Friendly Building Design” (2011), *available at* <http://www.abcbirds.org/newsandreports/BirdFriendlyBuildingDesign.pdf>.

⁸ U.S. FISH AND WILDLIFE SERV., “Final Land-Based Wind Energy Guidelines” (Mar. 2012) *available at* http://www.fws.gov/windenergy/docs/WEG_final.pdf.

could report incidents of bird deaths and possible violations of the MBTA. Such a system could establish national toll-free numbers and an on-line system for citizen reporting of bird deaths and potential violations, and would be enhanced by having the general authorization have posting/signage requirements with the citizen reporting information on/near permitted infrastructure at regular locations (*e.g.* signs on every electrical transmission tower and every 1,000' between towers).

Workload and Funding. The cost and personnel requirements to administer a program to permit incidental take has often been raised as a barrier to the development and implementation of such a program. While cost is a consideration, I believe that the benefit to permittees from insulating themselves from potential prosecution for incidental take is of substantial economic value to them and their investors/lenders, which should be reflected in the level of fees and costs to be charged to process, issue, review and renew permits for incidental take under the MBTA. I believe that the cost of similar permits⁹ authorizing incidental take under the Bald and Golden Eagle Protection Act, 16 U.S.C. §§ 668 – 668d, is more reflective the actual value of such legal certainty to the permittees.

Memorandums of Understanding. In my opinion, the FWS has made commendable progress with the implementation of E.O. 13186¹⁰ and the development of implementation-based MOUs with a number of Federal agencies. As such, the approach suggested in the NOI to use MOUs as the basis for a programmatic take authorization on an agency-by-agency basis has substantial merit, subject to working out important details of such authorization (including determining the mechanism for establishing baseline take, setting appropriate conservation-based take limitations, determining and implementing appropriate mitigation measures, monitoring and reporting requirements, and potentially including “whistleblower” protections for the reporting of potential violations by agency employees and contractors).

I am less enthusiastic about the NOI’s suggestion of using an MOU as a vehicle for delegating incidental take permitting authority to third parties regulated by the agency in question. I strongly believe that the administration of incidental take permitting needs to be handled by the FWS as the agency with the highest degree

⁹ 50 C.F.R. § 13.11(d)(4).

¹⁰ 66 FR 3853 (Jan. 17, 2001).

of expertise with management and conservation of avian species. I can speak from personal experience that there are often significant disagreements between the FWS and the conclusions of other federal agencies (*e.g.* the U.S. Forest Service) concerning bird and wildlife issues that arise in inter-agency consultation under Section 7 of the Endangered Species Act, 16 U.S.C. §§ 1531 – 1542. As the only agency whose mission is exclusively directed at bird and wildlife conservation,¹¹ the FWS should be the agency to oversee all permitting of incidental take under the MBTA. One possible exception to this comment opposing the delegation of permitting authority may be through an MOU with the National Oceanic and Atmospheric Administration (NOAA), whose history of shared administration of the ESA with the FWS, and its expertise in the management of coastal and marine ecosystems and resources, would make it a suitable authority to permit incidental take by third parties under its regulatory jurisdiction, with appropriate coordination with the FWS.¹²

Voluntary Guidelines and Enforcement. As described in the Article, applying a strategy voluntary compliance to implement the Wind Energy Guidelines coupled with prosecutorial discretion in the enforcement for takings under the MBTA has proven to be woefully inadequate to mitigate incidental take at wind energy projects, and has generated collateral issues and political blow-back.¹³ Although the recent prosecutions of wind energy operators who blatantly failed to follow the WEG or FWS' advice in the siting of projects in Wyoming is undoubtedly a step forward, the fines and penalties imposed in settlements of those prosecutions are, by themselves, inadequate to compel widespread compliance with the voluntary guidelines, and is as likely to motivate a political response.¹⁴

¹¹ "The mission of the U.S. Fish and Wildlife Service is working with others to conserve, protect, and enhance fish, wildlife, plants, and their habitats for the continuing benefit of the American people." Available at <http://www.fws.gov/info/pocketguide/fundamentals.html>.

¹² The issuance of a Special Purpose Permit under MBTA § 21.27 in 2012 to NOAA for take incidental to NOAA's regulation of the Hawaii-Based Shallow-Set Longline Fishery is an example of a situation where a direct delegation of permitting authority to NOAA would be appropriate.

¹³ See Article at 29 – 41.

¹⁴ See, *e.g.*, "Duke Energy: Looking for Payback" Audubon (Jun. 26, 2015) <https://www.audubon.org/news/duke-energy-looking-payback>; Rep. Duncan, Jeff [R-SC-3], "H.Amdt. to H.R.2822 - Department of the Interior, Environment, and Related Agencies Appropriations Act, 2016" (Offered 06/03/2015) (an amendment to prohibit the use of funds to

In my opinion, only the vigorous enforcement of the MBTA's take prohibition by prosecutions that seek legal and equitable remedies that are substantial enough to deter corporate defendants (including the removal of non-compliant infrastructure where necessary to prevent unavoidable harm that cannot be adequately mitigated), coupled with the prosecution of culpable corporate officers, will be adequate to deter future violations. Accordingly, I suggest that an analysis of the effects of any program or regime to regulate incidental take, or the use of voluntary guidelines to mitigate take, should include an analysis of the historical effects on migratory bird populations and habitats caused by the lack of voluntary compliance with the WEG, and should also include an analysis of the possible effects on such populations and habitats from a more vigorous and consistent enforcement policy of the MBTA prohibition on incidental take from activities that are regulated under such a program or provided with voluntary guidelines.

Evaluation of Impacts

Geographical and Temporal Scales. The geographical/spatial scales at which the direct, indirect and cumulative impacts of General Permits are analyzed and established should include both a Large Landscape Scale (national, continental other large landscape multi-population scale) and Regional Scales, and for evaluation of Individual Permits' impacts should add the Local/Project-impacted areas Scale. For example, when assessing the effect of permitted takings under either permitting regime on the management objective of stable or increasing breeding population for specific species is being met, the analysis should look at the national/large landscape scale as well as at the regional scale and the Local/Project Scales as applicable. This broader analysis incorporating a Large Landscape Scale will be particularly important as the boundaries of regional populations are altered by adaption to the effects of climate change, and the cumulative impacts of factors other than climate change (such as habitat loss or degradation associated with human activities) are analyzed. As stated in a recent report issued by The National Audubon Society,

prosecute or hold liable any person or corporation for a violation of section 2(a) of the Migratory Bird Treaty Act) available at <https://www.congress.gov/amendment/114th-congress/house-amendment/347?q=%7B%22search%3A%5B%22%5C%22migratory+bird%5C%22%5D%7D>.

One of the major challenges for understanding the effects of climate change on species distributions lies in identifying the appropriate spatiotemporal scales at which species distributions can and cannot be reliably predicted from a mechanistic knowledge of climate dependence. As a first approximation, species distributions considered at small scales tend to be mostly influenced by biotic interactions, mid scales by habitat and resource availability, and large scales by climate, putatively through interactions with the physiological limits of the organism. Gary Langham, *et. al.*, “Audubon’s Birds and Climate Change Report: A Primer for Practitioners,” Natl. Audubon Soc’y. (2014) at 21, *available at* <http://climate.audubon.org/sites/default/files/Audubon-Birds-Climate-Report-v1.2.pdf>.

Further, given the uncertain progression of climate change caused effects on populations and habitats, it is important to employ short, medium and long-term time horizons on the impacts analysis of the contemplated permitting program, as well as to any of the general authorizations, MOUs and/or permits that are ultimately issued under such program. The FWS has considerable experience in generating projected effects analyses many decades in the future, which will be necessary to develop and adaptively manage a permitting program that meets the applicable conservation standards as the climate evolves.

As used in this Comment, the term “geotemporal” scale refers to the ranges of both geographical/spatial and temporal scales as discussed above.

Mitigation

Implementation of Revised Mitigation Policy. In 2013, the Department of Interior (DOI) released a new policy on landscape-scale mitigation developed in response to Secretarial Order 3330.¹⁵ That Strategy¹⁶ articulates ten guiding principals to

¹⁵ Secretarial Order 3330, “Improving Mitigation Policies and Practices of the Department of the Interior” (Oct. 31, 2013), *available at* <http://www.doi.gov/news/loader.cfm?csModule=security/getfile&pageid=380602>.

¹⁶ Joel P. Clement, et al., “A Strategy for Improving the Mitigation Policies and Practices of the Department of the Interior: A Report to the Secretary of the Interior from the Energy and Climate

govern the DOI's implementation of mitigation measures, specifically including the principals of (1) utilization of the full mitigation hierarchy in project planning and review in a sequential process (avoidance, minimization, and repair/rehabilitate/restoration), (2) promoting mitigation efforts that improve resilience to climate change, and (3) monitoring and evaluation of mitigation results to ensure that the intended outcomes are achieved.

At this time, the revision of the FWS' existing mitigation policy 501 FW 2 is in process, and it is unclear how such revision will implement the principals and process described in the Strategy. The manner in which the FWS implements the DOI policy will have a significant influence on the important provisions regarding mitigation that are at the heart of the proposed MBTA incidental take permitting program. It is my hope that the revised FWS policy will implement the Strategy's principals by articulating effective standards and procedures that may be incorporated into the incidental take permitting program, specifically including the principals highlighted above (application of the mitigation hierarchy in a sequential process, using mitigation to improve avian species' resilience to climate change, and providing robust monitoring standards and protocols).

Mitigation to Avoid and Minimize Incidental Take. As discussed above, the mitigation standards for each industry sector will be specified in the sector-specific guideline that will serve as the basis for a general authorization and/or individual permit. Addressing the issue of applying such standards to existing activities and infrastructure, I believe that it is important that a distinction be made only in those circumstances where existing activities and infrastructure are unable to implement the same mitigation standards of BMPs, and deploying meet the same BAT/BADT standards, required of new facilities and activities within a reasonable period of time.¹⁷ When such existing activities and facilities are unable to meet the required mitigation standards applicable to new activities and infrastructure, then a permit should be available only if the incidental take that is "unavoidable" is not "unreasonable" such that the so called "legacy take" from such facilities adversely affects populations or habitats on any geotemporal scale. Compensatory mitigation

Change Task Force" (Apr. 2014), available at http://www.doi.gov/news/upload/Mitigation-Report-to-the-Secretary_FINAL_04_08_14.pdf.

¹⁷ See Article at 66 - 67 (proposing a 2-year transitional rule for existing wind energy and other existing facilities).

should be available only to compensate for unavoidable take that is reasonable, and not to permit unavoidable take that is unreasonable. All permits for existing facilities or activities (with limited *de minimus* exceptions) should be processed as individual permits and not under general authorizaion procedures and standards.

Compensatory Mitigation. Regarding the role of compensatory mitigation under a program to permit incidental take, I have the following comments:

- Compensatory mitigation should be required to compensate for take that is “unavoidable” after the implementation of all other measures available to avoid and minimize incidental take, including BMPs and BAT/BADT for the activity in question. However, with limited exceptions, compensatory mitigation should never be used to substitute for mitigation to avoid and minimize incidental take of protected species. Compensatory mitigation should also be required for adverse impacts to migratory bird habitat from the activity in question.
- As with all types of mitigation, each form of compensatory mitigation should be evaluated relative to its contribution in meeting specified conservation objectives for the affected species at each relevant geotemporal scale. As discussed in more detail below, only those forms of compensatory mitigation that make a significant and verifiable contribution to meeting the applicable conservation objective for the species affected should be acceptable to offset unavoidable taking or adverse impacts to migratory bird habitat.
- To be acceptable, mitigation measures intended to compensate for the unavoidable take of a specific species of migratory bird at a specific geographical scale (*e.g.* project or regional scale) must be proven to be effective at actually reducing the take from the mitigated hazard of the same species at the same geographical scale, and substantiated by post-mitigation monitoring to determine if the level of take from the mitigated hazard is actually reduced.
- To be acceptable, whenever possible mitigation intended to compensate for habitat degradation or loss should be the acquisition, preservation or

rehabilitation of equivalent habitat with the same or similar features at the same geographical scale. Assessment whether “replacement habitat” is equivalent should account for the different stages of annual migratory pattern affected by the habitat degradation or loss (*e.g.* compensatory mitigation for loss of breeding habitat and features such as food supply is not equivalent to the mitigation required for loss of habitat and features used during migration). Further, consideration should be given to whether “replacement habitat” will be equivalent with similar features considering the effects of climate change on such replacement habitat over a long-term temporal scale, which may result in such replacement habitat being in a geographically dissimilar location as migratory bird ranges and patterns change over time. When compensation to offset habitat degradation or loss is not possible, then the funding of habitat acquisition, preservation or rehabilitation to preserve or expand the range of the same or other migratory bird populations should be considered.

- An important issue to be analyzed is how and where to apply compensatory mitigation measures for the take of individual specimens of a specific migratory species/population outside of the normal range of such species or population.
- As a general principal, forms of compensatory mitigation that have an “indirect” effect on migratory bird conservation (*e.g.* the funding of private research) should not be approved as compensatory mitigation for incidental take of migratory birds or habitat degradation or loss.
- Although not part of the rulemaking as described by the NOI, it is possible that consideration may be given to developing a compensatory mitigation system as part of the permitting program that would provide “mitigation credits” to permittees whose non-compensatory mitigation efforts reduce actual take to a level below that specified in their permit. These mitigation credits could be transferred to a third or related party as compensatory mitigation to offset actual unavoidable take by such party. I strongly discourage the FWS from developing such transferrable compensatory mitigation credits a part of any permitting program, to avoid a situation where market forces are introduced in the compensatory mitigation equation,

to avoid potential misallocation of resources by related parties, and to avoid any possibility that compensatory mitigation may be used to offset take that may be avoidable with implementation of BMP and/or the deployment of BAT/BADT.

Thank you for the opportunity to comment in the proposed rulemaking. I look forward to the opportunity to participate further in the rulemaking process and working towards the conservation of migratory birds.

Please note that, in these comments, I am expressing my personal views and opinions on this NOI, and not as the representative of any organization or client with whom I have been affiliated or have represented.

Sincerely,

A handwritten signature in blue ink, appearing to read "A.G. Ogden", is positioned above the printed name.

Andrew G. Ogden

Attachment



July 21, 2015

Director Dan Ashe
Main Interior Building
1849 C Street NW Room 3256
Washington DC 20240

Subject: NOI Scoping Comment - Migratory Bird Incidental Take

Dear Director Ashe:

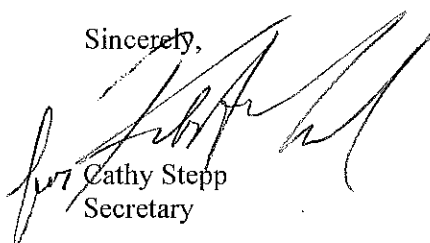
Thank you for the opportunity to comment during the scoping stage for the Programmatic Environmental Impact Statement on rulemaking to authorize incidental take of migratory birds under the Migratory Bird Treaty Act. My staff have reviewed the Notice of Intent (NOI) and associated informational materials as well as consulted with other state agencies through the Mississippi Flyway Council and Association of Fish and Wildlife Agencies. We offer the following comments on the proposed action:

- 1) The Programmatic Environmental Impact Statement (PEIS) should consider and establish a process to assure that any new federal regulations or permits remain consistent with bird conservation goals of the international treaty on migratory birds, how the other countries who are a party to that treaty are consulted and how our actions might alter the commitment or international cooperation of other countries in the conservation of migratory birds.
- 2) The PEIS should consider and establish a process through which state wildlife agencies are involved in the development of best management practices, avoidance, minimization and mitigation measures as well as compensation strategies. With respect to the creation and issuance of general and individual permits, the PEIS should evaluate how the state wildlife agencies can be involved in a consultation process while considering the additional work load and administrative burden to the states. In addition, the USFWS regularly works with state wildlife agencies on bird regulatory and conservation issues through existing game and nongame bird sections within the flyway council system. This established process should be considered as a vehicle for engaging state agencies in the development of best management practices and avoidance, minimization and mitigation measures.
- 3) The PEIS should consider and establish a process for consulting with appropriate state wildlife agencies regarding the issuance of approvals within a state's boundaries. There are existing take mechanisms currently in use under MBTA (depredation orders, damage permits etc.) that can serve as examples of how to implement this process. For example, USFWS Region 3 issues a federal migratory bird take permit for activities within Wisconsin's borders, but the Wisconsin DNR is involved in the development and approval of the federal permit. This cooperative approach ensures communication and coordination between the federal and state agencies while not duplicating permit issuance. The evaluation of new migratory bird take permit processes should also consider a consultation step to allow states to address state listed (i.e., legally protected) migratory birds which are not federally listed under the ESA.
- 4) With regard to the 4 permit approaches noted (general permit, individual permit, federal agencies MOU and voluntary guidance), we agree that a combination of a general and individual permit scenario is appropriate to be evaluated in the PEIS. With respect to authorizations for federal agencies, the PEIS should consider whether it is necessary to implement a separate MOU process, or whether it would be more appropriate for the federal agencies to fall under the general permit process applicable to other

entities. If an MOU approach is considered, it should include a process for state wildlife agency involvement, particularly with consideration of migratory birds which may have state listed status. We are uncertain how the "voluntary guidance" would be used and apply to "law enforcement discretion".

- 5) We agree that the four industry sectors identified in the NOI are appropriate for evaluation under the PEIS. We recommend that the wind generation industry be included in the same process as the other four identified sectors. In addition, we recommend the MBTA incidental take process consider how to proactively address new and emerging industries in the future. By evaluating emerging industries before their widespread establishment, the incidental take process may be able to avoid costly post-construction measures through the development of more efficient and cost effective preventative measures.
- 6) The NOI suggests consideration of mitigation and compensation measures where modifications to reduce take are not sufficient or feasible. Where modifications are not possible, we recommend that priority be placed on habitat conservation for those species most impacted within the flyway. Habitat conservation may include funding of habitat projects on public lands, private conservation lands, and private lands enrolled in conservation programs; fee simple acquisition of lands into conservation ownerships, either public or private; and acquisition of conservation easements for conservation ownerships.
- 7) If voluntary guidance is considered as an alternative, we recommend existing voluntary certification programs such as the Sustainable Forestry Initiative and Forest Stewardship Council for forest management certification or Leadership in Energy & Environmental Design programs for certification in building design be considered as models. While these programs are voluntary, they provide financial benefits to participants via finished products with added sale value at minimal additional cost. This benefit is enough to encourage enrollment by both public and private entities.
- 8) An evaluation of implementation cost, should include an assessment of USFWS staffing needs to administer the program and the applicant's staffing needs to implement actions and satisfy monitoring requirements. The applicant's costs for equipment, installation of modifications, costs of revised construction practices, maintenance, and decommissioning all must be taken into account when determining costs to the applicant. Additionally, costs to the state agencies for administration of the program must be included, and federal funding sources be considered to reimburse states for administration of federal program requirements.
- 9) Finally, the PEIS should consider methods, funding and staffing strategies to monitor bird mortalities associated with actions authorized under the general and individual permits as well as voluntary guidance. This monitoring should include a process to feed back into the adaptive management and improvement of existing avoidance and mitigation approaches.

Sincerely,



Cathy Stepp
Secretary

C: Tom Melius, Region 3 USFWS
Jerome Ford, Assistant Director, Migratory Birds
Tom Hauge
Kent Van Horn
Owen Boyle
Chandra Harvey



Texas Department of Transportation

125 EAST 11TH STREET | AUSTIN, TEXAS 78701-2483 | (512) 416-3001 | WWW.TXDOT.GOV

July 27, 2015

Public Comments Processing
Attn: FWS-HQ-MB-2014-0067
Division of Policy and Directives Management
US Fish and Wildlife Service
5275 Leesburg Pike
MS-PPM
Falls Church, VA 22041-3803

RE: Comments on Migratory Bird Permits; Programmatic Environmental Impact Statement:
Docket No. FWS-HQ-MB-2014-0067

To Whom It May Concern:

Thank you for the opportunity to provide input on the U.S. Fish and Wildlife Service's (USFWS) proposal to authorize incidental take of migratory birds under the Migratory Bird Treaty Act (MBTA).

Texas Department of Transportation (TxDOT) is one of the largest transportation departments in the nation, managing over 80,000 miles of road and over 52,000 bridges. The Environmental Affairs Division of TxDOT integrates environmental considerations, including addressing MBTA concerns, into all TxDOT activities to achieve environmental compliance.

The MBTA was originally enacted in the 1900s for the purpose of ending the extensive commercial trade in feathers. Currently, it protects over 1,000 bird species, including their nests and eggs, from "take" as defined in 50 C.F.R. § 10.12. The breadth of MBTA's scope has been influenced by various legal interpretations over time, interpretations which differ from circuit to circuit. Because of the varying case law, there exists a legal uncertainty over whether, and to what extent, incidental bird deaths that occur in the course of otherwise lawful land-use activities constitute a violation of MBTA. This legal uncertainty is compounded by the lack of clear authority to authorize permits for incidental take of migratory birds under the Act.

TxDOT is encouraged by the evaluation being conducted by USFWS in preparation of a programmatic environmental impact statement on the potential impacts of a proposal to authorize incidental take of birds under the MBTA. This effort could help clarify the legal and regulatory uncertainty facing agencies and industries managing MBTA compliance and allow a clear path for compliance.

COMMENTS ON PROPOSED RULEMAKING

Providing legal authorization for incidental take of migratory birds where authorization is appropriate

TxDOT strongly supports the proposal to establish a more general authority to permit incidental take through general authorizations, individual permits, or interagency memoranda of understanding. The absence of clear rules for permitting incidental take increases the regulatory uncertainty for

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agencies and industries whose land-use activities may include actions that may involve technical violations of MBTA, but where pursuit of prosecution is at the discretion of the USFWS and Department of Justice. The reliance on uncertain prosecutorial discretion to avoid criminal liability for an otherwise-lawful land use is problematic for agencies such as TxDOT.

The federal register posting states “we would not expect every person or business that may incidentally take migratory birds to obtain a permit”. TxDOT strongly encourages USFWS to ensure any new rules clearly define when a permit is required. Leaving room for law enforcement discretion does not address the regulatory uncertainty facing agencies and industries with respect to MBTA. The federal register posting also states that the authorization “will promote adoption of measures to avoid or minimize incidental take, and will provide for appropriate mitigation, including compensation, for that take.” TxDOT supports the requirement of practicable mitigation measures to offset the impact of take from otherwise lawful activities. Mitigation requirements should be limited to avoidance and minimization for common bird species that are found in abundance. Compensatory mitigation should only be considered for birds that are of conservation concern to the USFWS. Mitigation measures required for incidental take permits under MBTA should be less stringent than those required under Endangered Species Act (ESA), as the species covered are not threatened or endangered.

TxDOT strongly supports the effort to minimize administrative burdens on both applicants and the USFWS by combining environmental reviews being conducted for other Federal permits or authorizations, such as ESA. Agencies and industries should not be required to have a MBTA permit for species covered under an ESA permit.

Approaches for authorizing incidental take of migratory birds

TxDOT requests that consideration be given for programmatic take authorization for the transportation industry. While the development of new transportation corridors may destroy, degrade, or fragment existing habitat, the transportation industry also creates surrogate habitat for enumerable nesting birds through the construction of bridge structures, culverts, sign bridges, and highway light poles. Necessary maintenance and construction activities on and around these structures can be challenging because of their use as nesting sites. While we are committed to practical avoidance and minimization measures, TxDOT would be interested in pursuing some level of authorized programmatic incidental take associated with ongoing construction activities and emergency maintenance actions.

Although each of the options discussed in the federal register posting would be beneficial, certain options are better than others, or could be adjusted slightly, to address concerns of the transportation industry. Comments and suggestions on each are provided below.

General Conditional Authorization for Incidental Take Associated with Particular Industry Sectors

The general conditional authorization for incidental take associated with transportation as an industry may be problematic because each state's MBTA issues and mitigation options may vary greatly. We are not certain that standards (conservation measures or technologies) for protection could be established that would be appropriate for all states in the same manner as the other industries you are considering, given each state's unique natural resource environment and regulatory requirements. If implementation of select standards could be tailored to each state for implementation, this option would be sufficient to meet the needs of the transportation industry.

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Individual Permits

While this option would assist in reducing the regulatory uncertainty faced by transportation projects, it would likely require a substantial amount of effort by both transportation agencies and USFWS to review and issue permits on a project by project basis. TxDOT alone issued over 1,000 projects in 2014. The amount of time it may take to issue a permit could exceed the breeding season for birds, thus negating any benefit of an incidental take program. A better solution would be to allow for programmatic permits for transportation activities.

Memoranda of Understanding (MOU) with Federal Agencies

A MOU with the Federal Highway Administration (FHWA) that allowed for incidental take on federally-funded state highway projects would be beneficial. But a large portion of transportation projects are funded with only state dollars, including most maintenance and operation costs. To address the large number of projects that are not federally funded, USFWS should consider an option for development of an MOU directly with state agencies.

Development of Voluntary Guidance for Industry Sectors

The voluntary guidance for industry sectors is problematic because each state's MBTA issues and mitigation options may vary greatly and because it does not resolve the concern with the legal and regulatory uncertainty that would remain, given that prosecution of potential violations is at the discretion of law enforcement.

Thank you for your consideration of these comments.

Sincerely,



Carlos Swonke, P.G.
Director of Environmental Affairs Division

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North Carolina Wildlife Resources Commission

Gordon Myers, Executive Director
27 July 2015

Public Comments Processing
Attn: FWS-HQ-MB-2014-0067
Division of Policy Directives Management
U.S. Fish and Wildlife Service
5272 Leesburg Pike, MS-PPM
Falls Church, VA 22041-3803

Subject: Re: Comment on Migratory Bird Permits, Programmatic Environmental Impact Statement
[Docket No. FWS-HQ-MB-2014-0067]

Dear Sir/Madam:

Biologists with the North Carolina Wildlife Resources Commission (NCWRC) reviewed the federal notice with regard to impacts to fish and wildlife resources. Our comments are provided in accordance with provisions of the Migratory Bird Treaty Act of 1918 (16 U.S.C. 703-712; Ch. 128; July 13, 1918; 40 Stat. 755) as amended, the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), and North Carolina Environmental Policy Act (G.S. 113A-1 et seq., as amended; 1 NCAC-25). Please accept the following comments from the NCWRC regarding the proposed Programmatic Environmental Impact Statement (PEIS) to consider permitting for the incidental take of migratory birds under the Migratory Bird Treaty Act (MBTA).

The NCWRC supports the decision by the United States Fish and Wildlife Service (USFWS) to develop a PEIS that considers incidental take of migratory birds under the MBTA for particular industry sectors. Also, the NCWRC supports the USFWS establishing authority to permit incidental take through general authorizations, individual permits, and interagency memoranda of understanding.

The NCWRC recommends to the USFWS that the PEIS consider the following factors of interest to North Carolina and other states:

- Capacity of both the USFWS and NCWRC to establish and administer an incidental take permit process;
- Early involvement of NCWRC and other states in the evaluation and development of incidental take permitting;
- Early involvement of NCWRC and other states in the development of Best Management Practices (BMPs) to avoid or reduce incidental take, including an evaluation of their effectiveness; and
- Early involvement of NCWRC and other states in the development of meaningful compensatory mitigation for unavoidable take.

Thank you for the opportunity to provide comments on the proposed Programmatic Environmental Impact Statement. If we can be of further assistance, please contact me at (919) 707-0222 or shannon.deaton@ncwildlife.org.

Sincerely,

Shannon L. Deaton, Program Manager
Habitat Conservation

GOVERNOR
Susana Martinez



DIRECTOR AND SECRETARY
TO THE COMMISSION
Alexandra Sandoval

DEPUTY DIRECTOR
Daniel E. Brooks

STATE OF NEW MEXICO DEPARTMENT OF GAME & FISH

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FWS-HQ-MB-2014-0067
Public Comments Processing
Division of Policy and Directives Management
U.S. Wildlife Service
5275 Leesburg Pike, MS-PPM
Falls Church, VA 22041-3803

July 27, 2015

Subject: Comments on Notice of Intent to Develop a Programmatic Environmental Impact Statement to Authorize Incidental Take of Migratory Birds Under the Migratory Bird Treaty Act Docket #FSW-HQ-MB-2014-0067

Reply To: Stewart Liley, Chief, Wildlife Management Division, New Mexico Department of Game and Fish, 1 Wildlife Way, Santa Fe, New Mexico 87507

To Whom it May Concern:

The New Mexico Department of Game and Fish (Department) has reviewed the Notice of Intent (NOI) to prepare a programmatic environmental impact statement (PEIS) pursuant to the National Environmental Policy Act to evaluate the potential environmental impacts of a proposal to authorize incidental take of migratory birds under the Migratory Bird Treaty Act. We appreciate the opportunity to offer comments on this proposed rulemaking by the U.S. Wildlife Service (USFWS) and look forward to reviewing the PEIS when it becomes available. The Department would like for the Service to consider the comments below in the development of the PEIS.

The Service is looking at possibly expanding and/or negotiating Memoranda of Understanding (MOU) With Federal Agencies (pg 30065) to regulate and authorize incidental take caused by Federal agency programs and/or activities. We encourage the Service to develop similar MOU's with state wildlife agencies that consider impacts to migratory birds from state wildlife agency actions and mitigate take appropriately. These agreements should include measures to avoid unnecessary take, such as preliminary avian surveys and conservation plans, but also allow habitat manipulations that are expected to provide a net benefit to migratory birds.

We appreciate that this process will likely result in best management practices and bird-safe project design to reduce the current level of incidental mortality that occurs in the course of day-to-day operations in many industries. We encourage the Service to develop a science-based system to determine appropriate levels of take and mitigation or other compensation that serves to replace/replenish birds lost to incidental take, similar to the procedures established for non-purposeful eagle take (50 CFR 22.26 and 22.27). Range-wide and regional trends and

populations exist for all birds that are included in the Breeding Bird Survey. We also advocate for pre- and post-project monitoring and permit reviews, similar to those established for non-purposeful eagle take (50 CFR 22.26 and 22.27).

The NOI states that the Service is "considering approaches that will minimize the administrative burden of compliance with this regulatory process for industry, other Federal agencies, and the Service" (pg 3034). With a new system of permits and approaches, it is likely that at least part of the administrative burden will fall to the states. For example, state wildlife agencies often receive data requests to support federal permit applications. We encourage the Service to consider approaches that also minimize the administrative burden of compliance with this regulatory process for state wildlife agencies and develop a system to reduce this potential impact on the states.

As noted on page 30033, The MBTA was created and amended in cooperation with multiple countries outside of the United States. State wildlife agencies work with these other countries on issues covered under the MBTA. Additionally, State wildlife agencies and the Service work closely with Canada and Mexico through the Flyway system to develop seasons and bag limit regulations for the hunting of migratory game birds. We encourage the Service to coordinate with all countries involved when developing any PEIS that may impact migratory birds that fall under the MBTA.

Thank you for the opportunity to comment on this Notice of Intent. We look forward to reviewing the PEIS. Should you have any questions regarding these comments, please contact my office at (505) 476-8038.

Sincerely,



Stewart Liley
Chief, Wildlife Management Division



OKLAHOMA DEPARTMENT OF TRANSPORTATION

200 N.E. 21st Street
Oklahoma City, OK 73105-3204
www.odot.org

VIA ELECTRONIC SUBMITTAL (www.regulations.gov)

July 27, 2015

Dockets Management Facility
US Department of Transportation
1200 New Jersey Avenue SE
Washington DC. 20590

Subject: Comments from Oklahoma Department of Transportation
DOT Docket ID Number FWS-HQ-MB-2014-0067

Dear Administrators:

The Oklahoma Department of Transportation (Oklahoma DOT) is writing this comment letter in response to the Federal Register notice of intent (NOI) dated May 26, 2015, regarding 50 CFR Part 21 Migratory Bird Permits; Programmatic Environmental Impact Statement.

The Oklahoma DOT supports the Fish and Wildlife Service (USFWS) in the establishment of a permitting process to authorize incidental take of migratory birds. Compliance with the Migratory Bird Treaty Act (MBTA) in avoiding all possible impacts to the common cliff and barn swallows annually costs the taxpayers of Oklahoma up to \$15,000,000. Due to Oklahoma's continued focus on addressing structurally deficient bridges, future costs attributable to compliance measures are projected to be as high as \$21,500,000 in 2018. Oklahoma DOT strongly encourages the USFWS to consider that the construction and maintenance of transportation facilities should be considered as a sector to be addressed through a general incidental take authorization. Additionally, we encourage the USFWS to consider focusing efforts on Birds of Conservation Concern.

In response to the fifteen specific areas in which comments were solicited, please accept the following:

(1) *The approaches we are considering for authorizing incidental take:*

Oklahoma DOT recommends the following approaches for authorizing incidental take of migratory birds, in order of preference:

1. General conditional authorization for the Transportation Sector, and suggest a process similar to the Clean Water Act 404 Nationwide Permit process under the US Army Corps of Engineers.
2. Individual Permit for limited situations not falling under General Permit.
3. Memoranda of Understanding with Federal Agencies, while sufficient for federal agencies, would leave many state and local actions unpermitted.
4. Development of voluntary guidance for industry sectors is helpful, such as the identification of best management practices, but by itself is inadequate to address the problem in full.

"The mission of the Oklahoma Department of Transportation is to provide a safe, economical, and effective transportation network for the people, commerce and communities of Oklahoma."

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- (2) *The specific types of hazards to birds associated with particular industry sectors that could be covered under general permits:*

Transportation facility operations, maintenance, and construction should be considered as a sector for development of an incidental take permit. In Oklahoma, cliff and barn swallows nesting on bridges results in construction delay and added cost to the public. Routine maintenance and repair may result in incidental loss of nests with eggs or young. Some work requires nest removal and may result in incidental loss of a few eggs, but the species is very abundant and ultimately benefits from the additional nesting habitat created by bridge projects. Also, tree removal for maintenance and construction necessary for public safety may be required.

There are practices implemented by State Highway Departments, such as Oregon and Washington, known to minimize impacts. When infeasible to avoid impacts, incidental take should be permitted.

- (3) *Potential approaches to mitigate and compensate for the take of migratory birds:*

Permitting should focus on Birds of Conservation Concern, and should consider the benefits to species by the creation of new habitats with the construction of bridges. Mitigation, if deemed necessary, should only be considered for Birds of Conservation Concern.

- (4) *Other approaches or combinations of approaches we should consider with respect to the regulation and authorization of incidental take:*

Oklahoma DOT suggests a general permit approach by sector and/or species similar in structure to the Clean Water Act 404 Nationwide Permit process under the US Army Corps of Engineers. For example, bridge nesting species should have specific best management practices or general conditions/conservation measures identified that could be part of the incidental take authorization. This, in combination with guidance for industry, would provide the best opportunity to avoid and minimize take, and authorize incidental take required to provide needed infrastructure to serve the travelling public.

- (5) *Specific requirements for NEPA analyses related to these actions:*

Oklahoma DOT does not offer any comment.

- (6) *Whether the actions we consider should distinguish between existing and new industry facilities and activities:*

Oklahoma DOT does not recommend distinguishing between existing and new facilities or activities. For transportation sector impacts, there is little to no difference.

- (7) *Considerations for evaluating the significance of impacts to migratory birds and to other affected resources, such as cultural resources:*

Oklahoma DOT suggests USFWS consider the following when evaluating the significance of impacts to migratory birds and other affected resources:

1. Account for impacts to Birds of Conservation Concern, with less emphasis on abundant species.

2. Some measures to avoid impacts to MBTA, such as clearing and grubbing during the winter in advance of construction, can cause harm to water quality, and have competing interests with the Clean Water Act and Endangered Species Act.

- (8) *Information regarding natural resources that may be affected by the proposal:*
- (9) *Considerations for evaluating the interactions between affected natural resources:*

Allowing incidental take under most circumstances would result in shorter duration of ground disturbance, less water quality impact, and less conflict with avoidance and minimization measures for endangered species, most notably aquatic species. Compliance with different rules may result in longer duration of activities to complete a construction project, crossing into multiple construction seasons. This could result in greater environmental impact than would occur given permitted incidental take of non-threatened species of Migratory Birds.

- (10) *The benefits provided by current Federal programs to conserve migratory birds and the additional benefits that would be provided by a program to authorize incidental take:*

Oklahoma DOT does not currently benefit from any federal programs to conserve migratory birds.

- (11) *The potential costs to comply with the actions under consideration, including those borne by the Federal government and private sectors:*
- (12) *The baseline for quantifying the costs and benefits of the proposal:*

As discussed earlier, the benefits from an authorized incidental take program would include decreased construction contract costs and decreased user costs to the public. Direct costs are anticipated by other states to be substantial. As stated previously, Oklahoma has an aggressive program addressing structurally deficient bridges. The Oklahoma DOT anticipates a program cost of over \$550 million in bridge projects during FFY 2018 alone. Subsequently, Oklahoma will experience direct costs of nearly \$11,200,000 directly attributable to activities conducted in order to prevent nesting or to account for anticipated adverse working condition likely to be encountered due to avoidance of nesting seasons in 2018. Additional inflation and costs attributed to declining infrastructure conditions due to delayed construction will increase costs by approximately \$10,300,000 in that same year. Please see the attached sheet indicating the fiscal impacts referenced herein for each year of the Oklahoma DOT 8 Year Construction Work Plan. When feasible, incidental take permits would provide a mechanism to move forward and provide a method to avoid incurring the costs associated with delay in infrastructure spending.

- (13) *Bird species having religious or cultural significance for tribes, bird species having religious or cultural significance to the general public, and impacts to cultural values from the actions being considered:*

Oklahoma DOT does not offer any comment.

- (14) *Considerations for evaluating climate change effects to migratory bird resources and to other affected resources, such as cultural resources:*

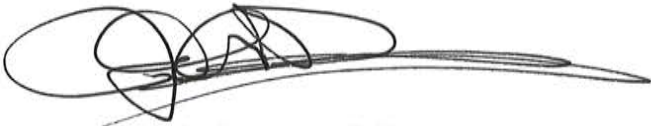
Oklahoma DOT does not offer any comment.

- (15) *How to integrate existing guidance and plans, such as Avian Protection Plans, into the proposed regulatory framework.*

Existing guidance and Avian Protection Plans or Migratory Bird Conservation Plans should provide a starting point or baseline for options to consider in determining minimization, similar to the 404 Nationwide Permitting Process.

Oklahoma DOT appreciates the opportunity to provide input in response to the NOI. State transportation system needs to be maintained and upgraded for the safety of the traveling public despite potential conflicts with nesting migratory birds. We recommend that transportation be included as an industry sector in any USFWS consideration of general conditional authorizations for incidental take of migratory birds. States need clear guidelines and processes and should not be reliant on prosecutorial discretion of enforcement. Finally, Oklahoma DOT recommends that efforts focus on Birds of Conservation Concern, while activities that will have little to no effect on common species like swallows should be authorized by any incidental take permit developed.

Sincerely,

A handwritten signature in black ink, appearing to read 'John R. Bowman', with a long horizontal flourish extending to the right.

John R. Bowman, P.E.
Director of Capital Programs

cc Director
 Deputy Director
 Chief Engineer

Estimated Bridge Infrastructure Improvement Project Fiscal Impact of the Migratory Bird Treaty Act Cliff and Barn Swallow Provisions

Estimated Fiscal Impact of MBTA on Bridge Infrastructure Improvements	2015	2016	2017	2018	2019	2020	2021	2022	8 Year Total
Estimated Value of Bridge Improvements (Replacement and Rehab)	\$344,125,632	\$381,969,624	\$376,573,391	\$558,789,531	\$300,580,890	\$343,626,911	\$306,685,998	\$248,952,000	\$2,861,303,977
Cost Escalation Due to Nest Prevention or Schedule Associated Overhead*	\$6,882,513	\$7,639,392	\$7,531,468	\$11,175,791	\$6,011,618	\$6,872,538	\$6,133,720	\$4,979,040	\$57,226,080
Value of Projects that are Likely to Experience Delay (50% of Estimated Value)	\$172,062,816	\$190,984,812	\$188,286,696	\$279,394,766	\$150,290,445	\$171,813,456	\$153,342,999	\$124,476,000	\$1,430,651,989
Construction Cost Index (CCI) Adjustment of 1.6% equal to 5 Months of 1 Year (est.)**	\$2,753,005	\$3,055,757	\$3,012,587	\$4,470,316	\$2,404,647	\$2,749,015	\$2,453,488	\$1,991,616	\$22,890,432
Infrastructure Lifecycle Cost of Delay of 2.1% equal to 5 Months of 1 Year (est.) ***	\$3,613,319	\$4,010,681	\$3,954,021	\$5,867,290	\$3,156,099	\$3,608,083	\$3,220,203	\$2,613,996	\$30,043,692
Total Estimated Annual Cost Escalation and Cost of Delay	\$13,248,837	\$14,705,831	\$14,498,076	\$21,513,397	\$11,572,364	\$13,229,636	\$11,807,411	\$9,584,652	\$110,160,203

* These are intrinsic costs (estimated at 2%) associated with all bridge improvement projects based on reasonably substantiated contractor activities conducted in order to prevent nesting or to account for anticipated adverse working conditions (winter construction) likely to be experienced when construction schedules are adjusted to avoid the restrictions of the nesting season altogether.

** National Construction Cost Index as reported by construction consultancy Rider Levett Bucknall (RLB) rose at a 4.64 percent rate in the first quarter of 2015, up 1.16 percent from the fourth quarter of 2014 and 5.39 percent for the full year. **The index “tracks the ‘true’ bid cost of construction, which includes, in addition to costs of labor and materials, general contractor and subcontractor overhead costs and fees** (profit). The index also includes applicable sales/use taxes that ‘standard’ construction contracts attract.” Among the 12 metro areas for which RLB calculates the index, annual increases ranged from 3.64 percent in Las Vegas to 13.30 percent in Honolulu. A construction cost index has been conservatively estimated at 3.7 percent per year for the purposes of this report. An equivalency factor of 5 months of 12 months has been applied which is representative of the April through August seasonal restriction for Cliff Swallow nesting.

*** The costing procedure that includes all agency costs in infrastructure project service life-cycle is called life-cycle costing. **Agency costs mainly consist of capital costs associated with project construction and the discounted future costs of maintenance and rehabilitation** (including resurfacing, restoration, and reconstruction). **Benefit-cost analyses use a discount rate that marks down benefits and costs arising farther in the future relative to those arising sooner.** A real discount rate of 7 percent means that deferring a benefit or cost for a year reduces its real value by approximately 6.5 percent (≈1/1.07). This real discount rate conforms to the “default position” in the 1992 Office of Management and Budget (OMB) guidance on discount rates for benefit-cost analyses of public investment and regulatory programs (OMB Circular A-94, Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs, October 29, 1992). Subsequently, in 2003, OMB recommended that regulatory analyses use both 3 percent and 7 percent as alternative discount rates. (OMB Circular A-4, Regulatory Analysis, September 17, 2003. The justifications for these recommendations apply equally to benefit-cost analyses of public investments. Using the estimated lifecycle costing and discount rate elements for reference, a lifecycle cost of delay has been conservatively estimated at 5 percent per year for the purposes of this report. An equivalency factor of 5 months of 12 months has been applied which is representative of the April through August seasonal restriction for Cliff Swallow nesting.

NOTE: An additional component of consideration when delaying projects is costs to the users of the system, defined as "user costs." **User costs consist of three primary components and typically include delay costs associated with an increase (or decrease) in the amount of time it takes for a user to travel from point A to B, vehicle operating costs attributable to the operation or maintenance of a vehicle (brake wear, idling, fuel consumption, tire wear, etc.) and crash costs resulting from property damage, injuries, or loss of life.** While these costs are real and quantifiable, user costs are less tangible and will not be considered in the context of this report.