

Friends of Blackwater Canyon



**Animal Welfare
Institute**

www.awionline.org



May 19, 2011

By Certified and Electronic Mail

**Division of Fisheries and Habitat
Conservation**

U.S. Fish and Wildlife Service
Attn: Wind Energy Guidelines
4401 North Fairfax Drive
Mail Stop 4107
Arlington, VA 22203-1610
windenergy@fws.gov

Division of Migratory Bird Management

U.S. Fish and Wildlife Service
Attn: Eagle Conservation Plan Guidance
4401 North Fairfax Drive
Mail Stop 4107
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**Re: Wind Energy Guidelines Comments and Eagle Conservation Plan Guidance
Comments**

Dear Sir/Madam,

Friends of Blackwater, the Center for Biological Diversity, the Animal Welfare Institute, the Wildlife Advocacy Project, and sixteen other environmental organizations¹ (hereinafter,

¹ Allegheny Front Alliance, Allegheny Highlands Alliance, Alliance to Protect Nantucket Sound, Blue Ridge Mountain Defenders, Conservation Committee - Virginia Society of Ornithology, Friends of Beautiful Pendleton, Friends of the Allegheny Front, Highlanders for Responsible Development, Keepers of The Blue Ridge, Laurel Mountain Preservation Association, Maryland Conservation Council, Mountain Preservation Association, Mountain Ridge Protection Act Alliance, North Carolina, Save Western Maryland, Stewards of the Potomac Highlands, and Virginia Forest Watch. If required, the contact information of the Commenters can be provided.

“Commenters” or “we”) submit these comments on the Draft Voluntary Land-Based Wind Energy Guidelines (“Wind Guidelines”) and the Draft Eagle Conservation Plan Guidance (“Eagle Guidance”) (jointly, the “Guidelines”), prepared by the U.S. Fish and Wildlife Service (“FWS” or “Service”).²

Commenters support the Service’s efforts in preparing the Guidelines and for providing the public an opportunity to comment on them. We recognize that the Service has taken an important step to address the threats to wildlife from wind energy projects by providing guidance on the reconciliation of those threats with preservation goals and federal wildlife laws. In particular, we support the use of the five-tier approach for reviewing wind energy projects where project developers are required to consult with the Service at each tier (although we have some concerns about the use of the tiered approach and how it is formulated). Further, we commend the Service for recognizing the importance of project siting, and the need to avoid areas that pose a high level of risk to wildlife and habitat and we encourage the Service to expand the use of avoidance of impacts to avian species for medium risk areas as well through better site selection and reconfiguration. Avoidance of impacts is always the first and best way to support conservation.

Commenters also recognize that properly sited and operated wind energy facilities may be part of the solution to human-induced climate change, which obviously poses an unprecedented threat to species and ecosystems, however, wind power (or other renewable energy) projects that are sited and operated in such a manner as to cause or contribute to significant impacts on wildlife should not be deemed “green” energy, nor should they be justified on the grounds that they will ameliorate global warming. Rather, as the Service and other agencies have recently recognized, all renewable energy projects should be truly “smart from the start,” and the only sensible national policy – and the only one that is consistent with federal wildlife protection and other environmental laws – is one that encourages wind power and other renewable energy projects while at the same time ensuring that such projects are sited, constructed, operated, and monitored in such a manner as to avoid, minimize, and mitigate adverse wildlife impacts to the greatest extent practicable.

Unfortunately, as presently written, the Guidelines cannot satisfy this fundamental objective for a national policy on land-based wind power projects because the Guidelines’ provisions addressing siting, construction, operation, and monitoring are merely voluntary, *i.e.*, wind energy developers can choose not to adhere to the requirements in the Guidelines. Merely asking wind energy projects to voluntarily conform to the Services’ guidance is a practice that

² We recognize that the Guidelines apply to land-based wind projects; however we believe that several of our concerns and recommendations detailed in our comments equally apply to off-shore wind energy projects. For instance, the need for proper siting of wind energy projects in such a manner as to avoid, minimize, and mitigate adverse wildlife impacts is crucial for both land-based and off-shore projects. We urge the Service to consider proposing requirements, similar to those in the Guidelines, for off-shore wind energy projects as well, particularly since measurement and monitoring of wildlife impacts of such projects is even more difficult.

has already been tried and failed. See FWS, *Interim Guidance on Avoiding and Minimizing Wildlife Impacts From Wind Turbines* (May 13, 2003). Especially when it comes to making appropriate siting decisions – which the Guidelines recognize as absolutely crucial to the success of any effort to avoid, minimize, and mitigate impacts on wildlife – there is no empirical evidence to suggest that a voluntary approach can be successful. To the contrary, wildlife mortality caused by wind energy projects has been increasing at a rapid pace across the nation notwithstanding the Service’s 2003 guidance.³

Further, by failing to impose mandatory regulatory obligations on wind energy projects to anticipate and avoid wildlife impacts before they occur, and by largely allowing to the industry itself to make siting decisions, the Service has not only effectively penalized those companies that do attempt to comply with the Service’s guidance – since they are essentially placed at a competitive disadvantage with those companies that refuse to do so – but has also tacitly permitted widespread disregard for statutes the Service is entrusted to enforce, particularly the Endangered Species Act, 16 U.S.C. § 1531 *et seq.*, (“ESA”), the Migratory Bird Treaty Act, 16 U.S.C. § 703 *et seq.*, (“MBTA”) and the Bald and Golden Eagle Protection Act, 16 U.S.C. §§ 668-668(c) (“BGEPA”).

The Service recognizes its “federal trust responsibility” over species that it has a duty to “conserve, protect and enhance,” *Wind Guidelines* at 3, 12, yet the Service has, to date, refused to exercise its prosecutorial discretion against wind energy developers, despite the unacceptable and illegal wildlife impacts at many wind energy projects across the country. The Service is well aware of these ongoing wildlife impacts and, indeed, many conscientious Service employees have documented them; yet, as a matter of nationwide policy, the Service has been content to merely ask wind energy developers to avoid obviously problematic sites or to voluntarily modify projects that repeatedly violate the MBTA and other federal wildlife protection laws. If the Service once again makes the requirements of the Guidelines voluntary and continues to rely on the same *laissez-faire* approach that has already proven to be woefully inadequate in preventing bird and bat mortality, the Service, regrettably, will have disregarded its federal trust responsibility in safeguarding federally protected wildlife and neglected its duty to enforce critical federal wildlife laws. Accordingly, this is the critical juncture at which the Service must take stock of the legal and empirical inadequacy of the approach taken to date – which is indisputable – and then commit to a fundamentally different approach under which wind power developers have both, a meaningful incentive to site and operate their projects in a wildlife-friendly fashion, and well-placed concern for potential agency enforcement if they do not.

There is no inherent reason why wind energy development cannot occur consistent with federal wildlife protection laws and the adoption of measures to avoid, minimize, and mitigate

³ See, e.g., http://www.windpoweringamerica.gov/wind_installed_capacity.asp (graphics showing the rapid proliferation of wind energy projects across the nation); *Post-Construction Avian and Bat Monitoring Reports*, Nedpower Mt. Storm Wind Farm, <http://www.psc.state.wv.us/WebDocket/default.htm> (documenting the rapid increase of wildlife fatalities at Mt. Storm project).

impacts on wildlife. The only question is whether the Service will promulgate a policy that genuinely meets those dual objectives or, rather, whether the agency will capitulate to the industry's demands while bemoaning the ever-escalating toll that essentially unchecked wind power development has on birds, bats, and other wildlife.

Our comments provide a series of detailed recommendations for the improvement of the Guidelines and their effective implementation, and are organized in the following manner: section I addresses the legal basis and practical need for the Guidelines to be binding; section II addresses the legal basis and practical need for comprehensive regional planning of wind power projects, including a thorough analysis of cumulative effects and the vital role the Service must play in initial siting decisions; section III addresses the need for developing a process to ensure the independence of the consultants that play a critical part in project decision-making, and offers potential solutions; section IV addresses issues specific to public land use; and section V provides additional specific comments on the Eagle Guidance.

I. The Guidelines Must Be Made Binding Upon All Projects and Must Provide for Meaningful Enforcement of Violations.

As noted, Commenters recognize the potential importance of wind power as a source of renewable energy and the policy considerations that weigh in favor of further wind energy development. However, the need for wind energy development must be balanced against competing wildlife protection concerns, and such development must be in compliance with federal law. The MBTA, ESA, and BGEPA are among the federal statutes that impose significant criminal and/or civil penalties on violators. Every time a wind project takes a migratory bird, and every time a project takes a bald or golden eagle or an ESA listed species without a permit, the project developers have committed a federal crime subject to civil and even criminal penalties.⁴ Yet these legal prohibitions are largely meaningless without a realistic threat

⁴ Representatives of the wind power industry have made several analogies comparing avian mortality at wind energy projects as being less serious than mortality caused due to cat predation, collisions with skyscrapers and other external threats – presumably in order to downplay the risk of wind energy projects on wildlife. However, this is an unwarranted apples-to-oranges comparison because the birds threatened by wind turbines placed in critical bird migratory routes and habitats disproportionately include eagles, hawks, songbirds, endangered and threatened species, and other species of special conservation concern. Moreover, merely because other threats to wildlife exist does not provide a free pass to the wind industry to exacerbate wildlife mortality and violate the MBTA and other wildlife protection laws; to the contrary, the fact that migratory birds are killed by preexisting sources is an additional reason to avoid, minimize, and mitigate a new source of mortality before it irreversibly contributes to a further decline in bird populations. This is especially the case for an industry that seeks to market itself as “green energy” and environmentally friendly. We therefore strongly urge the Service to debunk such a misguided comparison and set the record straight on the importance of reducing wildlife mortality at wind energy projects.

of enforcement against violators or some other regulatory apparatus with which wind power developers must comply.

Plainly, relying entirely on the voluntary efforts of private parties to comply with federal law, without other more concrete and enforceable means of assuring compliance is unacceptable in theory and has also proven to be unworkable in practice. In order for the Guidelines to be effective, and to ensure the legality of the Service's position, the Guidelines must provide a foundation that ensures wind project developers will fully meet their responsibilities under the ESA, BGEPA, and MBTA. Indeed, an ongoing practice of non-enforcement while wind energy projects openly flout the MBTA and other wildlife protection laws may open the Service to suit under the Administrative Procedure Act, 5 U.S.C. § 500 *et seq.*, ("APA"), for having "consciously and expressly adopted a general policy [that amounts] to an abdication of its statutory responsibilities" and for engaging in a "pattern of non-enforcement of clear statutory language." *Heckler v. Chaney*, 470 U.S. 821, 833 n.4 (1985) (citing *Adams v. Richardson*, 480 F.2d 1159 (D.C. Cir. 1973)); *see also id.* at 839 (Brennan, J., concurring) ("It may be presumed that Congress does not intend administrative agencies, agents of Congress' own creation, to ignore clear jurisdictional, regulatory, statutory, or constitutional commands[.]").

The Service's pattern of failure to enforce federal wildlife laws in the face of repeated flagrant violations (particularly of the MBTA), if combined with yet another set of voluntary and therefore ineffective guidelines, would only serve to reinforce that the Service has indeed "abdicated its statutory responsibilities." To avoid that conclusion the Service must take measures to ensure that the Guidelines are effectively implemented and federal laws are complied with. The simplest and most effective way to achieve those goals is for the final Guidelines to be made legally binding on all wind energy projects – a result that could be accomplished through a number of mechanisms.

Before turning to the legal context for taking such action, however, it is necessary to first set the record straight on the relationship between the Guidelines being developed by the Service and the recommendations of the Wind Turbines Advisory Committee ("the Committee"). Contrary to the apparent views of some members of that Committee, its recommendations, as a matter of law, are not and cannot be binding in any fashion upon the Service. As the Federal Advisory Committee Act, 5 U.S.C. Appendix 2 ("FACA"), plainly states:

[u]nless otherwise specifically provided by statute or Presidential directive, advisory committees shall be utilized *solely for advisory functions*. Determinations of action to be taken and policy to be expressed with respect to matters upon which an advisory committee reports or makes recommendations shall be made solely by the President or an officer of the Federal Government.

Id. Appendix 2 § 9(b) (emphasis added). Thus, the Service is not bound by the Committee's recommendations, and is free to alter or disregard those recommendations as the Service sees fit, including in making a decision that the Guidelines shall be binding instead of voluntary. Indeed,

the Service is obligated to disregard the Committee's recommendations to the extent that they depart from the Service's legal responsibilities under federal law.⁵

A. Wind Energy Projects Must Comply With Federal Wildlife Protection Laws But Routinely Violate Them.

Although the Service is under no obligation to comply with the Committee's recommendations, it is under an obligation to comply with, and to take appropriate steps to ensure that wind power projects comply with federal wildlife protection laws that are not only implicated by wind power projects but are being routinely violated by such projects. These statutes establish a legal foundation on which the Service can, and should, issue binding Guidelines for avoiding, minimizing, and mitigating the impacts of wind power projects on federally protected wildlife and other natural resources.

1. The Endangered Species Act

The Endangered Species Act, 16 U.S.C. § 1531 *et seq.*, makes it a crime to "take" any species listed under the Act as threatened or endangered. *Id.* § 1538(a)(1)(B). Take includes, among other things, to harm, wound or kill, or to attempt to engage in any such conduct. *Id.* § 1532(19). Harm is further defined in the ESA's implementing regulations to include significant habitat modification or degradation, and the impairing of essential behavioral patterns, including breeding, feeding, or sheltering, where such modification or impairment actually kills or injures wildlife. 50 C.F.R. § 17.3.

For each take, the developer is liable unless it has an Incidental Take Permit ("ITP"), 16 U.S.C. § 1539(a)(1)(B), or is covered under a biological opinion and ITS issued to a federal

⁵ This would be true even if there were no questions about the legality of the Committee itself. But there are such questions, and they are serious ones. As has been set forth in several detailed letters sent to the Service by Commenters and others concerned with the impacts of wind power projects on wildlife, since its inception the Committee has been dominated by representatives of the wind power industry, who have had far more influence in crafting the Committee's largely pro-industry recommendations than representatives of conservation organizations, state wildlife agencies, or others. As has been repeatedly pointed out to the Service, such domination by the very industry affected by the recommendations violates section 5 of FACA, which requires advisory committees to be "fairly balanced in terms of the points of view represented and the functions to be performed on the advisory committee," and that advisory committees may not be "inappropriately influenced" by any "special interest." FACA's legislative history reinforces that industry-dominated committees like the one involved here were precisely the evil at which Congress aimed these provisions. Accordingly, not only is the Service under no obligation whatsoever to adopt any particular recommendations proffered by the Committee, but given the Committee's unlawful composition, should the Service follow the Committee's recommendations, it will simply be compounding the violation of FACA that has previously been pinpointed.

agency. *Id.* § 1536(a)(2). For projects on private or state owned lands, for a developer to receive an ITP, the applicant must submit a Habitat Conservation Plan (“HCP”) detailing the impact of the takes on the species’ survival, the lack of alternatives, and a plan for minimization and mitigation of adverse affects. The Secretary may impose additional minimization and mitigation measures at the Secretary’s discretion, and the ITP may be granted only if the Secretary determines that it will not appreciably reduce the likelihood of the survival and recovery of the species in the wild. *Id.* § 1539(a)(2).

Every incidental take not permitted under an ITP or an ITS is a violation of 16 U.S.C. § 1538(a). Such violations by private entities are subject to criminal penalties up to \$50,000 and one year in prison and civil penalties up to \$25,000. *Id.* § 1540(a)-(b). In addition, citizen suits may be brought to enjoin ongoing or anticipated violations committed by wind projects. *See, e.g., Animal Welfare Institute v. Beech Ridge Energy*, 675 F. Supp. 2d 540 (D. Md 2009) (hereinafter “*Beech Ridge*”) (“The ESA’s plain language, citizen-suit provision, legislative history, and implementing regulations, as well as case law interpreting the Act, require that [courts] carefully scrutinize any activity that *allegedly may take* endangered species where no ITP has been obtained.” (emphasis added)).

It is well established, and the Service recognizes, wind energy projects that have been built or are planned for construction have a high potential to take listed species through direct collision and barotrauma as well as barrier/avoidance effects, habitat modification, degradation, and/or fragmentation, excessive noise, and other general displacement and behavioral issues associated with development. *See generally Wind Guidelines* at 8-11. For example, Beech Ridge Wind Farm was found by a federal District Court to have violated the ESA because it was reasonably certain to take endangered Indiana bat although an ITP had never been sought for the project. *Beech Ridge*, 675 F.Supp. 2d 540, 582-83.

Although some project developers, especially in the aftermath of the *Beech Ridge* decision, have sought ITPs, many projects that have been built or are planned in the habitat of listed species – including the Indiana bat – have failed to do so, even though their projects are also virtually certain to have caused, or to cause in the future, violations of the ESA’s take prohibition. Service biologists have sent letters expressing concerns with many of these projects, but the agency has pursued no enforcement actions when its objections are disregarded. Of particular concern, the Service presently has in place no systematic and effective approach to steer project placement away from listed species habitat before extensive resources are devoted to project planning and design, and the developer is effectively “locked in” to a particular site. Consequently, the Service is relegated to, at most, attempting to persuade wind power companies that they should attempt to ameliorate the adverse effects associated with what may be a very harmful site from the vantage of endangered and threatened species.⁶

⁶ This problem will become more acute as more species affected by wind power projects are listed. For example, an independent scientific evaluation has called for the protection of little brown bats under the ESA, primarily due to the ravages of white-nose syndrome, but also because of additive mortality caused by wind power projects. *See Status Review of the Little*

2. The Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act, 16 U.S.C. 668-668(c), makes it illegal to take any bald or golden eagle, or any part, nest or egg thereof. *Id.* § 668(a). The BGEPA definition of “take” includes to “wound, kill, molest or disturb.” *Id.* § 668(d). Disturb means to:

agitate or bother ... to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.

50 C.F.R. § 22.3. Habitat modification is a take under BGEPA if the modification “disturbs” an eagle.

For each take, the developer is liable unless it has a permit. BGEPA allows the Secretary to issue permits for the take of bald or golden eagles for the protection of wildlife, agricultural or other interests, provided that such permits are compatible with the preservation of the species. BGEPA, § 668(a). The Service has recently established a general permit process for incidental takes in BGEPA’s implementing regulations, under which permits may be granted for unavoidable incidental takes, subject to compliance with all avoidance, minimization and mitigation measures the Secretary may choose to impose. 50 C.F.R. § 22.6(c). All takes not authorized under a permit make the developer liable for penalties up to \$5,000 and imprisonment up to one year for a criminal violation, defined as an action taken “knowingly, or with wanton disregard for the consequences of [the] act. A second criminal offense has penalties up to \$10,000 and two years imprisonment. BGEPA, § 668(a). Civil penalties up to \$5,000 per violation may be imposed for takes, regardless of knowledge or intent. *Id.* § 668(b).

Wind power projects have been shown to take or pose a high risk of taking bald and golden eagles.⁷ Nonetheless, although many projects have been built or are being planned in known eagle habitat or in eagle migratory corridors, the Service has conspicuously failed to use the credible threat of BGEPA enforcement as a mechanism for diverting wind projects from high risk areas.

3. The Migratory Bird Treaty Act

The Migratory Bird Treaty Act, 16 U.S.C. § 703 *et seq.*, makes it illegal to, among other things, “take, kill or attempt to take or kill any migratory bird [or] any part, nest, or eggs of any

Brown Myotis (Myotis Lucifugus), Kunz, Ph.D and Reichard Ph.D, Boston University Center for Ecology and Conservation Biology.

⁷ See, e.g. *Golden Eagle Killed by Wash. Wind Turbine*, The Seattle Times, May 19, 2009; *Wind Farms Stymied By Concern for Increase in Eagle Deaths*, Associated Press, Dec 18, 2010.

such bird, at any times, by any means, or in any manner.” *Id.* § 703. FWS regulations define take to also include the wounding of migratory birds. 50 C.F.R. § 10.12. Violation of the MBTA is a strict liability offense, *i.e.*, there is no intent requirement, and direct incidental takes are prosecutable. The MBTA contains no citizen suit provision; the Service has the responsibility to enforce the statute. However, private parties may use the APA to pursue civil claims against federal agencies for taking actions that authorize or result in violations of the MBTA. *See, e.g. City of Sausalito v. O’Neill*, 386 F.3d 1186 (9th Cir. 2004); *Humane Society of the U.S. v. Glickman*, 217 F.3d 882 (D.C. Cir. 2000).

Many prosecutions for incidental takes have been pursued against companies involved in resource and energy production. In 2009, for instance, the electric utility PacifiCorp paid approximately \$1.4 million in fines and restitution and approximately \$9.1 million to repair and replace equipment in order to minimize impacts on migratory birds, after pleading guilty to 34 counts of unlawfully taking golden eagles, hawks, and ravens in violation of the MBTA.⁸ Also in 2009, Exxon-Mobil pled guilty to 85 violations of the MBTA for failure to take precautions to prevent the death of migratory birds at one of the company’s petroleum facilities, and paid \$600,000 in fines. There is a long history of these types of prosecution. *See, e.g., United States v. Moon Lake Electric Ass’n Inc.*, 45 F.Supp. 2d 1070 (D.Colo. 1999) (prosecution of electric company for failing to take reasonable measures to minimize the impact of power lines on migratory birds); *United States v. Stuarco Oil Co.*, 73-CR-129 (D.Colo. 1973) (prosecution of oil company on 23 counts for the death of 23 birds resulting from the company's failure to build oil sump pits in a manner that could keep birds away); *United States v. Equity Corp.*, Cr. 75-51 (D.Utah 1975) (oil company charged with 14 counts for the death of 14 ducks caused by the company's oil sump pits); *United States v. Union Texas Petroleum*, 73-CR-127 (D.Colo. 1973) (prosecution of oil company for maintenance of oil sump pit).

Similarly, wind energy developers are clearly liable for the killing and other taking of migratory birds, especially because it is now clearly established that projects sited in important bird habitats and migratory areas will predictably kill large numbers of birds and there is presently no mechanism in the MBTA or implementing regulations for authorizing the incidental take of MBTA-covered species. Simply put, the ongoing and ever-increasing takes of listed migratory birds by wind project are flagrant violations of federal law. Yet in sharp contrast to the enforcement efforts that have been pursued against companies in other energy sectors, the Service has, to our knowledge, never pursued an enforcement action against a wind power project, no matter how flagrant its violation of the MBTA. In the absence of a credible threat of enforcement, the industry will, inevitably, continue to site and operate projects with little regard for the strictures of the MBTA.

⁸ FWS News Release; July 10, 2009, <http://www.fws.gov/mountain-prairie/pressrel/09-47.html>

B. Mandatory, Effective and Enforceable Guidelines Are Critical for the Protection of Wildlife.

As the Service recognizes, and as all relevant science has repeatedly established, wind power is causing dangerous levels of wildlife mortality. The Service's own data shows that at least 440,000 birds are killed each year by wind turbines.⁹ This estimate is outdated, and the rapid growth of wind energy projects across the country makes it likely that current take far exceeds that figure.¹⁰ If the Department of Energy's ("DOE") stated goal of twenty percent wind power by 2030 is achieved, thousands more turbines will be built, and the American Bird Conservancy estimates that yearly bird deaths will top at least one million.¹¹ These estimates are conservative, and it is likely that wildlife mortality will far exceed this figure. And given the overlap between many wind power projects and the habitats and migratory routes of endangered, threatened, at risk, and vulnerable species, poorly sited and operated projects will take a particularly heavy toll on such species.

With regard to the impacts of wind energy projects on bats, the United States Geological Survey reports that current monitoring techniques have reported bat deaths at nearly every wind power project in North America, and several report thousands of bat deaths at a single facility.¹² One recent scientific study made a conservative estimate that more than 50,000 bats are killed by wind turbines every year in just ten eastern states, including nearly 5,000 little brown bats (currently under consideration for ESA listing).¹³

These serious wildlife impacts of wind energy projects are undisputed and the grave risks associated with extensive wind power expansion are obvious, yet few concrete measures have been adopted industry-wide to avoid, minimize, and mitigate the ongoing threat to wildlife. The Service issued voluntary guidelines similar to the ones now proposed in 2003. In the eight years since, wildlife deaths from wind turbines have risen drastically, and continue to rise as more and more turbines are built. Violation of federal wildlife laws, particularly the MBTA, is par for the course in the current regulatory regime, which lacks mandatory and effective requirements concerning siting, construction, and monitoring of wind energy projects. As noted, despite longstanding precedent for prosecuting energy and resource development companies whose

⁹ See *Towers, Turbines, Power Lines, and Buildings – Steps Being Taken By the U.S. Fish and Wildlife Service to Avoid or Minimize Take of Migratory Birds at These Structures*, Manville, Al; Proceedings of the Fourth International Partners in Flight Conference, July 17, 2009.

¹⁰ http://www.windpoweringamerica.gov/wind_installed_capacity.asp

¹¹ http://www.abcbirds.org/abcprograms/policy/collisions/wind_faq.html

¹² <http://www.fort.usgs.gov/batswindmills/>; see also, e.g., *Beech Ridge*, 675 F.Supp. 2d 540.

¹³ *Status Review of the Little Brown Myotis (Myotis Lucifugus)*, Kunz, Ph.D and Reichard Ph.D, Boston University Center for Ecology and Conservation Biology.

irresponsible operations cause wildlife fatalities, it does not appear that the Service has prosecuted a single wind energy developer. The essentially voluntary nature of any and all obligations placed on the wind industry to this point, combined with the lack of enforcement by the Service, means that wind energy has, for the most part, simply been given a *de facto* exemption from the federal wildlife laws.¹⁴

The Service is tasked with safeguarding our nation's federally protected wildlife and enforcing our wildlife protection laws. Both industry and other government agencies naturally look to the Service for leadership and guidance on reducing wildlife impacts caused by wind energy projects. There is an urgent need, and a legal obligation, for the Service to promulgate mandatory requirements for wind energy projects to provide uniformity and consistency in regulation, and a level playing field for all wind energy developers. Further, while concerned citizens can play a vital watchdog role and seek to enforce against violations of the ESA; other important wildlife statutes such as the BGEPA and the MBTA lack effective mechanisms for citizen suits. The public therefore must rely almost entirely on the Service to protect bald and golden eagles and (other) listed migratory birds through regulation and enforcement of the statutes.

Accordingly, when the Service is lax in its enforcement regarding wind turbine related wildlife fatalities, it sends a clear signal to industry that developers may build and operate projects with little concern for complying with federal law, and little risk of repercussions for violations thereof.¹⁵ Combined with the costs of thorough study, monitoring, and mitigation to prevent and rectify wildlife death, industry is left with a perverse disincentive to comply with the law. Without clear mandates to internalize the cost of wildlife mortality, it is economically efficient for the companies to do and spend as little as possible in avoiding and mitigating wildlife impacts. Industry self-regulation simply does not work in any sphere, and there is no rational reason to believe – and much empirical evidence to disprove – that it will somehow magically begin to work for the wind power industry.

Thus, so long as wildlife protection measures are voluntary, industry cannot be expected to reliably comply with either the Guidelines or the federal laws the Guidelines are meant to implement. The proven failure of the 2003 Guidelines and the Service's own recognition of the need for new and better Guidelines is evidence enough of this fact. Compliance can and must be made mandatory for all wind energy projects. Through meaningful enforcement, industry risk-assessment and cost calculations can be altered to make it economically efficient to comply with the Guidelines and federal laws, and economically inefficient to ignore them and risk

¹⁴ Blydes Lilley and Firestone, *Wind Power, Wildlife, and the Migratory Bird Treaty Act: A Way Forward*, 38 *Environmental Law* 1167, 1209 (2008).

¹⁵ See, e.g., Beveridge, Laura J., *The Migratory Bird Treaty Act and Wind Development*, North American Wind Power, September 2005 (opinion of attorney representing energy sector that the government's ongoing reluctance to prosecute wind energy projects provides assurance to developers that they will not be liable for avian deaths).

prosecution. Thus the Service can easily turn the current perverse disincentive into a mandate and a strong incentive for compliance. But if it fails to take this opportunity to do so, then it will be merely engaging in an academic exercise. Simply put, the best Guidelines in the world are worthless if they sit on a shelf and are ignored by the industry – that is the inevitable fate for these Guidelines if the Service does not abandon its approach to “voluntary” compliance and replace it with something that will actually motivate the industry to apply the Guidelines across the board.

We therefore urge the Service to take this opportunity now, before thousands of new turbines are constructed in wildlife sensitive areas, to impose mandatory requirements on wind energy projects. The Service itself recognizes the significance of siting decisions in avoiding wildlife fatalities related to wind energy projects: “[a] small project in a sensitive location may pose greater risk to resources than a larger site in a less sensitive location ...” *Wind Guidelines* at 15. Thus, a failure to make use of the current opportunity, before turbines further proliferate, will inevitably lead to a genuine crisis for wildlife that will be exponentially more difficult to address than today’s problem as wind projects continue to expand.

C. The Service Can and Must Make the Guidelines Binding on All Wind Energy Projects.

Especially given the systemic, ongoing, predictable, and increasing violations of federal wildlife protection law associated with the proliferation of wind power projects, the Service has more than sufficient legal authority to make the Guidelines binding upon all wind energy projects. The Service can do so either through a blanket prohibition on the likely future take of listed migratory birds,¹⁶ or through a series of individual mechanisms. We strongly urge the Service to carefully scrutinize and to exercise every potential source of authority to make the Guidelines legally binding on all wind energy projects.

1. The Service Has the Authority to Promulgate a Regulation That Restricts Likely Future Takes of Listed Migratory Birds.

The promulgation of a rule or regulation mandating compliance with avoidance and mitigation measures for takes reasonably certain or likely to occur is well grounded in the Service’s own interpretations of statutory law, procedures and regulations. Other wildlife laws provide a clear example of the Service’s authority to implement a regulation designed to avoid likely future take under the MBTA. For example, the implementing regulations of the ESA impose potential liability and trigger permitting processes for indirect takes that are reasonably certain to occur. 50 C.F.R. §§ 402.2; 402.13-402.14. In addition, implementing regulations of

¹⁶ As bald and golden eagles are listed under the MBTA, a regulatory prohibition on likely future MBTA takes that encompasses all wind energy programs would be sufficient to trigger the Eagle Guidance, as well as the Wind Guidelines. However, at the Service’s discretion, the Eagle Guidance could be separately triggered on an individual basis through BGEPA’s implementing regulations, as discussed in subsection C2.

BGEPA define take to include disturbances that are likely to cause injury or adverse behavioral changes. 50 C.F.R. § 22.3.

Further, other MBTA regulations have used a permitting process to authorize activities that will inevitably result in incidental takes under certain prescribed circumstances. *See* 50 C.F.R. § 21.15 (delineating conditions under which the “Armed Forces may take migratory birds incidental to military readiness activities” under certain circumstances). If the Service believes that it can promulgate regulations permitting certain incidental takes, it surely can implement regulations designed to regulate activities – such as wind power projects – that will inevitably result in violations of the MBTA, at least in the absence of proper siting, construction, operation, and monitoring. Indeed, the Secretary of the Interior is expressly and broadly “authorized to issue such regulations as may be necessary to implement the provisions” of the migratory bird conventions between the United States and other signatory nations, 16 U.S.C. § 712(b), and there are compelling legal and factual reasons for the Secretary and the Service to conclude that meaningful, enforceable Guidelines are indeed “necessary” to bring wind power projects into compliance with the MBTA, and that in the absence of compliance with such Guidelines violations of the Act will be rampant.

In the context of ESA enforcement, courts have accepted the prospect of virtually certain future unlawful takes as sufficient to support prophylactic remedies designed to prevent such takes from occurring. *See, e.g., Beech Ridge*, 675 F.Supp. 2d 540, 545 (holding that ESA requires courts to carefully scrutinize activity that allegedly may take endangered species without an ITP and granting injunction against wind energy project for likely take of endangered Indiana Bat). By the same token, there can be little doubt that the Service could bring a preemptive enforcement action under the MBTA against a wind power project that will inevitably kill or otherwise take federally protected migratory birds; in other words, as in the ESA context, the Service does not have to wait for the damage to be done before bringing enforcement actions in appropriate circumstances. Likewise, promulgation of enforceable MBTA standards designed to prevent, or at least minimize, the otherwise inevitable future take of migratory birds resulting from wind power projects is well grounded in current law and practice, is plainly authorized by 16 U.S.C. § 712(2), and would bring MBTA enforcement in line with similar wildlife laws.

The Guidelines themselves are grounded on the fact that wind turbines that fail to abide by basic standards for siting, construction, operation, and monitoring will take listed migratory birds in violation of the MBTA. Given that reality, there is no legal barrier to the Service establishing that compliance with the Guidelines is necessary for the industry as a whole to be brought into compliance with the MBTA, and that individual projects that refuse to comply – including those still in the planning stages – will be deemed to be in violation of the Act, as well as the Guidelines themselves. Such a comprehensive regulatory approach would thereby encompass all wind energy projects, making it the simplest and most efficient method for assuring industry-wide compliance with the Guidelines. Further, such an approach would also contribute to efficiency by removing the potential need for repeated individual litigation in favor of a general rule and process.

2. Guidelines Should Be Made Binding On Projects That May Take ESA Listed Species or Bald or Golden Eagles As a Condition of the ITP Process.

At minimum, the Guidelines can be made binding on all projects that may take an ESA listed species, or a bald or golden eagle. All projects that are reasonably certain to take an ESA listed species or likely to take bald or golden eagle must acquire an incidental take permit. Under the ITP process of both the ESA and BGEPA, granting of the permit may be conditioned upon any additional measures the Secretary/Director deems necessary or appropriate. 16 U.S.C. § 1539(a)(2)(A)(iv); 50 C.F.R. § 22.6(c). Thus, the Service should declare that full compliance with the Guidelines is required for any project that seeks incidental take authorization under the ESA or BGEPA.

3. The Guidelines Should Be Made Binding On All Projects On Federal Lands.

The Guidelines can and should be made binding on all projects on federal land as a condition of the permit or lease to use the federal land. All federal agencies are obligated to comply with the MBTA, and as noted they may be sued under the APA when they take or authorize actions that will result in MBTA violations. Accordingly, as described in more detail in section IV below, the Service can and should work with the land management agencies so that the Guidelines are made a binding aspect of the agencies' compliance with the MBTA, as well as wind power companies themselves.

In addition, as noted above, where wind power projects will take place in the habitat of listed species, the granting of a lease or permit to use federal lands is a federal action that requires inter-agency consultation under section 7 of the ESA. 16 U.S.C. § 1536. Federal action that may "adversely affect" listed species requires formal consultation. 50 C.F.R. § 402.14. Formal consultation requires, among other things, the granting of an Incidental Take Statement ("ITS") to the federal agency that administers the land. The ITS covers both the private developer using the land and the agency permitting the land's use. The Secretary may impose "reasonable and prudent measures" in the ITS to minimize the impacts on wildlife. 16 U.S.C. § 1536(b)(4). Thus the Guidelines can also be made binding upon projects using federal land that may adversely affect an ESA listed species as a condition of the ITS.¹⁷ The Service should exercise this authority to ensure compliance with the Guidelines.¹⁸

¹⁷ All takes that occur while not in compliance with the ITS are subject to prosecution and full ESA penalties. 50 C.F.R. § 402.14(i)(5).

¹⁸ Unfortunately, at least one federal agency is currently seeking to exempt wind energy projects from public land laws on the lands the agency administers. *See BLM Segregation of Lands-- Renewable Energy Proposed Rule* 76 Fed. Reg. 23230 (Apr 26, 2011). This is precisely the opposite of the approach that agencies should be pursuing to minimize wildlife impacts.

4. The Guidelines Should Be Made Binding On All Projects That Receive Federal Funds.

The Guidelines can be made binding upon all projects that receive federal grants, subsidies, loans, loan guarantees, or any other source of federal funding or federal financial backing, as a condition of the receipt of the funds or guarantees. Once again, DOE and other agencies that may fund projects must themselves comply with the MBTA and BGEPA, and the Guidelines are essential to bringing them into compliance. In addition, the issuance of federal funds or federal loan guarantees is a federal action that requires inter-agency consultation under section 7 of the ESA. Thus, for those projects that receive federal funds or federal financial backing and may adversely affect an ESA listed species, the Guidelines may also be made binding through the ITS process described above. *Supra* § I.C.3.

5. The Guidelines Must Be Made Binding On All Projects That Require or Involve Federal Agency Action.

As explained above in section I.C.1, the Service has the authority to promulgate a regulation mandating avoidance and mitigation measures, and establishing a presumption that all wind energy projects are in violation of the MBTA for likely future takes unless such avoidance and mitigation measures are adopted in full. If such regulation were implemented, any federal agency action that authorizes, permits, or otherwise enables a wind energy project would violate the MBTA and subject the agency to potential liability, unless the agency conditions the federal action on the private developer's full compliance with the Guidelines, including all avoidance and mitigation measures. We urge the Service to exercise that and all other options to make the Guidelines binding. However, to help the Service understand every option available to it, this subsection further explains the Service's options for exercising authority even absent the proposed MBTA regulation.

Most wind energy projects requiring federal agency action will contain sufficient grounds for the Guidelines to be made binding upon the project through the use of federal land, the receipt of federal funding or financial backing, or the potential take of an ESA listed species or bald or golden eagle. For all other federal agency actions - *e.g.*, a section 404 permit granted by the U.S Army Corps of Engineers for a non-federally funded or backed project that does not use federal land and is not reasonably certain/likely to take an ESA listed species or a bald or golden eagle - there are at least two mechanisms to obligate federal agencies to make the Guidelines binding on private developers as a condition of any federal action that authorizes, permits, or otherwise enables a wind energy project.

First, the Service has recently entered into, or is in the process of forming, Memoranda of Understanding ("MoU") with all relevant federal agencies, pursuant to Executive Order 13186. This Executive Order provides additional guidance on the responsibilities of federal agencies to protect migratory birds. The MoU can be drafted or amended to include a provision that all federal agency actions required for the development of a wind energy project must be predicated

upon mandatory compliance with the Guidelines, and that this is necessary as part of the agencies' compliance with the MBTA, as well as that of the wind power company.

Second, the Service has the authority under section 704 and/or section 712 of the MBTA to issue a regulation that the Guidelines are binding upon all federal agencies and their actions; such a rule or regulation may be predicated upon the Executive Department's duty to comply with and further the goals of the four Migratory Bird Treaties the United States has signed with the governments of Great Britain (on behalf of Canada), Japan, Russia, and Mexico.

6. In the Alternative, Certain Critical Provisions of the Guidelines Must Be Made Mandatory For These Guidelines to be Effective.

To the extent that the Service chooses not to exercise its full spectrum of options for making the Guidelines binding upon projects, we stress that some provisions in particular are indispensable to the overall goal of preventing threats to wildlife. First and foremost of these critical provisions are those related to initial siting decisions. In short, with regard to wildlife impacts, it is far better to pick a good site than to try to make the best of a bad site. Good siting decisions can drastically reduce wildlife fatalities and necessary mitigation measures. Thus, we strongly urge that, at the very least, Tiers 1-3 be made fully binding on all projects through one or all of the mechanisms discussed above. In the absence of such a requirement, it is inevitable that companies will continue to select sites based on what is best for project profitability, and with little or no regard to the appropriateness of the site for avoiding impacts to federally protected wildlife.

D. At Minimum, the Service Must Exercise Its Prosecutorial Discretion and Enforcement Authority to Ensure Effective Implementation of the Guidelines.

Although the Service can and should make the Guidelines binding, at minimum the Service should seek to maximize compliance with the Guidelines through its exercise of enforcement authority and discretion. Thus, although the Service cannot under any circumstances issue an express or implied waiver of MBTA liability, it may certainly make clear to companies that if the Guidelines are disregarded and migratory birds are then taken, appropriate enforcement actions will be forthcoming. The Service must then be prepared to back up that threat by actually bringing enforcement actions against wind power companies. Indeed, as noted, the agency's ongoing refusal to do so in the face of flagrant and increasing violations of the MBTA would expose the agency itself to claims of abdication of statutory responsibility to carry out the mandate of the MBTA and underlying conventions.

On the other side of the coin, the Service may also stress to project developers that good-faith compliance with the Guidelines will be a major factor that the Service considers in choosing how to exercise its discretion. The Service should emphasize the prosecutorial history in which enforcement has focused on resource and energy developers that did not properly consider, minimize, and mitigate the impacts of their projects on migratory birds. *See generally United States v. Moon Lake Electric Ass'n Inc.*, 45 F. Supp. 2d 1070 (D. Colo. 1999); *United States v. Stuarco Oil Co.*, Cir. No. 73-CR-129 (D.Colo. 1973); *United States v. Equity Corp.*, Cir.

No. 75-51 (D. Utah 1975); *United States v. Union Texas Petroleum*, Cir. No. 73-CR-127 (D. Colo. 1973). Again, the Service cannot categorically state that it will not enforce against takes even where full compliance with the Guidelines minimizes the taking of migratory birds, but the Service can and should make clear that its limited enforcement resources will be brought to bear on those project developers who disregard the Guidelines. Indeed, given the very high-bar of “no take” set by the MBTA and the overwhelming likelihood that every wind energy project that does not comply with the Guidelines will take migratory birds in large numbers, the Service can and should inform developers that willful non-compliance with the Guidelines will be deemed a presumptive violation of the statute. Such a presumption should put a burden on the developer to demonstrate to the Service that it has not taken migratory birds, or risk prosecution for violations of the MBTA. Most crucially, however, the Service must be prepared to enforce the MBTA against companies that refuse to comply with the Guidelines; otherwise, the unmistakable and unacceptable message will continue to be what it is today: wind power projects may in effect violate the MBTA with impunity, and the Guidelines may be dispensed with as soon as compliance becomes at all inconvenient or costly.

E. The Guidelines Should Be Implemented Reasonably but Effectively.

The Guidelines’ general implementation policy states that projects already in operation or construction will not be able to comply with all levels of the recommended tiered approach. *Wind Guidelines* at 5-6. Commenters recognize that fact but stress that a) depending on the stage of construction or operation of the project, every wind energy project will be subject to a corresponding tier of regulation and monitoring, as provided in the Guidelines; and b) additions and modifications to any existing projects, including those currently in operation or construction, should be considered new projects for the purposes of the Guidelines, and should be immediately subject to compliance with all provisions and tiers of the Guidelines.

II. The Service Must Develop Effective Mechanisms for Assessing, Avoiding and Mitigating National/Regional Cumulative Effects of Wind Energy Projects on Wildlife.

The cumulative effects of the proliferation of wind projects pose extremely serious threats to the survival, habitat and behavior of wildlife. The Service recognizes this fact in its initial discussion of risks to wildlife:

Assessing population-scale effects may not be as simple as assessing effects to individuals of a species. Population-scale significance of decreases in useable habitat (through habitat loss, degradation, fragmentation, or displacement) can be complicated and depend on the amount of habitat available to the affected population. If the loss of habitat results in habitat fragmentation, the risk to the demographic and genetic viability of the isolated animals is increased. The main causes of population change will likely come from effects to a species reproduction, survival, or distribution (*e.g.*, reduced utilization of habitats).

Wind Guidelines at 12. Appropriately, the Guidelines focus on these dangers in assessing project effects:

[A]ssessing effects should include two important components: 1) effects on wildlife resulting from displacement, disturbance, and other behavioral response, as well as habitat loss, alteration, and fragmentation; and 2) demographic effects that may occur at the local, regional, or population-wide scales.

Wind Guidelines at 51.

Despite the Service's recognition of the serious threats posed by cumulative effects, the Guidelines utterly fail to provide appropriate measures and directives to study, avoid and mitigate cumulative effects at a national or regional level. The Guidelines contain only general suggestions that developers study cumulative effects, and vague and ambiguous promises that such undefined studies should be taken into account in future decisions. In short, the Service has correctly identified wind energy's most complex and serious threat to wildlife, but failed to take any concrete and effective measures to alleviate that threat.

Vague and general notions of contingent future action will not suffice to alleviate the threat to wildlife, fulfill the Service's federal trust responsibilities, or bring private developers into compliance with federal law. The Guidelines must establish mechanisms to identify, study and assess cumulative effects at the national and regional level; contain specific and unambiguous mandates that such effects must be a primary consideration in siting decisions and pre-construction and post-construction monitoring; and further define and develop concrete and effective adaptive management techniques for the avoidance and mitigation of cumulative impacts on wildlife. Such adaptive management techniques must contain clear triggers for implementation, including specified impact levels correlated with management plans to reduce wildlife impacts.

Further, we urge the Service to clarify the meaning of "substantial risk" as the term is used in the *Wind Guidelines*. *See, e.g., Wind Guidelines* at 17 (providing a flow chart explaining the tiered approach). It is unclear how the use of the term "substantial risk," relates to the term "significant effects" used in NEPA and other statutes, and thus should be clarified.

A. A National/Regional Process Is Needed To Identify and Study Potential Cumulative Effects and Assess Their Impacts On Wildlife.

1. The Guidelines Do Not Adequately Address the Cumulative Effects Of Wind Energy Projects.

There is an important distinction between cumulative and aggregate effects. Cumulative effects are related but distinct threats caused by aggregate effects that trigger population level disruptions that could not have been caused by any individual parts of the aggregate. The Guidelines define cumulative effects as "changes in the environment caused by the aggregate of

past, present and reasonably foreseeable future actions on a given resource or ecosystem.” *Wind Guidelines* at A3. Put another way, the sum is often greater than its parts.

Aggregate effects may be viewed as micro level impacts – the raw sum of all individual project effects considered in isolation. Cumulative effects are macro level – the collective, synergistic effect of a series of projects that may destroy or fragment so much habitat that a species or population’s behavior and breeding patterns are affected, causing additional mortality not captured by the initial raw sum. Two small wind energy projects at opposite ends of the continent may have aggregate effects (*e.g.*, the sum total of takes from both projects), but may not have cumulative effects. Ten large wind energy projects constructed in a small state forest are likely to have aggregate effects (*e.g.*, the sum of takes), as well as cumulative effects by degrading and fragmenting so much of the forest that the behavior and breeding of local species will be affected.

Cumulative effects can only be avoided through careful planning of the size and location of wind projects in relation to each other. The Service stresses the danger of cumulative effects, yet its mechanisms for data gathering, siting decisions, and pre-construction mortality are not tailored for adequately evaluating cumulative effects. The Guidelines at least attempt to provide for the simple task of measuring aggregate effects through the basic provisions for monitoring in Tiers 2-4. However, cumulative effects are not effectively addressed in the Guidelines. Further, as addressed below in subsection III.C, the Guidelines lack data sharing and regional planning mechanisms necessary to identify, assess, avoid and mitigate cumulative effects.

2. Wind Energy Projects Are Causing or Will Imminently Cause Serious Cumulative Effects.

The number of wind energy projects in the United States has grown exponentially over the last decade and all signs point toward the industry’s continued proliferation.¹⁹ In particular, wind energy projects have increased rapidly in several distinct regional flyways in California, the Pacific Northwest, Texas, the Rocky Mountains and the southern and northern Midwest.²⁰ In the eastern United States as well, several wind energy project have been and are being constructed along the Allegheny Mountains in Pennsylvania, Maryland, Virginia, and West Virginia. This area constitutes an important migratory corridor for both birds and bats, and wind energy projects in this flyway may have disproportionately high impacts on wildlife. As a result, federal government estimates of avian mortality caused by wind energy projects have increased by at least a factor of ten in the last five years.²¹ However, despite these estimates of wildlife mortality

¹⁹ See http://www.windpoweringamerica.gov/wind_installed_capacity.asp (year-by-year graphics showing wind energy capacity in the United States).

²⁰ *Id.*

²¹ Compare, *A Summary and Comparison of Bird Mortality from Anthropogenic Causes with an Emphasis on Collisions*, Erickson et al., USDA Forest Service Gen. Tech. Rep. PSW-GTR-191.

- mortality that is currently taking place across the nation - the Service has undertaken no cumulative effects analysis of such projects.

Several potential cumulative effects can be identified based on current data and background knowledge. First and foremost, the Service itself has recognized that the unregulated proliferation of wind turbines can lead to excessive habitat loss, degradation, or fragmentation, hindering the ability of populations or species to reproduce and survive. *Wind Guidelines* at 10-11. Some species are particularly susceptible to threats from habitat modification. *Id.* Further, a great deal of wildlife habitat has already been destroyed, degraded or fragmented by human encroachment, and many areas are now particularly sensitive to further incursion. *Id.* Thus, determination of the permissible numbers of wind energy projects in a particular region and their specific locations is crucial for a thorough cumulative effects analysis of such projects, and such determination must be made through careful planning in all regions of wind energy development.

Reproduction and survivability of a species or population can also be adversely affected by excessive mortality rates. A population or species typically has a positive natural growth rate, absent strong external pressures. However, when external pressures cause excessive mortality, a species or distinct segment thereof can reach its minimum viable population, *i.e.*, its “critical depensation level” - the point at which a breeding population cannot sustain itself and the natural growth rate becomes negative.²² This threat is particularly relevant for species listed under the ESA. Because wind turbines are constructed in areas with strong winds - areas that are also invariably important migratory corridors for birds and bats - wind turbines may cause several bird and bat species to “run the gauntlet” of a long series of turbines. Further, the threats posed by wind energy projects exacerbate other external threats to such species. For example, the killing of thousands of bats in wind energy projects across the nation is particularly concerning because a large number of bats are now dying from “White-Nose Syndrome,” a deadly disease which if not contained will lead to “extinctions of listed [bat] species, and some [bat] species that are not even listed.”²³ Thus, the rapid proliferation of wind energy projects will cause excessive wildlife mortality levels that will jeopardize the survival of bird and bat species not currently listed under the ESA, or distinct populations of otherwise healthy species.

2005 (estimating annual avian mortality from wind turbines at 20,000 to 37,000 annually); with *Towers, Turbines, Power Lines, and Buildings – Steps Being Taken By the U.S. Fish and Wildlife Service to Avoid or Minimize Take of Migratory Birds at These Structures*, Manville, AI; *Proceedings of the Fourth International Partners in Flight Conference*, July 17, 2009 (estimating annual avian mortality at 440,000 annually).

²² For a full discussion of critical depensation levels see: Clark, C. *Mathematical Bioeconomics*, Wiley (NY), 1990.

²³ Tina Kelley, *Bats Perish and No One Knows Why*, N.Y. Times (Mar 25, 2008).

3. The Service Lacks Adequate Information on the Number, Location, Operations and Impacts of Wind Energy Projects.

Under the current regulatory regime, the Service only even learns of *certain* wind energy projects – those where the developer seeks incidental take authorization (*i.e.*, only when an endangered species or bald or golden eagle is present on or near the project site), or requires federal involvement that triggers ESA section 7 consultation, and those where developers voluntarily choose to coordinate with the Service. As has been repeatedly established, voluntary compliance is ineffective in gaining adequate cooperation and compliance from private developers. *See supra* § I.B. Hence, the Service only learns about most projects well after the critical early tiers - when siting decisions have already been made and it is too late as a practical matter to avert most wildlife impacts. As a Service official has explained, “[u]nfortunately, right now in many cases, we find out about the development of a project through a news release or something on the evening news when we have not been consulted whatsoever, and that’s frustrating.”²⁴ In sum, in the absence of any comprehensive federal oversight of wind energy projects and a cohesive regional/national level analysis and understanding of their cumulative impacts, there may well be situations where a project is taking wildlife, including listed species, and the Service is entirely unaware of the same.

Full and accurate information on the number, location, capacity, affected species, take rates, and the avoidance and compliance measures (or lack thereof) of all wind energy projects is vital to the Service’s ability to fulfill its duty to protect wildlife. The lack of such knowledge prevents the Service from being able to bring all relevant information to bear in establishing and applying the best available science; a standard that is relevant to many federal decision making processes, and which the Service itself adopts in the Guidelines. *See e.g.*, *Wind Guidelines* at 2, 43. This deficiency hinders the Service’s ability to make informed and responsible decisions in evaluating which areas are most and least suitable for wind energy development vis-à-vis wildlife impacts. Further, it hinders the Service’s ability to effectively analyze potential cumulative effects when the Service issues ITPs, engages in mandatory section 7 consultation under the ESA and issues ITS, and exercises (or chooses not to exercise) its prosecutorial discretion. For example, without accurate data on the number and location of wind turbines or wind farm developments, a regional/national cumulative effects analysis of wind energy projects cannot be developed, and consequently, the Service cannot accurately determine the environmental and population baseline of a concerned listed species in a section 7 consultation, thereby making its conclusions and predictions in biological opinions entirely unreliable.

To rectify these problems, the Service must develop a comprehensive and easily accessible database of all wind energy projects in the nation and gather data on the projects’ locations, capacities, affected species, take rates, and implemented avoidance and compliance measures.

²⁴ Clapp, J. *FWS Official To Wind Developers: Our Door Is Always Open*, North American Wind Power, Apr 21, 2011 (quoting Al Manville, senior wildlife biologist in FWS’ migratory bird division), http://www.nawindpower.com/e107_plugins/content/content.php?content.7713 (last accessed May 13, 2011).

Such information would be extremely valuable to the Service and industry in making siting decisions and analyzing cumulative effects in compliance with their obligations under federal wildlife laws. Further, such information would also be beneficial to the public, allowing people to educate themselves on wind energy projects and therefore make responsible consumer decisions.

Information on wind energy projects is already available with certain federal agencies and the Service should coordinate with such agencies to efficiently develop the database. For instance, DOE currently keeps information regarding wind energy projects in all United States jurisdictions, and total national wind energy capacity.²⁵ Thus, the Service may be able to acquire most necessary information for a comprehensive database simply by coordinating with other agencies. The Service should also consider contacting public utility companies throughout the nation seeking information about wind energy projects permitted by those entities which, if combined, with the wind energy project records maintained by the Service and DOE, would provide a solid foundation in the creation of the recommended database.

B. The Service Must Implement and Enforce Effective Measures to Avoid and Mitigate Identified Cumulative Effects.

With the Service's assistance, agencies should apply appropriate cumulative effects to every federal decision concerning federal authorization or funding of a wind power project. For example, whenever DOE is asked to provide funding for a project, or the Army Corps of Engineers is approached for a section 404 permit, the Service should have a mechanism in place for ensuring both that these agencies analyze cumulative effects that are related to the specific project being pursued and species affected, and that they adopt appropriate avoidance, minimization, and mitigation measures consistent with that analysis.

Another tool that may prove to be especially useful in addressing cumulative effects of wind power projects is the development of regional ITPs/HCPs under section 10 of the ESA. In working to develop the first wind energy regional HCP affecting eight Midwestern states, the Service has stated that:

[A] multi-species/multi-state HCP represents *the best strategy* for harmonizing the conservation needs of listed species with the regulatory compliance obligations of the wind industry and the legal responsibilities of the FWS under the Endangered Species Act (ESA) and other applicable laws.²⁶

²⁵ See, e.g., http://www.windpoweringamerica.gov/wind_installed_capacity.asp (year-by-year graphics showing wind energy capacity in the United States).

²⁶ Midwest Region Wind Energy Habitat Conservation Plan Q & As, 1; available at: <http://www.conservationfund.org/sites/default/files/Midwest%20Region%20Wind%20Energy%20Habitat%20Conservation%20Plan%5B4%5D.pdf> (last accessed May 13, 2011) (emphasis added).

We agree that such an HCP, if properly planned and implemented, may prove to be a valuable tool for addressing cumulative impacts while encouraging the siting of wind power projects in the most suitable locations from the standpoint of minimizing wildlife impacts. The Service should use the ongoing process for the midwest HCP as an example to reach out to other regions with potential for high wind energy development and attempt to form similar cooperative conservation plans. For example, by imposing uniform and consistent regulatory standards through HCPs, the Service can create a level-playing field for wind project developers. Further, regional HCPs may be broad enough to both inform national data-gathering, decision-making, and general policy formation, while retaining the ability to address distinct geographical concerns.

1. FWS and Developers Must Analyze Cumulative Effects When Making Siting Decisions.

The Service has repeatedly recognized the vital role that initial siting decisions play in avoiding or minimizing wildlife impacts. The Guidelines caution developers that small projects in bad locations cause more harm than large projects in good locations. *Wind Guidelines* at 15. Developers are then instructed to internalize the cost of wildlife impacts through proper risk assessment of all potential sites. Finally, the Guidelines provide examples of lands that are always inappropriate for wind energy development, and offers detailed guidance on how to rule out other inappropriate lands as options for siting are explored.

As noted, despite clear recognition that siting is among the most important decisions every project makes in avoiding takes of protected species, and the Service's detailed and repeated guidance on how to make proper siting decisions, the Guidelines only vaguely acknowledge cumulative effects and contain no mechanism for consideration of such effects in siting decisions. *See e.g., Wind Guidelines* at 20, ("It is in the interests of wind developers and wildlife agencies to improve research... by including studies of 'cumulative effects' of multiple wind energy projects"); *id.* at 44 ("Post-construction mortality information is also important for cumulative effects analyses").

The Service's recognition of the critical importance of siting decisions, as well as the need for a cumulative effects analysis, is not logically reconcilable with the Guidelines' failure to link the two in any meaningful way. The Guidelines must be amended to include an unambiguous mandate that the best science available on cumulative effects will be a primary factor in siting decisions. By doing so, the Service will marry the best threat prevention mechanism to the most serious potential threat. In addition to making the Guidelines binding on all wind energy projects, dictating thorough analysis of cumulative effects in siting decisions is the most important measure that the Service can take to ensure the effectiveness of the Guidelines.

2. Regional HCPs May Be Effective Solution To the Cumulative Effects Problem.

Regional HCPs may provide benefits to the Service's ease and efficiency of operations, thereby aiding in conservation of the Service's limited resources. By bringing entire regions into a single conservation plan, the Service may eliminate much of the need to repeatedly engage in

time-consuming and costly HCP development with individual projects. A regional HCP can be drafted to apply broadly to all wind energy projects in the applicable region, and then tiered-down to individual projects as needed, requiring significantly less work than drafting an individual HCP from scratch. New projects can be added, and the same tiering process applied through Certificates of Inclusion.²⁷

Finally, regional HCPs can be designed to include species whether or not they are listed under the ESA, BGEPA or MBTA.²⁸ Thus, a series of regional HCPs can be broadly drafted to encompass all birds and bats potentially affected by wind turbines, so long as sufficient information exists to adequately address the needs of the species. Beyond the obvious benefits for wildlife, such broadly drafted HCPs would further increase efficiency and reduce resource consumption for the Service by eliminating the need for repeated permit and consultation processes for individual statutes and species.

3. Regional HCPs May Contribute To Effective Identification, Avoidance, And Mitigation of Cumulative Effects At All Geographic Levels.

By forming regional HCPs in all geographic regions with a high level of wind development, the Service may be in a position to significantly contribute to effective cooperation in the gathering and sharing of information to avoid and mitigate wind energy impacts on wildlife across the nation. As recognized by the Service itself, such information is vital to the protection of birds and bats, and cooperation in gathering that information has benefits for both industry and the Service:

In order to develop a site specific HCP [tiered from regional HCP] . . . we desperately need more information . . . [o]btaining this research information will be expensive and time consuming for each developer. However, by combining efforts, developers can obtain much of this necessary information through a Regional HCP grant by having the Federal government cover 90% of the cost and splitting the remaining 10% among participating developers. This appears to us to be an *excellent opportunity to facilitate the safe development of wind facilities ... with minimal cost and effort to the developer.*²⁹

Thus, regional HCPs may, if designed and implemented properly, provide benefits for wildlife through effective national information gathering and sharing that enables project developers attempting to reduce their takes and comply with federal law to exchange knowledge

²⁷ *Id.* at 3.

²⁸ See <http://www.fws.gov/carlsbad/HCPs/CarlsbadCFWORregionalHCPs%20.html> (last accessed May 13, 2011).

²⁹ Midwest Region Wind Energy Habitat Conservation Plan Q & A at 1.

with, and learn from the experience of other wind energy developers. The Desert Renewable Energy Conservation Plan/HCP process recently commenced in California provides a useful model for such collaboration, including the consideration of other regional development in providing robust conservation for multiple species and supporting properly sited renewable energy projects. Such careful planning is necessary, as well as appropriate. Regional ITPs/HCPs are major federal actions which trigger review under NEPA. Hence, an Environmental Impact Statement would need to be prepared for each regional ITP/HCP, which should afford a basis for considering and addressing cumulative effects on non-listed species.³⁰

Further, regional HCPs are efficient. Forming regional HCPs will simultaneously save the Service time and manpower, as industry will contribute most of the effort in gathering crucial data about local and regional effects. HCPs may also reduce costs for all parties, as resources needed for data collection and planning efforts can be shared among the participants.

III. The Service Must Actively Ensure That Biological Consultants Are Qualified and Independent.

The Guidelines are inherently ineffective and will fail to realize their stated objective to “encourage scientifically rigorous” survey, monitoring and assessment, unless the monitoring and studies required at all tiers are conducted by responsible, trustworthy, qualified, and *independent* biological consultants. The Service and project developers cannot make well-informed and responsible decisions without full and accurate information about potential wildlife impacts. *See Wind Guidelines* at 3.

A. The Current System Is Rife With Bias and Conflicts of Interest.

Recent incidents have documented the inherent problems associated in having surveys, monitoring and assessments of wildlife impacts at wind energy projects conducted by consultants retained by and paid for by the project developers themselves. Consultants hired by the industry will almost invariably skew their surveys and analyses to arrive at findings that are favorable to the developer – their client who finances their work and may potentially retain the consultant for other projects. In the course of finding a wind power project in violation of the ESA, a federal district court expressly rejected the findings of one such developer-hired consultant in favor of other independent experts who appeared before the Court, holding that:

It is clear that [the chief consultant] adopted a ‘minimalist’ approach to his responsibilities and that he ‘neither strained very hard nor looked very far’ in his effort to find Indiana bats ... [s]earching for bats near proposed wind turbine locations for one year instead of three, looking in one season rather than three,

³⁰ The Council on Environmental Quality (“CEQ”) has issued a report on how cumulative impacts should be analyzed, including on a local and regional scale. *See* CEQ, *Considering Cumulative Effects Under the National Environmental Policy Act*, available at: <http://ceq.hss.doe.gov/nepa/ccenepa/ccenepa.htm> (last accessed May 13, 2011).

and using only one method to detect bats was wholly inadequate to a fair assessment.

Beech Ridge, 675 F. Supp. 2d at 582. The Court’s opinion details a plethora of ways in which the company-hired consultant performed minimal surveys, presented result-oriented analyses, and even suppressed important acoustic data in order to place the interests of the company ahead of wildlife protection interests. This may be an extreme example of the conflict and bias inherent in the present system of data collection and analysis on which the Service and other government agencies rely, but it is hardly an atypical one.

Another example of poor monitoring and assessment recently occurred in connection with the proposed Laurel Hill Wind Energy project in Pennsylvania. The bat impact assessments for the Laurel Hill project consisted only of acoustic recordings and a single mist net survey, conducted for a single week in summer, despite the project’s siting squarely in the range of listed bat species. The hired consultant corporation itself admitted that it did not have the requisite expertise to analyze the acoustic data files to species (i.e., to determine whether calls from listed species exist in the data), but the raw data files have nonetheless never been provided to the public, to independent scientists capable of such analysis, or even to the Service – rendering these files essentially useless in evaluating Laurel Hill’s siting decision and pre-construction studies, as well as risks to listed species.³¹ The mist net surveys were equally poor. A Pennsylvania Game Commission (“PGC”) biologist stated: “I find it rather difficult to believe that a team of over a dozen qualified bat biologists could not locate several dozen locations [suitable for mist net sites satisfying the Service protocols].”³² On that basis, the PGC concluded that, had better protocols been followed, “a higher capture success would have been achieved and the air space more likely to contain Indiana bats would have been sampled.”³³ The Service further condemned the “low level of effort ... used on the Laurel Hill project.”³⁴

As the *Beech Ridge* ruling makes clear, consultants have inherent conflicts of interest that often lead to their adoption of “a minimalist approach to [their] responsibilities,” leading to the sort of unacceptable, insufficient, and result-oriented studies done at Beech Ridge and Laurel Hill. *Beech Ridge* at 582. Such conflicts of interest and failures in duty are seen among even the most respected consulting firms.³⁵ In short, the available evidence suggests that the direct financial incentive to give the client-developer favorable results often causes biological

³¹ July 8, 2009 Laurel Hill TRC Report at 1.

³² July 29, 2009 Email from Greg Turner (PGC) to Cindy Tibbett (FWS).

³³ *Id.*

³⁴ Aug. 28, 2009 FWS Letter to TRC at 2.

³⁵ *See* July 23, 2009 NEES Letter to FWS at 7 (discussing inaccurate studies conducted by a “well-reputed” consulting firm).

consultants to forgo a thorough, neutral and “scientifically rigorous” assessment of the potential impacts of the wind energy project on wildlife. Effective implementation of the Guidelines, however, is entirely dependent on the unbiased collection and analysis of biological data.

B. The Service Must Develop Oversight Procedures to Ensure the Quality and Independence of the Consultants.

The inevitability of incomplete and/or inaccurate conclusions based on distorted science must be avoided to the extent practicable. There is a glaring need for a centralized mechanism that guarantees the scientific credentials of all wind project consultants, as well as the consultants’ independence from the financial influence of the developer. As described in detail below, there are several options for facilitating such a mechanism. We offer these simply as examples of mechanisms that could help avoid, or at least reduce, the flaws that plague the present system.

The Service should develop binding criteria for both qualified researchers and adequate and neutral research. Having set criteria, the Service should then maintain a pool of qualified consultants for every region where wind energy projects are built. These consultants could then be randomly (or in some other impartial manner) selected on a per-project basis to perform necessary monitoring and studies.

Payment of Service approved researchers should be segregated from the developers for whom they conduct research. Instead of paying researchers directly, developers should pay into a pool maintained by the Service, and from which the Service will dispense funds to the researchers selected for the project. This will eliminate the perverse incentive that consultants currently have to produce results friendly to the corporation that is paying them.

Industry can be compelled to use Service-approved consultants by streamlining the existing process for issuance of § 1539(a)(1)(A) ESA research permits to consultants who meet the Service’s criteria and are on the active list of qualified researchers as described above. Conversely, the Service can penalize companies that bypass the Service’s qualified consultants requirement by mandating a longer and more thorough investigation for the issuance of research permits to conduct studies at wind energy facilities for all consultants not on the approved list the Service should create.

Ongoing compliance of the individual research and researchers with the Service’s set criteria can be assured through a number of mechanisms. First and foremost, work should be evaluated post hoc by the Service or a panel of peer reviewers selected by the Service. Such post hoc evaluations should be used to ensure the validity of the developer’s siting, avoidance, and mitigation decisions. Further, the Service’s post hoc analysis of the research would also be helpful in determining the consultant’s continued qualifications for the approved researcher list. All research and researchers should be subject to peer-review, upon request of other researchers, organizations, the public, or the Service. Other steps for limiting an excessively close relationship between scientific consultants and particular companies – such as requiring large companies to rely on a diverse set of scientific consultants – should also be considered.

C. The Service Must Develop A Process To Adequately Store and Share Information on Consultants and Developers.

The vital safeguards described in this section are only possible if information is properly acquired, stored, and shared by the Service and developers. The Service should take steps to ensure that that all relevant data and information on every aspect of a project, its consultant, and the consultant’s research methods and findings is promptly shared with the Service in full. Such information must then be made available to the public. The Service should not allow “confidentiality agreements” between companies and non-federal officials to block public access to important biological data, as has occurred with some projects. Rather, conservation groups and independent scientists should be viewed as a vital resource that may complement and supplement the Service’s own efforts – a resource that can only be effective if all crucial biological information is made available to the public for independent review and analysis.

Allowing developers to claim that basic scientific data from surveys and monitoring is “proprietary” undermines the Service’s ability to fully analyze impacts of past, present and future projects and is entirely inconsistent with the requirements of the ESA that the Service rely on the best available scientific and commercial data and information. While it is absolutely clear that all data collected on public lands in the process of siting projects must be made available to the public if it is relied on to approve a project siting decision, the Service should also adopt a requirement in the Guidelines that such data be made public for all sites on both public or private lands.

The effective collection and sharing of information would also necessitate, as well as facilitate, adequate inter-regional coordination among the Service’s offices. To ensure the rapid sharing and easy accessibility of information, the Service should develop an internal database that can be accessed by all its officials, in every regional office. The wealth of information gathered by the Service should then be used to conduct post-hoc self-assessments at appropriate intervals, in which the Service reviews and revises its own policies regarding wind energy development in light of the effectiveness of the Guidelines in addressing wildlife impacts.

IV. Wind Energy Projects on Federal Public Lands

There are several additional aspects of the Guidelines that specifically relate to the placement of wind energy projects on or near federal lands.

A. The Guidelines Should Explicitly Discuss Compliance With Federal Public Land Laws.

The Guidelines state that they are complementary to the existing statutes, regulations and policies applicable on federal public lands. *Wind Guidelines* at 15. However, the Guidelines do not list the applicable statutes, regulations and policies nor do they discuss adopted land use management plans, instruction memoranda and other guidance that must also be followed by public agencies. *See, e.g., ONRCF v. Brong*, 492 F.3d 1120, 1125 (9th Cir. 2007) (“Once a land use plan is developed, ‘[a]ll future resource management authorizations and actions . . . shall

conform to the approved plan.’; 43 C.F.R. § 1610.5-3(a); 36 C.F.R. § 219.19 (regulations requiring the Forest Service to manage fish and wildlife habitat to ensure viable populations of existing fish and wildlife species are maintained).

For example, the Bureau of Land Management (BLM), like other public agencies, must take actions to “conserve and/or recover ESA-listed species and the ecosystems on which they depend so that ESA protections are no longer needed for these species” and it must “initiate proactive conservation measures that reduce or eliminate threats to Bureau sensitive species to minimize the likelihood of and need for listing of these species under the ESA.”³⁶ Similarly, under the terms of the California Desert Conservation Area Plan, BLM is required to affirmatively protect State listed and BLM sensitive species from decline on public lands. *See* California Desert Conservation Area Plan³⁷ at 20 (“All state and federally listed species will be fully protected”); *id.* at 29 (“Manage those wildlife species officially designated as sensitive by the BLM for California and their habitats so that the potential for Federal or State listing is minimized”).

B. The Guidelines Should Explicitly Designate Public Lands Inappropriate For Wind Energy Development.

The Guidelines fail to acknowledge that in many cases, particularly in the western states, public lands provide the last best refugia for rare, imperiled and listed species, as well as common species. Moreover, as the Service acknowledges, federal land management agencies must meet specific standards for conservation of all special status species on public lands including higher standards in many areas such as National Park Service lands, National Wildlife Refuges, critical habitats, wildlife management areas, areas of critical environmental concern (“ACEC”), wildlife habitat management areas (“WHMA”) as well as wilderness, wilderness study areas, and inventoried roadless areas. In addition, lands acquired by the public for conservation or mitigation (whether with public or private funds) should not be considered for development.

While the Guidelines do not mention National Wildlife Refuges at all, it also does not clearly state that these areas would be off limits to wind projects. We believe that such projects are highly unlikely to meet the test for compatible use under the National Wildlife Refuge System Improvement Act or the regulations, but the Service should make this explicit as well. *See* 16 U.S.C. §§ 668(dd)(d)(3)(A)(i); § 668ee(1).

The Guidelines need to be more explicit in listing other important areas, and explaining the likely conflicts. For example, the Tier 1 evaluation in the Wind Guidelines should specifically

³⁶ Instruction Memorandum No. 2009-039 adopting revised 6840 - BLM Special Status Species Management Manual (emphasis added).

³⁷ http://www.blm.gov/pgdata/etc/medialib/blm/ca/pdf/pdfs/cdd_pdfs.Par.aa6ec747.File.pdf/CA_Desert_.pdf

provide that ACECs, critical habitat, WHMAs, wildlife refuges, and other areas designated for species conservation on public lands are highly likely to be inappropriate for development – not just that they “may be inappropriate.” The Service should also explain that areas identified in the recovery plans for listed species are also highly likely to be inappropriate for development. Tier 1 should also include a question regarding other proposed or approved projects in the area so that the potentially significant additive and cumulative impacts are considered early in the evaluation process.

C. Federal Land Management Agencies Have Unique Responsibilities to Consider Cumulative Impacts and Potential Alternatives to Proposed Wind Energy Projects.

While the tiered, iterative approach proposed in the Guidelines can be useful, such an approach may not pick up important issues related to aggregate and particularly cumulative effects of these projects. In addition, the tiered approach as designed may unlawfully truncate a meaningful alternatives analysis for projects on public lands. The alternatives section is “the heart of the environmental impact statement.” 40 C.F.R. § 1502.14. NEPA requires BLM to “rigorously explore and objectively evaluate” a range of alternatives to proposed federal actions. *See* 40 C.F.R. §§ 1502.14(a), 1508.25(c). “An agency must look at every reasonable alternative, with the range dictated by the nature and scope of the proposed action.” *Nw. Envtl. Defense Center v. Bonneville Power Admin.*, 117 F.3d 1520, 1538 (9th Cir. 1997). An agency violates NEPA by failing to “rigorously explore and objectively evaluate all reasonable alternatives” to the proposed action. *City of Tenakee Springs v. Clough*, 915 F.2d 1308, 1310 (9th Cir. 1990) (quoting 40 C.F.R. § 1502.14). This evaluation extends to considering more environmentally protective alternatives and mitigation measures. *See, e.g., Kootenai Tribe of Idaho v. Veneman*, 313 F.3d 1094, 1122–23 (9th Cir. 2002) (and cases cited therein). The consideration of more environmentally protective alternatives is also consistent with the Federal Land Policy Management Act (“FLPMA”), 43 U.S.C. § 1701 *et seq.*, requirement that BLM “minimize adverse impacts on the natural, environmental, scientific, cultural, and other resources and values (including fish and wildlife habitat) of the public lands involved.” *Id.* §1732(d)(2)(a).

The mere fact that lands for an alternative site are not public lands or are not administered by the same public agency does not render an offsite alternative unreasonable. “An alternative that is outside the legal jurisdiction of the lead agency must still be analyzed in the EIS if it is reasonable.”³⁸ NEPA requires consideration of alternatives “that are practical or feasible” and not just “whether the proponent or applicant likes or is itself capable of carrying out a particular alternative.”³⁹ In the case of poorly sited projects, the Guidelines would do nothing to assist the

³⁸ CEQ, Forty Most Asked Questions Concerning CEQ’s National Environmental Policy Act Regulations, Questions 2(b)(A) (emphasis added), <http://ceq.hss.doe.gov/nepa/regs/40/40p3.htm>; 40 C.F.R. §§ 1502.14, 1506.2(d).

³⁹ *Id.* at Question 2(a)(A)

developer or the agency in developing meaningful alternatives to meet the NEPA and other planning requirements.

On public lands, using the best “practicable” standard for mitigation described in the Guidelines is simply not good enough to protect eagles and other species that are already facing declines—the developers’ financial interests cannot be used to outweigh conservation mandated under the ESA, BGEPA, and the implementing regulations.

D. The Guidelines Should Address Projects In Proximity To Important Conservation Areas.

The Guidelines fail to address the issues that are raised by wind projects that are proposed on public or private land that is not expressly set aside for conservation but is adjacent or nearby public lands set aside for conservation including National Park Service lands, National Wildlife Refuges, critical habitats, wildlife management areas, ACECs, WHMAs, as well as wilderness, wilderness study areas, and inventoried roadless areas. For example, in Nevada, there are proposals for wind projects surrounding the Great Basin National Park and may affect the migratory birds, bats, and eagles that live in and near the park all or part of the year. Similarly, at least two wind projects are proposed adjacent to Anza Borrego Desert State Park in California but neither the Wind Guidelines nor the Eagle Guidance would provide a useful framework for addressing cumulative impacts to park resources in that case. Indeed, both the wind and eagle guidelines provide little or no relevant information or guidance regarding additive or cumulative impacts that would ensure that the impacts to the birds, bats and eagles that use these parks are minimized. As a result, the piecemeal approach allowed under the Guidelines could result in a devastating cumulative loss of avian life in parks, wildlife refuges and other areas set aside for conservation.

E. The Guidelines Should Address Cooperation and Coordination With States, Particularly With Regard to the Protection of State-Listed Species.

Many states also have statutes and regulations that protect the species that may be impacted by wind projects. Species that are protected under state laws or are species of concern should be protected where they also occur on federal public lands (in many states this is accomplished through the special status species programs or MOUs with state agencies). For example: the Nevada Natural Heritage Program includes both an “at risk” list and a “watch” list;⁴⁰ Colorado protects species in a state listing program and also protects species of concern;⁴¹ Utah also maintains a sensitive species list,⁴² as does Montana,⁴³ and many other states. California’s fully

⁴⁰ <http://heritage.nv.gov/spelists.htm>

⁴¹ <http://wildlife.state.co.us/WildlifeSpecies/SpeciesOfConcern/>

⁴² <http://wildlife.utah.gov/habitat/>

⁴³ <http://mtnhp.org/SpeciesOfConcern/?AorP=a>

protected species statute prohibits any take of certain species including bald and golden eagles and condors, Cal. Fish & Game Code § 3511, and provides other statutory protections for falcons, Cal. Fish & Game Code § 3503.5, and other species.

State agencies and other organizations working within the states may have resources that will assist developers in avoiding sensitive areas. For example, the Colorado bat working group prepared a statewide bat conservation plan;⁴⁴ and the Utah Comprehensive Wildlife Conservation Strategy is intended to ensure key habitats are protected.⁴⁵ These and other resources should be acknowledged in the Guidelines. To the extent the Guidelines is to be utilized by developers, these are critical omissions that should be corrected in the final document.

V. Additional Specific Comments on the Eagle Guidance

As explained below, we also have certain specific concerns in relation to the Eagle Guidance. The Eagle Guidance should focus more on avoidance through proper siting rather than mitigation; avoiding impacts is the most effective and important first step in any siting decision or site evaluation, and the best way to conserve species is to conserve habitat and avoid impacts to individuals of the species as well as populations. The Eagle Guidance site categorization is of particular concern because it only discusses avoidance for “category 1” high risk sites and fails to embrace this most fundamental tool of site-avoidance for sites with high to moderate risk to eagles.

Further, the Service should provide separate guidance on impacts to golden eagles and bald eagles in many of the subject areas. While conservation measures for the two species may be similar in some ways, the two species are dissimilar in many important respects. It appears that in most cases, the Eagle Guidance is addressing the needs of golden eagles which have already been significantly impacted by existing and past wind development. However, with large scale wind projects spreading into new areas particularly in the western states, impacts to bald eagles will likely increase. As the Service is aware, the Center for Biological Diversity and other groups have provided significant evidence that the desert nesting bald eagle populations remain at risk and should be protected under the ESA as well as the BGEPA. To the extent it is understood, the Service should clearly explain why it believes there has been a difference in impacts on bald and golden eagles in the past. For example, what are the likely impacts of expanding wind development into new areas and changes in turbine designs and size? These issues are not clearly examined in the Eagle Guidance but should be. We are particularly concerned that the Eagle Guidance does not require avoidance of impacts to eagle populations that have already suffered significant impacts from wind projects fails to provide sufficient protection of recently de-listed bald eagle populations in order to support the recovery that was achieved over decades of conservation efforts.

⁴⁴ <http://www.cnhp.colostate.edu/teams/zoology/cbwg/consPlan.asp>

⁴⁵ <http://wildlife.utah.gov/cwcs/>

Additionally, the Service should define the terms “populations” and “sub-populations” in the Guidelines. The Eagle Guidance is unclear regarding how populations of eagles are to be defined and analyzed, *see Eagle Guidance* at 12, and whether the Wind Guidelines’ focus on populations is also applicable to eagles. *See Wind Guidelines* at 12. Similarly, the Wind Guidelines also fails to clearly define populations and sub-populations. The discussion continental eagle populations and of using adaptive management at that scale is of particular concern, *Eagle Guidance* at 27, 50, because of the lack of data in many areas and lack of consistency in the available data. The full extent of the range of many eagle populations at the local and regional scale is not well known and the analysis should ensure that any assessment of impacts takes into account the full extent of the eagle’s range for each of these populations. For example, golden eagles have been and continue to be killed in the Altamont area and these eagles may come from several different golden eagle populations. Studies have shown that eagles killed at Altamont include resident golden eagles and migrant golden eagles traveling significant distances from other populations. Without a careful assessment of these and other similar issues, the use of a population scale analysis at a continental scale, or even at a regional scale, will be significantly flawed.

Further, apart from protection of populations of species, the Service should also emphasize the protection of individuals, breeding pairs and other sub-populations. The Guidance’s focus is skewed too heavily to “populations” without adequate protections for individuals, breeding pairs, and other sub-population groupings. As the Service is well aware, obtaining the type of data needed over a sufficient time to show definitive population level effects can be quite costly and time consuming, and in most cases such data is unavailable. While population level analysis is important for conservation, protections for individuals and breeding pairs of raptors, for example, is essential to maintaining current populations and ensuring recovery in the future. Further, sub-populations are critical to maintaining genetic diversity. Similarly, maintaining flyways and stop-over sites for migratory birds is essential and sub-populations that may utilize different areas or types of habitat are critical to the long term survival of those species.

Finally, the conservation measures for eagles need to be broadened because electrocution of eagles from power lines is not the only or even the primary threat to many eagle populations. While we fully support utility infrastructure retrofits as one conservation measure, other conservation measures should be included such as measures that would reduce deaths due to secondary poisoning from rodenticides and other pesticides (particularly anti-coagulants), lead poisoning from scavenging carcasses from hunting, and habitat loss due to other projects on public and private lands (including urban development, oil and gas development, mining, and large-scale solar industrial development). Mitigation should also include options for increasing habitat conservation for eagle nesting and foraging areas. In addition to retrofitting existing power lines, the Guidance should clarify and ensure that all new power lines and gen-tie lines associated with wind projects meet the highest standards for “bird-safe” designs.

Sincerely,

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