**"Roveillo, Virginie" <virgrove@indiana.edu >**

12/03/2012 03:21 PM

To: "Rick_Amidon@fws.gov" <Rick_Amidon@fws.gov>
cc: "midwestwindhcp@fws.gov" <midwestwindhcp@fws.gov>
Subject: FW: Comment Submission: Draft Midwest Wind MSHCP_FWS-R3-ES-2012-N225

Hi Mr. Amidon,

I just left you a voicemail and wanted to follow up via email as well. I submitted the attached comments to midwestwindhcp@fws.gov this morning, but I have not yet received any confirmation that my submission was received. Could you please confirm receipt?

Thank you.

Best regards,

Virginie Roveillo
Conservation Law Center
(812) 855-3688
virgrove@indiana.edu

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**From:** Roveillo, Virginie
**Sent:** Monday, December 03, 2012 10:15 AM
**To:** midwestwindhcp@fws.gov
**Subject:** Comment Submission: Draft Midwest Wind MSHCP_FWS-R3-ES-2012-N225

Attn: Rick Amidon

Dear Mr. Amidon:

On behalf of the American Bird Conservancy and the Conservation Law Center, I am submitting the attached comments on the Draft Midwest Wind Multi-Species Habitat Conservation Plan (FWS-R3-ES-2012-N225; FXES11120300000F2-123-FF03E00000). The deadline for comments is today, December 3, 2012. The PDF document is attached to this email.

Please confirm receipt of this email submission. Thank you.

Best regards,

Virginie Roveillo
Conservation Law Center
(812) 855-3688
virgrove@indiana.edu

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CLC-ABC_Draft Midwest Wind MSCHP Comments_12.3.12_FWS-R3-ES-2012-N225.pdf

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December 3, 2012

Regional Director
Attn: Rick Amidon
U.S. Fish and Wildlife Service
Ecological Services
5600 American Blvd. West, Suite 990
Bloomington, MN 55437-1458
E–Mail: midwestwindhcp@fws.gov

**Subject: Comments on Draft Midwest Wind Energy Multi-Species Habitat Conservation Plan Within Eight-State Planning Area**

Sent via E-mail (receipt verification requested)

Dear Mr. Amidon:

Please find below our timely submitted comments on the U.S. Fish and Wildlife Service's notice of intent and request for comments pertaining to the Draft Midwest Wind Energy Multi-Species Habitat Conservation Plan Within Eight-State Planning Area [FWS-R3-ES-2012-N225; FXES11120300000F2-123-FF03E00000].[1] The deadline for comments on this notice and request is December 3, 2012.

Thank you for this opportunity to comment. These comments are jointly submitted by the Conservation Law Center and the American Bird Conservancy. 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. American Bird Conservancy ("ABC") is a not-for-profit membership organization whose mission is to conserve native birds and their habitats throughout the Americas. ABC acts across the full spectrum of threats to birds to safeguard the rarest bird species, restore habitats, and reduce threats, unifying and strengthening the bird conservation movement.

[1] The original Federal Register notice coordinates were FWS–R3–ES–2012–N179; FXES11120300000F2-123-FF03E00000. *See* 77 Fed. Reg. 52754 (*Draft Midwest Wind Energy Multi-Species Habitat Conservation Plan Within Eight-State Planning Area*) (Aug. 30, 2012).

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Wind power is one of the fastest developing sources of energy in the United States and could be an important part of the solution to climate change. However, wind farms can kill wildlife through collisions with turbines and associated structures. Wind farms can also harm wildlife by displacing species from habitat needed for survival, as well as by destroying, degrading, or fragmenting habitat. The CLC and ABC believe that wildlife and wind power can co-exist if wind projects are carefully designed, sited, studied, operated, monitored, and mitigated. Of these principles, careful siting is the most important.

We divide our comments below into six parts. In Part I we comment on species that should be covered and protected under the Midwest Wind Energy Multi-Species Habitat Conservation Plan ("MSHCP"). Part II discusses areas in the eight-state planning region that should be excluded from permitted wind development. In Part III we comment on avoidance and minimization measures for the proposed MSHCP. Part IV discusses the need for a clear and well-defined adaptive management scheme. Part V focuses on the permitting structures proposed for the MSHCP/ITP(s) and the need for second-tier siting analysis. In Part VI, we comment on planning the direct, indirect, and cumulative effects analysis for the MSHCP to assist the U.S. Fish and Wildlife Service ("USFWS") with its Section 7 jeopardy assessment under the Endangered Species Act ("ESA").

# PART I: PROTECTION FOR SPECIES

**COMMENT I.1. Besides the Eight Proposed Listed and Candidate Species, the MSHCP Should Cover Several Additional Listed, Candidate, and Non-Listed Species.**

**A. Background to Comment.**

The MSHCP planning partners are proposing to cover eight ESA-listed or ESA-candidate species: the endangered Indiana Bat (*Myotis sodalis*), the endangered Gray Bat (*Myotis grisescens*), the endangered Piping Plover (*Charadrius melodus*), the endangered Interior Least Tern (*Sterna antillarum athalassos*), the endangered Kirtland's Warbler (*Setophaga kirtlandii*), the Little Brown Bat (*Myotis lucifugus*), the Northern-Long Eared Bat (*Myotis septentrionalis*), and the Eastern Small-Footed Bat (*Myotis leibii*). The Bald Eagle (*Haliaeetus leucocephalus*) is also being considered for inclusion but no decision has yet been made.

The original grant proposal for the MSHCP, submitted by Indiana, Ohio, Michigan, Missouri, and Iowa in 2009, planned to include 30 species, from bats and birds to mollusks and fish.[2] These species were identified by comparing high potential wind development areas with information on the presence/absence of federally listed or candidate species in the Midwest region.[3] This shows that, at least initially, the states anticipated that the MSHCP would protect a range of species against a number of threats. The Federal Register notice does not provide an explanation for the reduction in the number of proposed covered species, and we urge the planning partners to incorporate additional ESA-related species (endangered, threatened, or candidate) into the MSHCP as well as additional bird species that are most susceptible to becoming listed in the near future.

[2] Grant Proposal, *Development of a Multi-Species Habitat Conservation Plan for Wind Energy Development in the Midwest*, Table 1, *available at* http://www.fws.gov/midwest/endangered/grants/2010/pdf/MultiStateWindHCPproposal.pdf.

[3] *Id.* at p. 4. High potential wind development areas in the Midwest region are those with average wind speeds of 7 meters per second or greater at 50 meters in height. *Id.*

### B. The MSHCP Should Cover All ESA-Listed Species that Occur or May Occur in the Eight-State Planning Region.

The USFWS HCP Handbook advises permit applicants "to include all federally listed wildlife species likely to be incidentally taken during the life of the project or permit."[4] If take of ESA-listed species not covered by the MSHCP/ITP(s) occurs, the wind companies can be liable for violating the ESA and "project activities could be stopped or delayed after the permit has been issued."[5] Even prior to any take, if take of any of these species appears imminent, the wind companies can be enjoined from moving forward with construction and operation of their wind facilities.[6]

To avoid such a result, the MSHCP should cover all ESA-listed species (endangered or threatened) that currently use the plan area or that may occur anywhere within the proposed plan area over the term of the MSHCP. The Ozark Big-Eared Bat (*Corynorhinus townsendii ingens*), for example, is a federally listed endangered species and is known to or is believed to occur in Missouri.[7] Unless it is covered under the proposed MSHCP, any take of this species is prohibited and wind facilities can be held liable.

### C. The MSHCP Should Cover All ESA Candidate Species that Occur or May Occur in the Eight-State Planning Region.

USFWS strongly encourages applicants to include candidate species in HCPs as well as non-listed species having the potential to become listed during the life of the HCP.[8] All candidate species that currently use the MSHCP plan area or that may expand their distribution into the plan area should be included as covered species in the MSHCP.

In particular, USFWS and its planning partners should cover Sprague's Pipit (*Anthus spragueii*). Sprague's Pipit is an ESA candidate species and a Midwest Bird of Conservation

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[4] USFWS, *Habitat Conservation Planning and Incidental Take Permit Processing Handbook* (Nov. 1996), at p. 3-7 (emphasis in original) [hereinafter "*HCP/ITP Handbook*"].
[5] USFWS, *HCP/ITP Handbook*, at p. 3-7.
[6] *See, e.g.*, Animal Welfare Institute v. Beech Ridge, 675 F.Supp.2d 540 (D. Md. 2009).
[7] USFWS, *Species Profile for the Ozark Big-Eared Bat*, http://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=A075; *see also* USFWS Midwest Region, *Missouri: Federally-Listed Threatened, Endangered and Candidate Species County Distribution*, http://www.fws.gov/midwest/endangered/lists/missouri-spp.html.
[8] USFWS, *HCP/ITP Handbook*, Chapt. 4. The Handbook identifies two main reasons for including unlisted species in an HCP: "(1) to provide more planning certainty to the permittee in the face of future species listings; and (2) to increase the biological value of HCPs through comprehensive multi-species or ecosystem planning that provides early, proactive consideration of the needs of unlisted species." *Id.* at 4-1.

Concern.[9] Its current range includes northeastern Minnesota,[10] though there have been sightings in Michigan and Ohio, which were part of the Pipit's historic range.[11] Once common, their numbers have now declined drastically.[12] 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. Sprague's Pipits require unbroken tracts of native grassland and have high altitude aerial displays. They would clearly be at risk of colliding with wind turbines, and wind farms might cause abandonment of otherwise suitable habitat.

Sprague's Pipit is at special risk for take by collisions 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 display times may be as long as three hours by a single Pipit, and display heights of 50 to more than 100 meters above the ground have been documented.[13] In addition, the Government of Alberta's Wildlife Guidelines for Alberta Wind Energy Projects identify Sprague's Pipit as a species with potential for collisions with wind turbines due to its aerial display.[14]

### D. The MSHCP Should Cover Additional Bird Species that Occur in the Eight-State Planning Region and Are Most At Risk of Becoming Listed Under the ESA.

ABC recently published a comprehensive study on the conservation status of American bird species and sub-species.[15] Using a range of factors, the study ranked species into four categories in order of increasing risk: Secure, Potential Concern, Vulnerable, and At-Risk. The

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[9] *See* USFWS, *Species Profile for Sprague's Pipit*, http://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0GD; USFWS News Release, *Listing of Sprague's Pipit Under ESA Found Warranted But Precluded* (Sept. 14, 2010), *available at* http://www.fws.gov/mountain-prairie/pressrel/10-61.htm.

[10] *See* USFWS, *Species Profile for Sprague's Pipit*, http://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0GD.

[11] *See* 74 Fed. Reg. 63337 (*90-Day Finding on a Petition to List Sprague's Pipit as Threatened or Endangered*), *available at* http://www.gpo.gov/fdsys/pkg/FR-2009-12-03/html/E9-28868.htm. Michigan and Ohio were part of the Pipit's historic range. *See* USFWS, *Region 3 Candidate Species*, http://www.fws.gov/midwest/endangered/lists/candidat.html.

[12] *See* USFWS, *Region 3 Candidate Species*, http://www.fws.gov/midwest/endangered/lists/candidat.html.

[13] Mark B Robbins, "Display Behavior of Male Sprague's Pipits," 110 Wilson Bulletin of Ornithology 435 (1998).

[14] Government of Alberta, *Wildlife Guidelines for Wind Energy Projects* (Sept. 2011), at p. 3, *available at* http://srd.alberta.ca/FishWildlife/WildlifeLandUseGuidelines/documents/ WildlifeGuidelines-AlbertaWindEnergyProjects-Sep19-2011.pdf.

[15] American Bird Conservancy, *List of the Birds of the United States with Conservation Rankings* (2012) http://www.abcbirds.org/abcprograms/science/conservationchecklist/index.html.

MSHCP planning partners should cover the bird species that occur in the planning area and are identified in the ABC study as "At-Risk."[16] These are species that need immediate conservation attention if they are to survive the range of environmental challenges they face, such as habitat loss, global warming, and invasive species.

The following "At-Risk" species are not currently listed under the ESA and stand to gain significantly from conservation measures targeting their habitat needs under a MSHCP. If they are not incorporated into the MSHCP and do not receive those habitat benefits, these species are more likely to become endangered over the next 30 years:

- Yellow Rail
- Black Rail
- Buff-breasted Sandpiper
- Golden-winged Warbler (currently under USFWS review for listing under the ESA)[17]

### E. Bald Eagles Should Be a Covered Species Given Their Presence in the Eight-State Planning Region.

The Bald and Golden Eagle Protection Act ("BGEPA") prohibits the unpermitted take of Bald and Golden Eagles.[18] The BGEPA defines "take" broadly to include, among other activities, the wounding, killing, or disturbing of Bald and Golden Eagles or their nests.[19] The prohibitions of the BGEPA extend to activities that result in the unintentional or incidental take of Bald and Golden Eagles, and when the recurring take of Bald and Golden Eagles is associated with but is not the purpose of a given project or activity, the proponent of the project or activity must obtain a programmatic permit from USFWS to avoid liability for take.[20]

The 2009 Eagle Permit Take Rule defines a programmatic take as one that is "recurring, but not caused solely by indirect effects, and…occurs over the long term and/or in a location or locations that cannot be specifically identified."[21] The programmatic permit strategy is "designed to provide a net benefit to eagles by reducing ongoing unauthorized take."[22] USFWS

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[16] American Bird Conservancy, *At-Risk Birds – Lists and Charts, available at* http://www.abcbirds.org/abcprograms/science/conservationchecklist/charts.html.
[17] *See* USFWS, *Species Profile for the Golden-Winged Warbler*, http://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0G4.
[18] 16 U.S.C. § 668.
[19] 16 U.S.C. § 668c.
[20] 50 C.F.R. § 22.26.
[21] 74 Fed. Reg. 46836, 46841 (*Eagle Permits; Take Necessary To Protect Interests in Particular Localities*) (Sept. 11, 2009).
[22] 74 Fed. Reg. at 46842.

regulations implementing the BGEPA allow the Service to issue programmatic eagle take permits only when the direct and indirect effects of the take and required mitigation, together with the cumulative effects of other permitted take, are compatible with the "preservation" of Bald and Golden Eagles, the permitted take is "unavoidable," and the taking will occur "despite application of advanced conservation practices."[23] In short, if the proponent of a project that is likely to take Bald or Golden Eagles fails to obtain a programmatic eagle take permit, then that project proceeds in violation of the BGEPA.

Project developers may seek to include Bald and Golden Eagles as covered species under an ESA Section 10 ITP.[24] To do so, the HCP must meet BGEPA permit issuance criteria. A Section 10 ITP can be issued only if it is otherwise lawful, meaning here that the ITP will not cause the unauthorized take of Bald or Golden Eagles. Hence, if the HCP does not meet BGEPA permit issuance criteria, the ITP would be unlawful because it would cause the unauthorized take of Bald or Golden Eagles.[25] Similarly, if the HCP seeks to cover Bald or Golden Eagles as non-listed species but BGEPA mitigation and minimization requirements are not met, the ITP cannot be issued, given that the "permitted activity [would be] incompatible with the preservation of the bald or golden eagle."[26]

We support including the Bald Eagle as a covered species under the MSHCP. We discuss the Golden Eagle below in Comment I.2.C. The National Bald Eagle Management Guidelines state that significant Bald Eagle populations occur in the Great Lakes states.[27] Although delisted in 2007, the Bald Eagle remains a Bird of Conservation Concern and FWS continues to monitor the species' progress post-delisting. The expanding wind energy sector presents serious risks to Bald Eagles. A 2004 Bald Eagle assessment by the U.S. Bureau of Land Management states 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."[28] Bald Eagle deaths at

[23] 74 Fed. Reg. at 46842.
[24] *See* USFWS, *Draft Eagle Conservation Plan Guidance* (Jan. 2011), at p. 9.
[25] USFWS, *Draft Eagle Conservation Plan Guidance* (Jan. 2011), at p. 9.
[26] 50 C.F.R. § 22.11.
[27] USFWS, *National Bald Eagle Management Guidelines* (2007), at p. 3.
[28] Amber Travsky & Gary P. Beauvais, *Species Assessment for Bald Eagle (Haliaeetus Leucocephalus) in Wyoming* (prepared for BLM, 2004).

wind energy facilities in the United States appear to be increasing and have occurred at facilities as small as a single 10 kW wind turbine.[29]

## COMMENT I.2. In Addition to Covered Species, the MSHCP Should Incorporate a Second Tier of Protection for Bird Species Vulnerable to Threats from Development.

### A. Background to Comment.

The list of species currently proposed for coverage suggests that the planning partners are focusing on bird and bat species that occur widely in the eight-state planning region, are most susceptible to collision with wind turbines and associated facility infrastructure, and with the exceptions of the Bald Eagle and the Little Brown Bat, are already listed as endangered species or are pending review under the ESA. Although collision risk may be the most visible threat to wildlife, wind development has other important repercussions on habitat, breeding, and migratory movement. Many species are vulnerable to habitat disturbance, degradation, and fragmentation and may be equally harmed by those threats as by collision.

The MSHCP should adopt a two-tiered approach to protecting species. As discussed above in Comment I.1., the MSHCP should fully cover all ESA-related species (endangered, threatened, and candidate) that occur in the eight-state planning region, the Bald Eagle, and bird species that are most at risk of becoming listed under the ESA. A second tier of protection should be developed for bird species that are less at risk of being listed – and therefore are not proposed as "covered species" – but that would benefit significantly from siting restrictions and operational measures specific to the individual species.

### B. Bird Species Identified as "Vulnerable" in ABC's Conservation Checklist Merit Protective Measures Under the MSHCP.

The Migratory Bird Treaty Act ("MBTA") prohibits the unpermitted take of listed migratory birds, whether done intentionally or occurring incidentally to an otherwise lawful activity.[30] The regulations implementing the MBTA define "take" broadly to include, among

[29] *See, e.g.*, USFWS, *Eagle's Cause of Death Confirmed at Eastern Neck National Wildlife Refuge in Maryland* (undated), *available at* http://www.fws.gov/northeast/ecologicalservices/pdf/EasternNeckeaglestrikeatturbine7312.pdf.
[30] 16 U.S.C. §§ 703, 707.

other activities, the wounding and killing of migratory birds.[31] In addition, Executive Order 13186 directs federal agencies and executive departments to promote the conservation of migratory birds protected by the MBTA, including the identification and minimization of incidental or unintentional take of migratory birds that is reasonably attributable to agency actions.[32]

The MSHCP should develop measures to avoid take of individuals from sensitive bird species vulnerable to habitat loss and collision. Examples of protective measures include avoiding important habitat like breeding/nesting grounds and curtailing/feathering turbines upon observation of a bird of a particular species. It may also be possible to include habitat acquisition or restoration for these birds in the MSHCP's proposed "green infrastructure" mitigation approach, especially for those species that have similar habitat needs to the covered species.

Specifically, the USFWS Midwest Birds of Concern[33] that are designated as Rare or Declining and that have been identified as Vulnerable in ABC's Conservation Checklist[34] should be afforded protection under the MSHCP. Birds of these species need conservation attention because they have limited habitat ranges, live in smaller populations, face significant threats, or are experiencing negative population trends. The needs of these species, given their low population numbers and declining trends, should be given adequate consideration under the MSHCP. Under the MBTA and Executive Order 13186, USFWS has a duty to protect these species and a responsibility to prevent their take from threats such as wind energy development. In addition, because these are USFWS-designated Birds of Conservation Concern,[35] including protections for them in the MSCHP will help USFWS fulfill a major objective of the Birds of Conservation Concern list: "Our goal is to prevent or remove the need for additional ESA bird listings by implementing proactive management and conservation actions."[36] Keeping these birds off the endangered species list will also benefit the wind industry.

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[31] 50 C.F.R. § 10.12.
[32] Exec. Order No. 13186 (Jan. 10, 2001).
[33] USFWS, *Migratory Birds: Midwest Birds of Concern*, http://www.fws.gov/midwest/midwestbird/concern.html.
[34] *See* American Bird Conservancy, *List of the Birds of the United States with Conservation Rankings*, http://www.abcbirds.org/abcprograms/science/conservationchecklist/index.html. ABC's Conservation Checklist utilizes the 2012 Partners in Flight update to species assessment scores.
[35] *See* USFWS, *Birds of Conservation Concern 2008*, Table 41 (USFWS Region 3), at p. 59, *available at* http://www.fws.gov/migratorybirds/NewReportsPublications/SpecialTopics/BCC2008/BCC2008.pdf.
[36] *See* USFWS, *Birds of Conservation Concern 2008*, at p. iii, http://www.fws.gov/migratorybirds/NewReportsPublications/SpecialTopics/BCC2008/BCC2008.pdf.

The following species are "Vulnerable" bird species that should benefit from a second tier of protective measures under the MSHCP:

- Whooping Crane (experimental population) [avoid developing in stopover habitat, curtail turbines on observation of individual in project area]
- Cerulean Warbler [avoid developing in breeding habitat]
- Henslow's Sparrow [avoid developing in breeding and other important habitat]
- Baird's Sparrow [avoid developing in breeding habitat]
- Olive-sided Flycatcher [avoid developing in breeding habitat]
- Nelson's Sparrow [avoid developing in breeding and stopover habitat]
- Marbled Godwit [avoid developing in breeding and general habitat]
- Semipalmated Sandpiper [avoid developing in stopover habitat]
- Red-headed Woodpecker [avoid developing in breeding habitat]
- Wood Thrush [avoid developing in breeding habitat]
- Chestnut-collared Longspur [avoid developing in habitat]
- Blue-winged Warbler [avoid developing in breeding habitat]
- Prairie Warbler [avoid developing in breeding habitat]
- Prothonotary Warbler [avoid developing in breeding habitat]
- Swainson's Warbler [avoid developing in breeding habitat]
- Kentucky Warbler [avoid developing in breeding habitat]
- Canada Warbler [avoid developing in breeding habitat]

### C. The MSHCP Must Incorporate Protective Measures for the Golden Eagle.

USFWS has estimated the U.S. Golden Eagle population at approximately 30,000,[37] and 1,000 to 2,500 individuals of that population have been estimated to occur east of the Mississippi River.[38] Golden Eagles use a range of habitats including grasslands, tundra, forested habitat, brush lands, deserts, and woodlands. The species is thus exposed to a multitude of threats, and Golden Eagle experts have ranked wind energy as the third greatest mortality threat.[39]

It is a violation of the BGEPA to kill or disturb a single Golden Eagle without an appropriate permit. Given that the distribution of Golden Eagles includes areas in the eight-state planning area, the MSHCP must incorporate measures that protect against take of Golden Eagles. It is likely that wind turbines in the Midwest Region will take Golden Eagles and thus create a violation of the BGEPA. Under the current eagle permitting structure, however, USFWS cannot provide for the legal programmatic take of Golden Eagles in the eastern United States. The Federal Register notice for the 2009 Eagle Permit Rule specifies that "[f]or golden eagles east of

[37] USFWS, *Golden Eagles Status Fact Sheet* (2011).
[38] *See* Todd Katzner, et al. *Status, Biology, and Conservation Priorities for North America's Eastern Golden Eagle (Aquila Chrysaetos) Population* (2012), The Auk 129(1):168–176, at p. 168.
[39] *See* USFWS, *Minutes and Notes from the North American Golden Eagle Science Meeting* (Sept. 21, 2010).

100 degrees West longitude, [the Service] will not issue any take permits unless necessary to alleviate an immediate safety emergency."[40] Insufficient information on the rates of Golden Eagle mortality in the eastern U.S. provided the basis for this prohibition.

As a result of this conflict, USFWS must complete an Environmental Assessment ("EA") or an Environmental Impact Statement ("EIS") under the National Environmental Policy Act ("NEPA") if the agency seeks to permit take of Golden Eagles beyond the western U.S. An EA or EIS is necessary to determine the effects of permitting programmatic take of Golden Eagles, and the results of the agency's analysis will provide a scientific basis for determining whether take of Golden Eagles east of 100 degrees West longitude should or should not be permitted.

Given the current conflict in the BGEPA permitting structure, the MSHCP must incorporate protective measures for Golden Eagles. Proper siting and operational measures should be implemented to avoid take of the species and to avoid development in its breeding habitat. We further discuss siting, design, and operational measures in Parts II and III below.

[40] 74 Fed. Reg. at 46840.

# PART II: NO-DEVELOPMENT ZONES

**COMMENT II.1. Designated Critical Habitat Within the Eight-State Planning Region Should Be Excluded from Wind Energy Development, As Should Important Habitat for ESA-Listed Species That Have Not Had Critical Habitat Designated.**

All ESA-designated critical habitat in the eight-state planning region should be off-limits to siting of proposed wind projects and should not be eligible for the legal protection granted by an ITP. Critical habitat has been designated in the eight-state region for the following species (by state):

- Illinois: Piping Plover, Hine's Emerald Dragonfly[41]
- Indiana: Piping Plover[42]
- Iowa: Topeka Shiner, Higgins Eye Pearlymussel[43]
- Michigan: Piping Plover[44]
- Minnesota: Canada Lynx, Piping Plover, Topeka Shiner[45]
- Missouri: Indiana Bat, Niangua Darter, Hine's Emerald Dragonfly, Tumbling Creek Cave Snail[46]
- Ohio: Piping Plover[47]
- Wisconsin: Piping Plover, Hine's Emerald Dragonfly[48]

Kirtland's Warbler is an example of an endangered species that has not had critical habitat designated in the eight-state planning region. Important habitat for it and any other ESA-listed species without designated critical habitat should also be off-limits to siting of proposed wind projects and should not be eligible for the legal protection granted by an ITP.

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[41] USFWS Midwest Region, *Illinois: Endangered, Threatened, and Candidate Species*, http://www.fws.gov/midwest/endangered/lists/state-il.html.
[42] USFWS Midwest Region, *Indiana: Endangered, Threatened, and Candidate Species*, http://www.fws.gov/midwest/endangered/lists/state-in.html.
[43] USFWS Midwest Region, *Iowa: Endangered, Threatened, and Candidate Species*, http://www.fws.gov/midwest/endangered/lists/state-ia.html.
[44] USFWS Midwest Region, *Michigan: Federally-listed Threatened, Endangered, Proposed, and Candidate Species*, http://www.fws.gov/midwest/endangered/lists/michigan-spp.html.
[45] USFWS Midwest Region, *Minnesota: Endangered, Threatened, and Candidate Species*, http://www.fws.gov/midwest/endangered/lists/state-mn.html.
[46] USFWS Midwest Region, *Missouri: Federally-Listed Threatened, Endangered and Candidate Species County Distribution*, http://www.fws.gov/midwest/endangered/lists/missouri-spp.html.
[47] USFWS Midwest Region, *Ohio: Endangered, Threatened, and Candidate Species*, http://www.fws.gov/midwest/endangered/lists/state-oh.html.
[48] USFWS Midwest Region, *Wisconsin: Endangered, Threatened, and Candidate Species*, http://www.fws.gov/midwest/endangered/lists/state-wi.html.

**COMMENT II.2. Wind Energy Development Should Be Excluded from Areas That Pose High Risk to Birds.**

The MSHCP should channel wind development to areas that pose low risk to birds by excluding high risk land from development. USFWS and its planning partners should consult ABC's Wind Development Bird Risk Map ("the Map"). [49] The Map identifies areas in the U.S. that pose elevated risk to birds, based on susceptibility to collision and/or susceptibility to displacement from nesting, foraging, and transit areas.

Areas that pose a high risk and are of critical importance to bird species are shown in red on the Map. These lands include the following: ESA-designated critical habitat, other important habitat for bird species, important bird areas where large numbers of migratory birds congregate, important bird areas that are home to rare birds, and areas where large number of birds are present on a seasonal basis. Wind facility development presents significant threats to birds and their habitat in these environs. Any land labeled by the color red in the eight-state planning region should be a no wind facility development zone. USFWS and its planning partners should also consult Audubon Important Bird Areas for exclusion areas.[50]

**COMMENT II.3. The MSHCP Should Channel Wind Development to Lands that Pose the Lowest Risk to Bats by Excluding Development in Areas That Are Home to Important Bat Hibernacula, Habitats, and Aggregations.**

Similar to ABC's Wind Risk Map, the MSHCP planning partners should conduct a regional, landscape-level analysis of collision/barotrauma and displacement risks for bat species. Wind development should not be permitted in areas that are home to important bat hibernacula, maternity colonies, or spring or fall swarming aggregations. Major migratory corridors from winter habitat to summer habitat for covered bat species should likewise be excluded from wind development.

[49] American Bird Conservancy, *Wind Development Bird Risk Map*, *available at* http://www.abcbirds.org/extra/windmap.html.
[50] *See* Audubon, *Important Bird Areas Program*, *available at* http://web4.audubon.org/bird/iba/.

**COMMENT II.4. Sensitive, Essential, and Exceptional Areas Such As Refuges, Migratory Routes, and Large Blocks of Intact Native Landscapes Should Be Excluded from Wind Energy Development.**

USFWS and its planning partners should identify sensitive, essential, and exceptional locations potentially used by one or more of the species covered by the MSHCP and should exclude those areas from the MSHCP's coverage. The following general areas are likely to contain sensitive, essential, or exceptional locations:

- Broad geographic areas of high sensitivity such as those mentioned in the USFWS *Land-Based Wind Energy Guidelines* and The Nature Conservancy's *Great Lakes Regional Guidelines*.
    - large blocks of intact native landscapes and intact ecological communities, especially rare landscape types such as intact grasslands greater than 76 acres in size, forest patches greater than 5,080 acres in size in agricultural or urban landscapes, and prairie or savanna remnants of any size;
    - riparian corridors and lake shorelines;
    - inland wetland complexes and connected upland habitats;
    - known migratory routes and staging areas;
    - fragmentation-sensitive species' habitats;
    - high-priority conservation areas for NGOs;
    - other local, state, regional, federal, tribal, or international categorizations.

- River and forest systems acting as valuable diurnal migration corridors.
    - Maps of "Potential Bird-Structure Collision Areas" for Iowa, Minnesota, and Wisconsin with accompanying descriptions are available at http://www.fws.gov/midwest/wind/resources/biomaps.html.

- Sensitive natural resources areas.
    - USFWS provides several maps of biological resources in the Midwest Region, including "Areas of Concern for Wind Farm Sitings" (Iowa), areas with potential species richness, Service lands, staging areas, and bird migration routes. These maps are available at http://www.fws.gov/midwest/wind/resources/biomaps.html.

- Wildlife refuges.
    - A list of national wildlife refuges and wetland management districts in the Midwest can be found at http://www.fws.gov/midwest/Refuges/visit.html.
    - An overview of conservation planning on the national wildlife refuges in the Midwest Region is available at http://www.fws.gov/midwest/planning/plansbystate.html.

- Locations where partnerships with private landowners are being formed to protect habitat where imperiled species are present or where those species could be reintroduced.

- Formation of such partnerships is underway throughout the MSHCP corridor. To learn their locations, we suggest contacting the recovery coordinators for each of the covered species, the Nature Conservancy office for each state in the MSHCP plan area, and each national wildlife refuge in the MSHCP plan area.

**COMMENT II.5. "No-Development" Zones Should Be the Basis for Setting the MSHCP's Boundaries.**

The Federal Register notice for the MSHCP states that the planning area encompasses the Midwest Region of the Service but that the specific land covered by the MSHCP has not yet been determined and "could be all or portions of the eight States." The USFWS's HCP Handbook encourages applicants "to consider as large and comprehensive a plan area as is feasible and consistent with their land or natural resource use authorities"[51] but notes that boundaries should "be as exact as possible" to "avoid later uncertainty about where the [ITP] applies or where permittees have responsibilities under the HCP."[52]

The HCP Handbook also states that "HCP boundaries should encompass *all areas* within the applicant's project, land use area, or jurisdiction *within which any permit or planned activities likely to result in incidental take are expected to occur*."[53] Thus, in the context of this MSHCP, the "planned activities likely to result in incidental take" include the siting, construction, operation, maintenance, and decommissioning of wind energy facilities. These are the only areas where incidental take is expected to occur. The Federal Register notice states that once identified, the "'covered land' will be the general locations where future ITPs could be issued under the MSHCP."[54] It follows, then, that "covered land" and "HCP boundaries" are synonymous. General locations where future ITPs could be issued are the same as areas where incidental take is expected to occur.

Future ITPs should not be issued in the areas we recommend above as no-development zones and, therefore, these areas should not be included within the MSHCP's boundaries. ESA-designated critical habitat, sensitive ecological areas, bird and bat migration corridors, red zones on ABC's wind map, and bat hibernacula, for example, should *not* be "locations where future ITPs could be issued." None of these areas should be afforded the protection of an ITP under

[51] USFWS, *HCP/ITP Handbook*, at p. 3-11.
[52] USFWS, *HCP/ITP Handbook*, at p. 3-11.
[53] USFWS, *HCP/ITP Handbook*, at p. 3-11 (emphasis added).
[54] 77 Fed. Reg. at 52754.

this MSHCP. By excluding these areas from the MSHCP's boundaries, developers seeking to build in those no-development zones will not be able to rely on the MSHCP and will therefore need to apply for individual ITPs and develop full, separate HCPs for project proposals.

Generally, we believe the approach to delineating the MSHCP's boundaries should promote the channeling of wind facility development to areas that pose the least risk to birds, bats, and other covered or vulnerable species[55] and away from areas that pose the highest risk to those species. USFWS and its planning partners should focus on impact prevention in setting the MSHCP boundaries. Impact prevention encompasses both impacts from collision/barotrauma as well as impacts from habitat displacement, loss, fragmentation, and degradation.

[55] That is, both the MSHCP-covered species as well as the second-tier vulnerable species discussed in Part I above.

# PART III: AVOIDANCE AND MINIMIZATION MANAGEMENT

## COMMENT III.1. The MSHCP Should Incorporate General Fine-Scale Siting Criteria for Proposed Wind Facilities.

The MSHCP should specify criteria for micro-siting of individual wind facility projects. This will provide a second habitat assessment over and above the general, landscape siting assessments recommended in the above comments.[56] Areas of suitable or potentially suitable habitat should be assessed at the individual project level for potential present and future use by covered species and prioritized for different levels of protection depending on whether the species are listed, candidate, or non-listed as well as on biological and ecological factors.

To illustrate, mandatory buffer zones of approximately five miles from Indiana bat roost trees and foraging areas should be required as a siting criterion in the MSHCP.[57] Also, project areas should be thoroughly surveyed for bird presence and habitat use. Assuming that project areas do not overlap with excluded bird areas discussed in Part II, take of birds may be able to be avoided and minimized effectively using fine-scale siting adjustments.

Areas that are not excluded from wind energy development (see Part II for recommended exclusions) may still pose a high risk to bats, birds, and other species relative to other lower-risk areas. For example, although the red areas on ABC's Wind Risk Map should be excluded, the orange areas on the Map are also important to birds and the risks posed by wind development are still substantial. The fine-scale siting criteria for such higher risk areas should be more stringent than the siting criteria used to locate facilities in low risk areas. Buffer distances, for instance, should be wider and pre- and post-construction monitoring more frequent and extensive in these higher risk areas. Similarly, in higher risk areas wind turbines should not be sited on ridges that may be followed by migrating birds. Moreover, the determination of whether a proposed set of avoidance and minimization measures is practicable should be more conservative (i.e., precautionary on the side of species protection) in higher risk areas.

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[56] The USFWS's Final Land-Based Wind Energy Guidelines sets forth a multi-tier, multi-scale process relevant for siting. *See* USFWS, *Land-Based Wind Energy Guidelines* (Mar. 2012), *available at* http://www.fws.gov/windenergy/docs/WEG_final.pdf.

[57] *See* USFWS, *Indiana Bat Section 7 and Section 10 Guidance for Wind Energy Projects* (Revised 26 October 2011), p. 9, *available at* http://www.fws.gov/midwest/Endangered/mammals/inba/pdf/inbaS7and10WindGuidanceFinal26Oct2011.pdf.

## COMMENT III.2. Take of Birds Should Be Avoided and Minimized Through Design Measures in Addition to Appropriate Siting.

### A. Background to Comment.

Because the presence of individual birds is not entirely predictable, sensitive siting alone is not sufficient to protect birds from collision risk. The design of wind facilities and power lines must be appropriate to ensure to the fullest extent possible that birds do not contact wind turbines, power lines, or associated structures.

### B. The USFWS Land-Based Wind Energy Guidelines Should Be Mandatory Rather than Voluntary Under the Terms of the MSHCP.

USFWS recommends measures and best management practices for avoiding contact with birds and bats in the Service's Final Land-Based Wind Energy Guidelines ("the Guidelines").[58] We believe that the planning partners should incorporate the Guidelines' tiered approach and its recommendations for wind development as mandatory rather than merely voluntary.

### C. Best Practices for Managing Avian/Power Line Issues Should Be Incorporated into the MSHCP's Take Minimization Plan.

The Avian Power Line Interaction Committee and USFWS jointly developed Avian Protection Plan Guidelines in 2006 to provide a framework for utilities to manage avian/power line problems.[59] The MSHCP should require wind developers to adhere to these guidelines and any updates of them in the design, construction, and operation of power transmission lines and other associated infrastructure at wind project sites. This includes, among other practices, requiring complete line marking and bird diverters, nest management, and reporting systems. Not only are many of these best practices inexpensive as compared to the cost of wind turbines and other infrastructure, they are also easily implemented and effective at minimizing avian mortality when incorporated at the beginning of a project's planning phase.

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[58] USFWS, *Land-Based Wind Energy Guidelines* (Mar. 2012), Chap. 9, at pp. 49-50, *available at* http://www.fws.gov/windenergy/docs/WEG_final.pdf.

[59] *See* Avian Power Line Interaction Committee, *Suggested Practices for Avian Protection on Power Lines* (2006), *available at* http://www.dodpif.org/downloads/APLIC_2006_SuggestedPractices.pdf.

**COMMENT III.3. In Addition to Appropriate Siting and Design, Take of Birds Should Be Minimized Through Operational Measures.**

In addition to siting and design provisions and restrictions, the MSHCP should incorporate operational measures to reduce bird mortality. Nocturnally migrating birds are at increased risk of collision with turbines on nights with low-altitude cloud cover and bad weather. Birds fly at lower heights in poor weather conditions when visibility is reduced (such as with rain or fog), increasing their risk of flying in rotor swept zones. Additionally, studies have shown that birds are attracted to continuous light and are therefore at increased risk of colliding with stationary objects during bad weather events.[60]

To reduce risk of collision, the MSHCP should require turbine curtailment, turbine feathering, and lighting adjustments for birds. Events like mass migration movements and weather patterns are generally short (hours or days). Operational measures therefore have the benefit of being short in duration but effective at reducing large-scale bird mortality. Turbine curtailment should be triggered during peak bird migration periods when weather conditions force birds to fly at low altitudes. The Great Lakes Regional Guidance handbook notes, for example, that in the western Lake Erie basin, westerly winds in the fall and southerly winds in the spring bring mass movements of migrating birds.[61] When bad weather is predicted during these periods, turbines should be shut off to permit safe passage for birds. Turbine curtailment for both ESA-listed and non-ESA listed species is already taking place at multiple wind energy facilities in the United States, so it is not unreasonable to include it as a condition in the MSHCP.[62] Additionally, rotor blades should be adjusted to minimize their surface in relation to the direction of migration, and developers should follow USFWS wind guideline recommendations for installing lighting in compliance with Federal Aviation Administration requirements.

[60] The Nature Conservancy, *Wind Energy: Great Lakes Regional Guidance* (2011), at p. 4, *available at http://www.glc.org/energy/wind/pdf/TNC-Great-Lakes-Regional-Guidelines.pdf.*
[61] The Nature Conservancy, *Wind Energy: Great Lakes Regional Guidance* (2011), at p. 40.
[62] We are aware of turbine curtailment taking place in Texas (for both ESA-listed and non-ESA listed species), South Dakota (for Whooping Cranes), and Maine (for Bald Eagles), but it may be happening in other locations as well since there is no publicly available national list of curtailing facilities.

## COMMENT III.4. Take of Bats Should Be Avoided and Minimized Through a Turbine Curtailment Plan Based on the Best Available Science.

### A. The Baseline Curtailment Plan Provided for in the MSHCP Should Reflect the Best Available Science.

Several experimental studies have examined the relationship between increases in cut-in speed and reductions in bat mortality due to turbines.[63] These studies are the best available science to date on the effects of curtailing cut-in speeds of wind turbines on bat fatalities.[64] The CLC has commented on the results of these studies in our submission to USFWS on Beech Ridge Energy's Draft Habitat Conservation Plan for its Beech Ridge Wind Facility in West Virginia. We incorporate our comments in Part I of that document by reference here.[65]

Together, the results of the most recent turbine curtailment studies reasonably indicate that a cut-in speed of 6.5 m/s may produce a significantly larger reduction in bat fatalities compared to a cut-in speed of 5.0 m/s.[66] In addition, these studies also show that curtailing turbines to a cut-in speed of 6.5 m/s should be implemented over the entire nightly active period: from 30 minutes before sunset to 15 minutes after sunrise. Although activity levels of bats from just before sundown to just after sunrise is to some extent uncertain and may exhibit a decreasing trend over the course of the night, blade feathering during the second half of the night still reduces bat mortality substantially compared with unfeathered blades.

The MSHCP planning partners should recognize and acknowledge that the best available science points to a baseline curtailment regime for all turbines of a 6.5 m/s cut-in speed with blade feathering, from 30 minutes before sunset through 15 minutes after sunrise, during the entire active season from emergence to hibernation (which may differ depending on latitude).

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[63] *See* Arnett et al., *Effectiveness of changing wind turbine cut-in speed to reduce bat fatalities at wind facilities. A final report submitted to the Bats and Wind Energy Cooperative* (May 2010); Good et al., *Bat Monitoring Studies at the Fowler Ridge Wind Energy Facility, Benton County, Indiana, April 13 – October 15, 2010, A report prepared for Fowler Ridge Wind Farm* (Jan. 28, 2011); *see also* Good et al., *Bat Monitoring Studies at the Fowler Ridge Wind Farm, Benton County, Indiana, April 1 – October 31, 2011, A report prepared for Fowler Ridge Wind Farm* (Jan. 31, 2012).

[64] *See id.*

[65] *See* Conservation Law Center, Comments on Draft EIS and Draft HCP for Beech Ridge Energy Wind Facility (Oct. 2012) (Docket ID: FWS-R5-ES-2012-0059-0032), *available at* http://www.regulations.gov/#!documentDetail;D=FWS-R5-ES-2012-0059-0032.

[66] It is possible that a cut-in speed higher than 6.5 m/s may not significantly reduce impact to bats any further, but this has yet to be established.

### B. The Baseline Curtailment Plan Provided for in the MSHCP Should Minimize the Impact of Take to the Maximum Extent Practicable.

Since an applicant for an ITP must minimize the impact of take to the maximum extent practicable in order to obtain an incidental take permit, choosing a minimization plan that is reasonably likely to be *less* effective at reducing take than an alternative minimization plan will fail the permit issuance criteria, unless the applicant can show that the more effective alternative is "impracticable." The MSHCP thus should set forth the reasoning behind selection and rejection of alternative minimization measures in a stepwise manner: first select measures that the best available science reasonably indicates will minimize take, and then examine and discuss why those measures are practicable or impracticable. If the baseline set of measures is impracticable, chose the next best alternative set of measures that will minimize take and will also be practicable.

The following steps should be implemented under the MSHCP for ITP applicants:

- Require a baseline cut-in speed of 6.5 m/s with turbine feathering below that wind speed, from 30 minutes before sunset through 15 minutes after sunrise, during the period from emergence to hibernation – the best available science reasonably indicates that this regime may minimize impact of take to covered bat species to the maximum extent practicable;

- Determine whether those measures are practicable, and justify the decision based on FWS's guidance;

- If and only if that set of measures is shown to be impracticable, select and analyze another alternative for the project that is most likely to produce similar reductions in take but that is also practicable (e.g., cut-in speed of 6.5 m/s with feathering, for the entire night, from mid-July through mid-October).

- Take that remains after implementing such minimization measures must be mitigated to the maximum extent practicable.

### C. The Operational Regime and Adaptive Management Plan Should Work in Tandem to Best Protect Covered Species.

The MSHCP should use the operational regime described above as the starting point for the research and adaptive management plan section for covered bat species. In other words, the triggers and processes for research, monitoring, and adaptive management should be based on the operational regime that the best available science reasonably indicates will minimize take to

the maximum extent practicable. Monitoring and adaptive management may be used to determine whether the selected minimization plan is performing as expected. If the selected curtailment plan is found to be performing as expected, then project developers may experiment with *incrementally* lower cut-in speeds and shorter nightly and seasonal curtailment periods using a subset of facility turbines to determine if the same effectiveness can be achieved at lower cost. Care must be taken, however, that the experimentation is not likely to unduly compromise the take reductions produced by the initial baseline measures. On the other hand, if the selected curtailment plan is found to be performing below expectations, additional measures such as shutting down or relocating problematic turbines would be implemented as specified in the adaptive management plan.

However, as discussed more extensively below in Part IV, the MSHCP's adaptive management plan should not be a substitute for specifying and implementing those baseline operational measures that the best available science reasonably indicates will best avoid and minimize impacts to covered species. The adaptive management plan should not be used to lock in a curtailment regime that the best available science now indicates is sub-par relative to other regimes under the rationale that "more research is needed." Given the scope of this MSHCP, USFWS and its planning partners must proceed cautiously. If the planning partners feel that more research and experimentation is needed to test hypotheses about curtailment regimes, that research and experimentation should be conducted incrementally at a small scale and should proceed from more restrictive to less restrictive, not vice versa.

### COMMENT III.5. Measures to Avoid and Minimize Take of Birds and Bats Must Be Consistent and Integrated.

Measures to avoid and minimize take of birds must be integrated with measures for bats. Avoiding and minimizing direct take of bats at wind turbines may require some measures not relevant or not protective for birds, such as adjustment of wind turbine height,[67] reducing operation during periods of low wind speeds,[68] and use of electromagnetic fields for

[67] Robert M.R. Barclay et al., *Variation in Bat and Bird Fatalities at Wind Energy Facilities: Assessing the Effects of Rotor Size and Tower Height*, 85 Canadian J. of Zoology 3, 381-387 (2007), *available at* http://www.nrcresearchpress.com/doi/abs/10.1139/Z07-011.

[68] Edward B. Arnett et al., *Effectiveness of Changing Wind Turbine Cut-in Speed to Reduce Bat Fatalities at Wind Facilities*, Bat Conservation International (Apr. 2009), *available at* http://www.batsandwind.org/pdf/Curtailment_2008_Final_Report.pdf.

deterrence.[69] Thus, measures that focus on avian species alone will not be sufficient to protect bats as well, and vice versa. Not only must the MSHCP provide a plan for implementing avoidance measures for both birds and bats, it must also find ways to avoid conflicts between measures for different taxa.

[69] Barry Nicholls & Paul A. Racey, *Bats Avoid Radar Installations: Could Electromagnetic Fields Deter Bats from Colliding with Wind Turbines?*, PLoS ONE 2(3), at 1 (2007), *available at* http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0000297.

# PART IV: ADAPTIVE MANAGEMENT, CHANGED CIRCUMSTANCES, AND MONITORING

## COMMENT IV.1. Adaptive Management Provisions Should Be Incorporated With Clear and Well-Defined Implementation Criteria.

### A. Background to Comment.

Achieving the objectives of this MSHCP is going to be a complex undertaking. There are clear goals to be met (e.g., remaining within allowable take levels for the ITP) and a mandate to protect species (e.g., large-scale wind energy development is taking place in areas with wildlife species protected by the ESA, BGEPA, and MBTA), but there is significant uncertainty about how the goals can be achieved (e.g., how can take levels be managed given the large geographic area and multiple wind energy projects that could potentially take protected wildlife). Adaptive management, if properly structured and implemented, will provide a structured method for managing this uncertainty and complexity while still achieving the goals.

Adaptive management may be implemented as part of an HCP for several reasons: (1) to determine whether implemented minimization and mitigation measures are as effective as predicted and to modify the measures if not; (2) to resolve a specific uncertainty about the effectiveness of planned minimization and mitigation measures; (3) to determine the potential effects of the activity on the species covered in the HCP/ITP; and (4) to test hypotheses about the relative effectiveness or feasibility of measures that are not planned but which may be as effective as the planned measures. Especially for the third and fourth uses of adaptive management, experiments must not pose too much risk to the covered species.[70]

The HCP Handbook emphasizes that while the "base mitigation strategy or initial minimization and mitigation measures which are implemented must be sufficiently vigorous so that the Service may reasonably believe that they will be successful," an "adaptive management approach is particularly useful when significant questions remain regarding an HCP's initial mitigation strategy."[71] The Five-Point Policy states that adaptive management is "essential" for HCPs that pose significant risks to species as a result of data and information gaps.

[70] 65 Fed. Reg. 35242, 35252 (*Final Addendum to the Handbook for Habitat Conservation Planning and Incidental Take Permitting Process*) (June 1, 2000) [hereinafter "*HCP/ITP Handbook Addendum*"].
[71] USFWS, *HCP/ITP Handbook*, at p. 3-25.

It is important to note that a commitment to adaptive management is not by itself a valid mitigation measure. Adaptive management seeks to address uncertainties about impacts to species and allows for the implementation of measures that reduce, remove, or mitigate impacts of take.[72] Reducing uncertainty "does not compensate for take that occurs, and therefore, is not a mitigation measure."[73]

### B. The Adaptive Management Plan Should Cautiously Allow For the Implementation of Updated Minimization and Mitigation Techniques.

While there is consensus in the scientific community that wind facilities cause mortality in birds, bats, and other species and can result in habitat degradation, results of monitoring and from studies of effects of wind turbines on bats and birds shed new light on the appropriateness of existing mitigation and minimization techniques. In addition, there is a high level of risk associated with this MSHCP, considering that it is one of the first of its kind and one of the first on this geographic scale. In the face of such uncertainty and risk and given the scale of this MSHCP, the conservation program for the Midwest region should be "cautious initially and adjusted later based on new information."[74] The adaptive management strategy should therefore employ active experiments only if experimental treatments reflect relatively small and incremental adjustments to initial baseline measures. The adaptive management strategy should also require early and frequent monitoring and adjustments based on monitoring results. Indeed, monitoring is the key element of a successful adaptive management strategy and, as discussed further below, must be designed to allow the efficient reporting and dissemination of monitoring data to permit timely adjustments to the conservation plan.

To illustrate with an example, the adaptive management plan for covered bat species should contain triggers and specific modifications to the turbine curtailment regime if roosting or maternity sites are newly identified. The Indiana Bat draft recovery plan notes that "[b]ecause maternity colonies are widely dispersed during the summer and difficult to locate, all the combined summer survey efforts have found only a fraction of the maternity colonies presumed to exist based on the rangewide population estimates derived from winter hibernacula surveys. . .

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[72] USFWS, *Indiana Bat Section 7 and Section 10 Guidance for Wind Energy Projects* (Revised 26 Oct. 2011), question 73, at 49, *available at* http://www.fws.gov/midwest/endangered/mammals/inba/pdf/inbaS7and10WindGuidanceFinal26Oct2011.pdf.
[73] *Id*. at 49.
[74] USFWS, *HCP/ITP Handbook Addendum*, at p. 35252.

Regardless of reasonable disagreements regarding the average colony size, the geographic locations of the majority of Indiana bat maternity colonies remain unknown."[75] Thus, the adaptive management plan and the changed circumstances provisions of the MSHCP should provide for locating previously unobserved roosting sites and maternity colonies within commuting distance of projects and provide for specific modifications over and above the baseline minimization and mitigation plans if any are found.

### C. The Adaptive Management Plan Must Not Be a Substitute for Avoidance, Minimization, and Mitigation Measures that Reflect the Best Available Science.

Every adaptive management plan should begin with identifying the key uncertainties and the questions that need to be addressed to resolve the uncertainties. "Identifying the uncertainty to be addressed is the foundation of the adaptive management strategy."[76] A second foundational feature of an adaptive management plan is that adaptive management cannot substitute for a showing of reasonable certainty that the substantive criteria will be met.[77] An important role of adaptive management is to resolve key uncertainties while satisfying statutory and regulatory standards. Specifically, the MSHCP cannot use uncertainty as a justification for holding back measures that are reasonably indicated by the best available science to minimize and mitigate the impact of take to the maximum extent practicable.[78]

## COMMENT IV.2. The Range of Responses to Information Gained Through Adaptive Management and to Changed Circumstances Must Be Clearly Specified in the MSHCP.

A common shortcoming of draft HCPs for wind facilities has been the failure to adequately specify the range of measures that will be implemented in response to new

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[75] USFWS, *Indiana Bat Draft Recovery Plan, First Revision* (Apr. 2007), at p. 27, *available at* http://www.fws.gov/midwest/endangered/mammals/inba/pdf/inba_fnldrftrecpln_apr07.pdf.
[76] USFWS, *HCP/ITP Handbook Addendum*, at p. 35252.
[77] J.B. Ruhl & Robert L. Fischman, *Adaptive Management in the Courts*, 95 Minn. L. Rev. 424, 472 (2010).
[78] This view is supported by *Greater Yellowstone Coalition, Inc. v. Servheen*. In *Greater Yellowstone* the court addressed the agency's plan to remove the grizzly bear population from the threatened species list in the face of substantial uncertainties about the impact of whitebark pine declines. The agency decided to rely on monitoring and adaptive management rather than ensure that the applicable ESA standards were satisfied. The court stated, "Just as it is not enough simply to invoke 'scientific uncertainty' to justify an agency action, it is not enough to invoke 'adaptive management' as an answer to scientific uncertainty." Greater Yellowstone Coalition, Inc. v. Servheen, 665 F.3d 1015, 1028–29 (9th Cir. 2011).

information gained through adaptive management or in response to the triggering of changed circumstances provisions.

According to USFWS, "[a]daptive management strategies, if used, are part of [the HCP] provisions, and their implementation becomes part of a properly implemented conservation plan"[79] but "[a]daptive management should not be a catchall for every uncertainty or a means to address issues that could not be resolved during negotiations of the HCP."[80] The adaptive management plan must clearly and with specificity state the range of possible operating conservation program adjustments that would be triggered by new information.[81] "Whenever an adaptive management strategy is used, the approved HCP must outline the agreed-upon future changes to the operating conservation program."[82] This requirement is relatively straightforward. If new information reveals that take is greater than expected or initial measures are not as effective as expected, then one or more additional *specified* measures are triggered depending on the deviation. Alternatively, if appropriate responses to new information are uncertain initially, experimentation may be included as part of the adaptive management plan – for example, a comparison of the effectiveness of three cut-in speeds. The plan would then call for implementation of the treatment alternative that produces the best result. Either way, the range of additional measures can be described with specificity in the HCP – i.e., they are either known additional measures or known treatment alternatives in planned experiments. An adaptive management plan is not an excuse for failing to specify a range of measures that will be triggered based on specified scenarios, even though the scenario that will occur and the precise measure called for may be uncertain at the time of permit issuance.

According to USFWS, adaptive management is compatible with the No Surprises policy only if the HCP, ITP, and Implementing Agreement "clearly state the range of possible operating conservation program adjustments due to significant new information, risk, or uncertainty."[83] The description of such adjustments must be specific enough to delineate "the limits of what resource commitments may be required of the permittee" so that the applicant can "assess the potential economic impacts of adjustments before agreeing to the HCP."[84] An adaptive

[79] USFWS, *HCP/ITP Handbook Addendum*, at p. 35253.
[80] USFWS, *HCP/ITP Handbook Addendum*, at p. 35252.
[81] NRDC v. Kempthorne, 506 F.Supp.2d 322, 356–57 (E.D. Cal. 2007).
[82]USFWS, *HCP/ITP Handbook Addendum*, at p. 35252.
[83] USFWS, *HCP/ITP Handbook Addendum*, at p. 35253.
[84] USFWS, *HCP/ITP Handbook Addendum*, at p. 35253.

management plan that sets forth only a process for meetings, consultation, and recommendations, or that sets forth only vague and generalized responses to new information, is insufficient under the ESA[85] and would not be compatible with No Surprises assurances.

Under the "No Surprises" policy, if the status of a species worsens because of changed circumstances the responsibility for implementing additional conservation measures falls on the federal government and all other entities except the HCP permittee – the entity taking the species – unless the specific measures deemed necessary to respond to the changed circumstances are "provided for" in the HCP. Changed circumstances, as opposed to unforeseen circumstances, "can reasonably be anticipated and planned for."[86] The regulations provide as follows with respect to changed circumstances:

> (i) Changed circumstances provided for in the plan. If additional conservation and mitigation measures are deemed necessary to respond to changed circumstances and were provided for in the plan's operating conservation program, the permittee will implement the measures specified in the plan.
>
> (ii) Changed circumstances not provided for in the plan. If additional conservation and mitigation measures are deemed necessary to respond to changed circumstances and such measures were not provided for in the plan's operating conservation program, the Director will not require any conservation and mitigation measures in addition to those provided for in the plan without the consent of the permittee, provided the plan is being properly implemented.[87]

If operational or mitigation measures are not "provided for" in the MSHCP, those measures cannot be required of wind energy facilities for the term of the associated ITPs. USFWS has stated that, with respect to changed circumstances, "[t]he HCP, incidental take permit, and IA, if any, must describe the agreed upon range of management and/or mitigation actions and the process by which the management and funding decisions are made and implemented."[88] Therefore, the MSHCP's changed circumstances plan must describe a range of specific agreed-upon measures and must commit to the implementation of one or more of those measures in response to the changed circumstances scenarios presented. It is insufficient to commit only to "confer" with USFWS or to "research" a solution to the problem without specifying a range of possible actions and without committing to implementation. The

[85] *NRDC v. Kempthorne*, 506 F.Supp.2d at 356–57.
[86] USFWS, *HCP/ITP Handbook*, at p. 3-28.
[87] 50 C.F.R. § 17.22(b)(5)(i)-(ii).
[88] USFWS, *HCP/ITP Handbook Addendum*, at p. 35253.

specificity with which the range of responses to changed circumstances must be described in the MSHCP must be sufficient to delineate "the limits of the resource commitments that may be required of the permittee."[89] Thus, vague and generalized descriptions such as "additional operational measures" are insufficient because such statements do not allow delineation of the resources that can be required of the permittee over the term of the ITP/HCP.

**COMMENT IV.3. The MSHCP Should Implement a Robust Mortality Monitoring Program.**

Monitoring will be a necessary part of the MSHCP. This MSHCP could be a model for other efforts if it includes a robust mortality monitoring program, funded by permit applicants. The monitoring program should contain the following elements:

1. The monitoring program should feed information into an adaptive management approach towards decision making about future wind farm proposals. USFWS already has guidelines for adaptive management in the context of structured decision making that should be followed.

2. Design and implementation of the monitoring program should be overseen by an independent science advisory group (including representatives from multiple agencies, academia, and NGOs). While USFWS facilitators could assist in the design of this program, they should not be voting members of the working group.

3. Standardized data collection protocols that have been peer-reviewed by the science advisory working group should be implemented at all project sites.

4. Monitoring protocols should have sufficient statistical power to detect trends in local populations over the relevant timeframe.

5. Data entry into a central repository that has been designed by database professionals (and is freely accessible to the science advisory group and the public for analysis) should be a mandatory permit condition. Failure to meet this condition should have consequences.

6. Bi-annual analyses of this database (documented in written reports) should be produced by scientists/statisticians approved by the science advisory group.

7. These bi-annual monitoring reports should be reviewed and evaluated in public forums involving USFWS, industry professionals, NGOs, academics and other experts. Mitigation practices should be evaluated in light of the monitoring data and reports.

[89] USFWS, *HCP/ITP Handbook Addendum*, at p. 35253 (stating also, with respect to changed circumstances, "[t]he HCP, incidental take permit, and IA, if any, must describe the agreed upon range of management and/or mitigation actions and the process by which the management and funding decisions are made and implemented.").

8. A National Academy of Sciences panel should evaluate the success of the monitoring program once every 2 to 3 years.

9. The recommendations on pre-construction and post-construction mortality study design appearing in the USFWS Land-Based Wind Energy Guidelines should be followed.

# PART V: PERMIT STRUCTURE

## COMMENT V.1. Second Tier Analysis for Site-Specific Impacts Must Be Incorporated Into the Permitting Structure.

### A. Background to Comment.

The CEQ defines "tiering" as "the process of addressing a broad, general program, policy, or proposal in an initial environmental impact statement (EIS), and analyzing a narrower site-specific proposal, related to the initial program, plan or policy in a subsequent EIS."[90] Tiering is appropriate in two situations:

> (a) From a program, plan, or policy environmental impact statement to a program, plan, or policy statement or analysis of lesser scope or to a site-specific statement or analysis.
>
> (b) From an environmental impact statement on a specific action at an early stage (such as need and site selection) to a supplement (which is preferred) or a subsequent statement or analysis at a later stage (such as environmental mitigation).[91]

Furthermore, CEQ guidance material provides that:

> …where a Federal agency adopts a formal plan which will be executed throughout a particular region, and later proposes a specific activity to implement that plan in the same region, both actions need to be analyzed under NEPA to determine whether they are major actions which will significantly affect the environment. If…both actions will be subject to the EIS requirement…[and] tiering is utilized, the site-specific EIS contains a summary of the issues discussed in the first statement…[and] the site-specific statement would focus primarily on the issues relevant to the specific proposal.[92]

The Federal Register notice soliciting these comments sets forth two main MSHCP structures: a template/umbrella MSHCP and a programmatic MSHCP. Under the umbrella approach, "the Service would issue individual ITPs to applicants that agree to implement the MSHCP." Under the programmatic approach, "each State agency would apply for and receive an ITP and would issue certificates of inclusion to wind energy companies that agreed to

[90] 48 Fed. Reg. 34263 (*Guidance Regarding NEPA Regulations*) (July 28, 1983); *see also* 40 C.F.R. § 1508.28.
[91] 40 C.F.R. § 1508.28.
[92] 48 Fed. Reg. at 34268.

implement the MSHCP at their facility."[93] According to USFWS, at this time it is anticipated that the umbrella approach – in which individual ITPs would be issued – is the more likely for this MSHCP, although the programmatic approach and other permit structure options are being considered.[94] Whatever permit structure is adopted, USFWS expects that the MSHCP "would meet all ITP issuance criteria found at 50 CFR 13.21, 17.22(b), and 17.32(b)," and would be evaluated under NEPA and Section 7 of the ESA only once – that is, "the partners envision that under any permit approach, no additional NEPA or Section 7 analysis would occur."[95]

### B. The Permit Structure Will Need to Include Site-Specific and Project-Specific Analysis of Impacts and Risks.

The agency's description in the Federal Register notice suggests that at the time a company applies for an ITP or a certificate of inclusion, the USFWS (under the umbrella approach) or the State conservation agency (under the programmatic approach) would issue the ITP or certificate of inclusion if the company "agree[s] to implement the MSHCP at their facility." USFWS has not provided sufficient information in the Federal Register notice about whether specific project locations are currently known or will be included in the final EIS and MSHCP.

Regardless of which permitting option is chosen, unless the proposed locations of individual projects covered under the MSHCP are included in the final EIS and MSHCP, or unless the siting of future projects is confined to pre-evaluated locations, the permitting process must provide for a second tier, more detailed assessment of impacts in addition to the single programmatic EIS. Failure to analyze potential impacts and risks at the site or project scale would most likely leave impacts and risks unanalyzed.[96]

A programmatic-level EIS, without analysis of the proposed locations of wind projects, would not be able to address site-specific details of project impacts, costs, and mitigation measures. The programmatic analysis emphasizes cumulative effects of multiple future activities, whereas a second tier analysis would emphasize direct and indirect effects of a single

[93] 77 Fed. Reg. at 52755.
[94] 77 Fed. Reg. at 52755.
[95] 77 Fed. Reg. at 52755.
[96] This is made clear in USFWS's Land Based Wind Energy Guidelines, which calls for site characterization and and field studies to document site wildlife and habitat after a landscape scale siting evaluation. USFWS, *Land-Based Wind Energy Guidelines* (Mar. 23, 2012), Chapters 3 & 4.

activity.[97] The broad geographic scope of most programmatic NEPA analyses requires different data sources than project-level analyses. The remaining question is what type of second tier compliance document – e.g., a site-specific EIS or a site-specific EA – is required under NEPA, which will be answered independently for each separate project. [98]

Moreover, the public should have the opportunity to comment on site-specific wind project proposals and to challenge proposed locations, which would not be possible without an analysis of the site- and project-specific impacts and risks.

The requirements of the ESA also indicate the need for a site-specific or project-specific analysis of impacts. The baseline and cumulative effects analysis required by ESA Section 7 depends on the delineation of an "action area," which typically is separately delineated for each project. ESA regulations define the term "action area" as "all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action."[99] The action area is a biological determination of the reach of the proposed action on listed species. Careful delineation and explanation of the chosen action area is important because the determination of the environmental baseline and cumulative effects are tied to the action area.[100] Determining the scope of an action area requires application of scientific methodology and the agency must explain the "scientific methodology, relevant facts, or rational connections linking the project's potential impacts" to the action area boundaries to enable a reviewing court to determine whether the action area was properly conceived.[101] Cumulative effects analyses for action areas delineated for sited wind energy projects may not be equivalent to an analysis of cumulative effects for a programmatic or regional-scale action area or to the larger-scale cumulative impact analysis required by NEPA. For example, a cluster of projects in a particular local area may have disproportionate cumulative effects that are not revealed by a larger scale cumulative effects analysis that does not consider location-specific information. Thus, a failure to delineate project-specific action areas and to then analyze project-specific baselines and cumulative effects may leave impacts and risks unanalyzed and ESA requirements unfulfilled.

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[97] *See* USFWS, *Land-Based Wind Energy Guidelines* (Mar. 23, 2012), Chapters 3 & 4.
[98] *See* CEQ regulation at 40 C.F.R. § 1508.28; 48 Fed. Reg. 34263 (*Guidance Regarding NEPA Regulations*) (July 28, 1983).
[99] 50 C.F.R. § 402.02. Section 7 of the ESA applies to the USFWS issuance of an ITP. *See* USFWS, *HCP/ITP Handbook*, at pp. 6-12 to 6-14.
[100] Defenders of Wildlife v. Babbitt, 130 F.Supp.2d 121, 129 (D.D.C. 2001).
[101] Native Ecosystems Council v. Dombeck, 304 F.3d 886, 902 (9th Cir. 2002).

**COMMENT V.2. The ITPs or Certificates of Inclusion May Need to Incorporate Site-Specific and Project-Specific Avoidance, Minimization, and Mitigation Measures.**

The main potential shortcoming of both the umbrella and programmatic permitting structures is that it is unclear how the features of specific project locations will be assessed and incorporated into avoidance, minimization, and mitigation measures. The planning partners should explain as soon as possible in the scoping process how each permitting structure will tailor allowable take, terms and conditions, minimization and mitigation measures, and adaptive management provisions to the specific characteristics of individual wind projects, and under what circumstances this is necessary.

Required determinations may not be able to be made at the program level. For example, USFWS may not be able to programmatically determine whether all wind energy projects to be covered under the MSHCP will meet the ITP issuance criteria – in particular the criterion that the impacts of take will be minimized and mitigated "to the maximum extent practicable" – without knowing specifically where those projects will be sited and what local impacts they may have. On one hand it may be possible to programmatically identify measures that the best available science indicates will likely minimize or mitigate take of a covered species. However, <u>if</u> the agency interprets the term "practicability" to depend on the estimate of local impacts, the resources of the project proponent, or the localized costs of alternative turbine configurations and operations, whether such measures are "practicable" may not be clear until the project owner is known and a specific site is characterized and studied. In other words, how can USFWS ensure that the program-level MSHCP "would meet all ITP issuance criteria found at 50 CFR 13.21, 17.22(b), and 17.32(b)"[102] if the "practicability" determination depends on site- or project-specific characteristics? Moreover, at least one court has ruled that USFWS cannot impose compensatory mitigation that is not tailored to the level of unavoidable impact that remains after practicable avoidance and minimization measures are accounted for. It is unclear how USFWS can specify mitigation measures without knowing the level of practicable avoidance and minimization, which in turn may depend on local factors.

Of the two proposed permit structures as currently described, the umbrella option has the potential to allow USFWS to tailor the allowable take and the measures of the MSHCP to the

[102] 77 Fed. Reg. at 52755.

specific characteristics and needs of each individual project (characteristics and needs that might change due to the project's owner, size, location, etc.) because an individual ITP would be issued for each project. Such tailoring would benefit permittees, who will not be saddled with a permit that is overly broad or narrow, as could be the case under a state-held ITP. Issuing individual ITPs also allows more flexibility in setting take limits and in the agency's response to monitoring data on takings. Presumably, at the time the MSHCP is evaluated, the agency would have to estimate a cumulative allowable take for each covered species over the entire MSHCP plan area. With the umbrella option, the agency would be able to fine tune allowable take at finer spatial scales to account for differences in species distributions, ecological sensitivity, and anthropogenic threats across the Midwest region. Note, however, that even with the umbrella option with individual ITPs it may not be possible for the agency to determine satisfaction of the permit issuance criteria based on the MSHCP before knowing the locations, characteristics, and owners of the covered wind energy projects.

The programmatic option, which apparently would use a "certificate of inclusion" to bind individual projects to the MSHCP and state-held ITP, would be especially problematic if it is not possible to determine satisfaction of the permit issuance criteria before knowing the locations, characteristics, and owners of the covered wind energy projects. Neither USFWS regulations nor, to our knowledge, USFWS guidance describes certificates of inclusion. NOAA Fisheries Service regulations do have such regulations,[103] but the criteria for issuing a certificate under those regulations do not include a finding that the permittee will minimize and mitigate the impacts of take to the maximum extent practicable. If the NOAA regulations are used for this ITP process, they would thus require only findings that the applicant will be engaged in the activity covered by the MSHCP and that the applicant will fund and implement the applicable measures in the MSHCP (measures which are programmatic and not site or project specific). This is inadequate without an additional requirement of a finding that the permittee will minimize and mitigate the impacts of take to the maximum extent practicable. Unless USFWS issues regulations or guidance on certificates of inclusion, it appears unlikely that such certificates will require or include any consideration of site- or project-specific characteristics.

[103] 50 C.F.R. § 222.307(f).

**COMMENT V.3. ESA Section 7 Consultation Is Required for Each Project if Wind Projects Are Allowed in Designated Critical Habitat.**

The descriptions of the structural options indicate that only one ESA Section 7 consultation will be completed for the single MSHCP, and that Section 7 consultations or analyses will not be applied to individual ITP issuances or certificates of inclusion. The potential problem with this scheme is that at the time the single MSHCP is evaluated by the agency, the specific locations of some wind projects will likely be unknown to USFWS or unrevealed to the public. Unless all designated critical habitat, regardless of species, is declared off limits to wind energy projects under the MSHCP, which we recommend in Part II above, a site- and project-specific Section 7 analysis will be required in order to determine whether the project will result in "destruction or adverse modification" of designated critical habitat. Destruction or adverse modification cannot be assessed without knowing the specific locations and extent of the wind projects.

This determination of destruction or adverse modification would not otherwise be made pursuant to an ITP issuance or certificate of inclusion under ESA Section 10. The questions asked during a Section 7 consultation are not identical to the questions asked prior to Section 10 ITP issuance. Specifically, before issuing an ITP the agency must ask whether the taking "will not appreciably reduce the likelihood of survival and recovery of the species in the wild":

> (2) Issuance criteria. (i) Upon receiving an application completed in accordance with paragraph (b)(1) of this section, the Director will decide whether or not a permit should be issued. The Director shall consider the general issuance criteria in § 13.21(b) of this subchapter, except for § 13.21(b)(4), and shall issue the permit if he or she finds that: (A) The taking will be incidental; (B) The applicant will, to the maximum extent practicable, minimize and mitigate the impacts of such takings; (C) The applicant will ensure that adequate funding for the conservation plan and procedures to deal with unforeseen circumstances will be provided; (D) *The taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild*; (E) The measures, if any, required under paragraph (b)(1)(iii)(D) of this section will be met; and (F) He or she has received such other assurances as he or she may require that the plan will be implemented.[104]

In contrast, during a Section 7 consultation the agency must ask whether the agency action "is not likely to jeopardize the continued existence of any endangered species or threatened species

[104] 50 C.F.R. § 17.22(b)(2) (emphasis added).

or result in the destruction or adverse modification of [designated critical] habitat of such species."[105] "Destruction or adverse modification" means a direct or indirect alteration that appreciably diminishes the value of critical habitat for *either* the survival *or* recovery of a listed species.[106] The "destruction or adverse modification" standard accounts for impacts to species recovery whereas the ITP issuance standard, in contrast, accounts only for species survival and not recovery.[107] The "destruction or adverse modification" standard does not appear in the § 17.22 or § 17.32 ITP issuance criteria.

## COMMENT V.4. Permittees Must Be Held Accountable for Noncompliance Under a Programmatic Permit Structure.

Under an umbrella permit approach, which would require individual ITPs for each wind project, each wind facility can be held individually accountable for noncompliance under its individual ITP. Under that approach USFWS plays an active and clear role in monitoring compliance with take limits and triggers for the implementation of adaptive management measures. Monitoring and assuring compliance with take limits and permit terms under a state-held ITP could pose difficulties, however. If the planning partners choose to proceed with the programmatic permit structure for the MSHCP, they must explain how a wind facility's certificate of inclusion under a state-held ITP may be suspended or revoked, and how the suspension or revocation of a facility's certificate of inclusion will affect the validity of the state ITP. This is especially important if, as we recommend above, certificates of inclusion are tailored to individual facilities. The MSHCP/ITP permit structure must provide a documented avenue through which USFWS, the state conservation agencies, and the public can enforce permit conditions and project adherence to permit terms.

## COMMENT V.5. An Independent Oversight and Advisory Committee Is Important and Needed for a Program of this Breadth.

### A. Background to Comment.

The USFWS's Five-Point Policy states the following about oversight committees:

[105] 16 U.S.C. § 1536(a)(2).
[106] 50 C.F.R. § 402.02. *See also* Butte Environmental Council v. USACE, 620 F.3d 936 (9th Cir. 2010) (interpreting "adverse modification"); Gifford Pinchot Task Force v. U.S. Fish & Wildlife Services, 378 F.3d 1059 (9th Cir. 2004) (same).
[107] *See* Spirit of the Sage Council v. Kempthorne, 511 F. Supp.2d 31, 43–44 (D.D.C. 2007).

> For large-scale or regional HCPs, oversight committees, made up of representatives from significantly affected entities…are often used to ensure proper and periodic review of the monitoring program and to ensure that each program properly implements the terms and conditions of the incidental take permit…For large-scale or regional HCPs, oversight committees should periodically evaluate the permittee's implementation of the HCP, its incidental take permit, and [Implementation Agreement (IA)] and the success of the operating conservation program in reaching its identified biological goals and objectives. Such committees usually include species experts and representatives of the permittee, the Services, and other affected agencies and entities. Submitting the committee's findings to recognized experts in pertinent fields (*e.g.*, conservation biologists or restoration specialists) for review or having technical experts conduct field investigations to assess implementation of the terms and conditions would also be beneficial. Because the formation of these committees may be subject to the Federal Advisory Committee Act, the role of the participants and the purpose of the meetings must be clearly identified. Oversight committees should meet at least annually and review implementation of the monitoring program and filing of reports as defined in the HCP, permit, and/or IA, if one is used.[108]

The Five-Point Policy also encourages the use of science advisory committees, which are active during both HCP development and implementation phases:

> The Services encourage the use of scientific advisory committees during the development and implementation of an HCP. The integration of a scientific advisory committee and perhaps other stakeholders improves the development and implementation of any adaptive management strategy. Advisory committees can assist the Services and applicants in identifying key components of uncertainty and determining alternative strategies for addressing that uncertainty. We also encourage the use of peer review for an HCP. An applicant, with guidance from the Services, may seek independent scientific review of specific sections of an HCP and its operating conservation strategy to ensure the use of the best scientific information.[109]

Lastly, USFWS's HCP Handbook, Chapter 3.A.3, states the following regarding HCP steering committees, which assist with the development of the HCP:

> Steering committees are particularly useful in regional HCPs, especially those in which the prospective permittee is a state or local government agency, and are recommended for these types of HCP efforts.[110]

[108] USFWS, *HCP/ITP Handbook Addendum*, at p. 35255.
[109] USFWS, *HCP/ITP Handbook Addendum*, at p. 35256.
[110] USFWS, *HCP/ITP Handbook*, at p. 3-3.

### B. Oversight and Advisory Committees Should Be Used.

Development of an MSHCP and ITP(s) at this spatial scale and involving this many species is replete with uncertainties. Oversight and science advisory committees, independent from potential future permit holders and representing a range of viewpoints, should be assembled for implementation of this proposed MSHCP.

## COMMENT V.6. Whichever Permit Structure is Chosen, USFWS Cannot Sub-Delegate Particular Responsibilities.

### A. Background to Comment.

The HCP Handbook states that for "large-scale HCPs, monitoring programs should include periodic accountings of take, surveys to determine species status in project areas or mitigation habitats, and progress reports on fulfillment of mitigation requirements."[111] The Five-Point Policy also provides that "[t]he Service should verify adherence to the terms and conditions of the incidental take permit, HCP, IA, and any other related agreements and should ensure that incidental take of the covered species does not exceed the level authorized under the incidental take permit."[112] The above USFWS policy expressly reflects the oversight role of the agency.

### B. USFWS Must Have an Active Monitoring Role Under Any Permit Structure.

In the context of HCPs and ITPs, USFWS has repeatedly assumed an active role as an overseer – not only by working alongside ITP holders to set biological objectives and create adaptive management plans but also by supervising ITP compliance and, if necessary, implementing the agency's power of permit revocation.[113] The Programmatic option appears to relieve USFWS of its supervisory role after the ITPs are granted to the state agencies – this option relies on the state conservation agencies to exclusively monitor *and determine* compliance of the individual wind companies and projects with the terms and conditions of certificates of inclusion. The option as described does not explicitly provide for USFWS compliance oversight, such as site visits.

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[111] USFWS, *HCP/ITP Handbook*, at p. 3-26.
[112] USFWS, *HCP/ITP Handbook Addendum*, at p. 35254.
[113] *See e.g.*, 69 Fed. Reg. 71723 (*Endangered Species Act Incidental Take Permit Revocation Regulations*) (Dec. 10, 2004).

In general, the ESA and implementing regulations set forth a number of decision making responsibilities for the Service. Regardless of which MSHCP/ITP structure the planning partners choose to implement, the ESA regulations prescribe a set of decisions that may not be sub-delegated by USFWS. These decisions include whether each project satisfies ITP criteria, whether the permit should be suspended or revoked, whether permit succession or transfer should be authorized, and whether and how the permit should be amended. At this stage of program development, USFWS should clarify its role and level of oversight with respect to these and similar decisions.

# PART VI: COORDINATION WITH ESA SECTION 7

**COMMENT VI.1. To Assist USFWS in Meeting ESA Section 7 Consultation Requirements, the MSHCP Should Carefully Consider the Full Spectrum of Potential Effects of Issuing ITPs on a Regional Scale.**

The ESA seeks to ensure by way of the Section 7 consultation requirement that "any action authorized, funded or carried out by such agency is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification" of critical habitat.[114] While consultation is the federal agency's responsibility rather than the applicant's, the HCP Handbook urges ITP applicants to "ensure that those considerations required of the Services by section 7 have been addressed in the HCP."[115] Thus, USFWS considers the HCP development process under Section 10 of the ESA and the consultation process under Section 7 to be concurrent and related rather than independent and sequential.[116] If this is to be the case here, the MSHCP must adequately meet Section 10 issuance criteria as well as Section 7 standards.

In satisfying the Section 7 consultation requirement, USFWS must "[e]valuate the effects of the action and cumulative effects on the listed species or critical habitat."[117] "Effects of the action" means "the direct and indirect effects of an action on the species or critical habitat, together with the effects of other activities that are interrelated or interdependent with that action, that will be added to the environmental baseline."[118] "Cumulative effects" refers to "those effects of future State or private activities, not involving Federal activities, that are reasonably certain to occur within the action area."[119] Action area, in turn, constitutes "all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action."[120]

In general, there is growing concern in the scientific community regarding the potential for bat and bird kills and population declines given the rapid proliferation of wind power facilities and the large- scale mortality that has occurred at some facilities. The USFWS's direct,

[114] 16 U.S.C. § 1536(a)(2); USFWS, *HCP/ITP Handbook*, at p. 3-15.
[115] USFWS, *HCP/ITP Handbook*, at p. 3-15.
[116] USFWS, *HCP/ITP Handbook.* at p. 3-16.
[117] 50 C.F.R. § 402.14(g)(3).
[118] 50 C.F.R. § 402.02.
[119] 50 C.F.R. § 402.02.
[120] 50 C.F.R. § 402.02.

indirect, and cumulative effects analysis for this MSHCP must consider the potential impacts to all threatened and endangered species and designated critical habitat from at least the following sources: (1) wind facilities not covered under the proposed MSHCP; (2) other HCPs and ITPs (and incidental take statements) issued in the region; (3) construction of transmission and distribution lines associated with the wind energy facilities; (4) other causes of habitat loss and fragmentation affecting the species such as logging, agriculture, oil and gas development, power line construction, agricultural conversion, and residential development; (5) shifts in summer, stopover, and winter habitats and in migration pathways due to climate change; (6) disease and parasites (e.g., White Nose Syndrome); (7) predation; (8) competition between species; (9) environmental contaminants (not just "pesticides"); (10) collisions with man-made objects; and (11) any other threats to the species of which USFWS is aware.

### COMMENT VI.2. The Duration of the MSHCP/ITP(s) Should Be Specified to Direct the Cumulative Effects Analysis.

ESA Section 7 specifically notes that the Service's responsibility is to "[f]ormulate its biological opinion as to whether the action, *taken together with cumulative effects*, is likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat."[121] In order to properly assess cumulative effects and thereby assist USFWS in reaching a biological opinion, the planning partners will need to specify the proposed duration for the MSHCP and ITP(s). The cumulative effects analysis is tied to foreseeable future events that correspond to the timeframe of the projects' impacts or the timeframe of the MSHCP, whichever is longer. Without a specified duration, the scope of the cumulative effects analysis cannot be adequately planned.

[121] 50 C.F.R. § 402.14(g)(4) (emphasis added).

## SUMMARY

In summary, the MSHCP should cover additional ESA endangered, threatened, and candidate species. It should also provide a second tier of protection for bird species that are vulnerable to the collision and habitat risks of wind development, and which have been identified by USFWS and ABC as in need of conservation action. Wind energy development should be excluded from ecologically valuable areas, such as in designated critical habitat, near bat hibernacula and habitat, in ABC Red Zones, and within migratory routes. These no-development zones can help delineate the covered land for the MSHCP's boundaries. Take of birds and bats should be avoided and minimized through appropriate siting, design, and operational measures. The MSHCP's mortality monitoring program and adaptive management provisions must be clearly defined, and any actions that are to be required of project developers in response to information gained through adaptive management or in response to changed circumstances must be fully specified.

With respect to the permitting structure of the MSHCP, the planning partners should be cognizant of USFWS's supervisory role and responsibilities under the ESA and implementing regulations. Additionally, under either proposed approach, the individual ITPs or Certificates of Inclusion should be tailored to incorporate site-specific and project-specific avoidance, minimization, and mitigation measures, and the planning partners need to develop a system for holding permittees accountable for noncompliance. Finally, looking forward to the next stages of the planning process, the MSHCP should evaluate the full range of potential effects due to issuing ITPs on a regional scale.

In closing, thank you for this opportunity to comment. The MSHCP could be a strong tool for facilitating both wildlife conservation and wind power, but it will require careful planning and implementation. We look forward to further participation in the planning process as it develops. Please add CLC and ABC to the notification list, using the names and contact information below.

Sincerely,

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