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Public Comments Processing
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ABC Comments on Eagle Permits; Revisions to Regulations for Eagle Incidental Take and Take of Eagle Nests (FWS-R9-MB-2011-0094)

To Whom It May Concern:

Introduction

The American Bird Conservancy (ABC) hereby submits its comments on the proposed regulation by the U.S. Fish and Wildlife Service (FWS), *Eagle Permits; Revisions to Regulations for Eagle Incidental Take and Take of Eagle Nests* and its associated Draft Environmental Impact Statement (DEIS). ABC commented on FWS's prior regulation on this subject, expressing its concerns about the impact of the 30-Year Eagle Take Rule on eagle populations in the United States (<https://abcbirds.org/article/review-of-30-year-eagle-take-rule-prompts-call-for-new-approach-to-managing-wind-industry/>). The revised regulation does not allay our serious, legitimate concerns about the short- and long-term impacts that 30-year permits for large, commercial wind energy facilities, along with some of the other rule changes proposed by FWS, will have on eagle populations and other wildlife.

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

ABC supports the development of clean, renewable sources of energy such as wind and solar power to address anthropogenic climate change, but also believes that it must be done responsibly and with minimal impact on our public trust resources, including ecologically important native species of birds and bats, and particularly Threatened, Endangered and other protected species. When it comes to wind energy, proper siting is the most important consideration. ABC is a proponent of Bird Smart Wind Energy, described in some detail on our web site (<https://abcbirds.org/program/wind-energy/bird-smart-strategies/>) and in Hutchins et al. (2016).

Purposeful or Incidental Take

ABC fully understands that the proposed rule involves authorization of “non-purposeful” or “incidental” take of eagles and eagle nests. Those terms recognize that eagles will be killed by otherwise lawful activities associated with the wind energy industry and other industries. They should not be confused with “unanticipated.” Wind energy developers and regulators both know that there is a near certainty that, when eagles are present in the same landscape for some portion of their lifecycle, some or even many eagles will be killed by collisions with wind turbine blades or collisions and electrocutions at their associated power lines and towers. Thus, when wind turbines are sited in areas with large concentrations of eagles, take can be expected to occur, and the distinction between “non-purposeful” or “incidental” and “purposeful” take becomes meaningless, as a practical as well as a legal matter. Indeed, the Bald and Golden Eagle Protection Act (BGEPA) imposes serious *criminal* penalties on any conduct that involves a “knowing” “take” of Bald or Golden eagles without a FWS permit, as well as conduct that is pursued with “wanton disregard for the consequences” of the action. (16 U.S.C. § 668(a)). Thus, the change in the proposed rule from “non-purposeful” take permits to “incidental” take permits accomplishes nothing of substance with respect to the protection of eagles.

30-Year Permits: The Shifting Rationale

The FWS implemented BGEPA rules in 2009 and extended the permit length from five to 30-years in 2013 without going through the National Environmental Policy Act (NEPA) process or consulting with Native American tribes, both required by law. ABC’s successful lawsuit required the Service to rescind the 30-year Eagle Take Rule and go back to the drawing board to formulate a more science-based approach to eagle management. (*See Shearwater v. Ashe*, No. 14-CV-02830-LHK, 2015 WL 4747881 (N.D. Cal. Aug. 11, 2015)). FWS now proposes new BGEPA rules in the face of growing and multiple threats from a wide variety of anthropogenic sources of bird mortality (Loss 2015), including a rapidly expanding commercial wind industry and its associated infrastructure of power lines and towers.

The proposed rules unfortunately stick with a 30-year permit regime, albeit for dramatically different reasons from those previously proffered. The first 30-year rule was expressly designed to “*facilitate the development of renewable energy and other projects*” in eagle habitat (77 Fed. Reg. 22,267, 22267, Apr. 13, 2012, emphasis added), on the ostensible rationale that the “uncertainty surrounding the renewal of programmatic eagle take permits was preventing operations from obtaining the necessary financing for wind energy projects that might last up to thirty years” (*Shearwater*, 2015 WL 4747881, page 7). FWS further explained that the “stated purpose of the Final 30-Year Eagle Take Rule was to “facilitate the development of renewable energy and other projects that are designed to be in operation for many decades,” and to “facilitate the funding, construction, and operation of numerous energy generation projects, including wind power facilities” in areas occupied by eagles.” (Quoting 78 Fed. Reg. 73,704, 73,704, 73,722 (Dec. 9, 2013)).

That “development facilitation” rationale appears nowhere in the proposed new rule, which instead purports to be justified only by the *need to protect eagles* by enticing companies into a BGEPA permitting regime that the companies would otherwise avoid. Thus, the proposed rule states that: (1) the “Service cannot require any entity to apply for an eagle take permit (except under legal settlement agreements)”;

(2) that “project proponents build and operate without eagle take permits even in areas where they are likely to take eagles”; and (3) “the Service believes that permitting long-term activities that are likely to incidentally take eagles, including working with project proponents to minimize the impacts and secure compensatory mitigation, *is far better for eagle conservation than having companies avoid the permitting process altogether because they perceive the process as overly onerous.*” (FWS 2016b, emphasis added; see also FWS (2016c, page xiii) stating: “[c]ompanies are more likely to weigh the benefits of obtaining a permit as higher than the risk of federal prosecution” when they can obtain long-term permits.)

A dispassionate observer might be forgiven for concluding that FWS’s new proposal, which never even acknowledges the rationale for its earlier 30-year rule, is still designed actually to accommodate the wind energy industry, rather than to protect eagles.

In addition, the proposed new rule will not affect siting (the only current form of proven mitigation besides curtailment) in any way, as demonstrated in this FWS statement:

“We recommend that developers avoid areas that are important to eagles. However, we do not have the authority to prohibit development in areas that are important to eagles. Our role is to evaluate the level of impacts to eagles when a project proponent approaches us to inquire about a permit to authorize eagle take. We do not have the authority to approve or veto the actual project” (FWS 2016b, page 74).

30-Year Permits and FWS Enforcement of BGEPA

FWS’s justifications for the proposed rule are inadequate and, in some cases, demonstrably false. To begin with, the FWS’s premise that it “cannot require any entity to apply for an eagle take permit” (FWS 2016b, page 64) in advance of project construction and operation is not only unexplained but also incorrect. The same is true of FWS’s proclamation that it can have no influence on siting.

ABC has pushed for mandatory, not voluntary, permitting regulations for many years (Hutchins et al. 2016). Any wind energy facility built in an area known to be inhabited by federally protected species (i.e., eagles) during some portion of their life cycle should be required to obtain an incidental take permit under BGEPA prior to construction. FWS plainly has the legal authority under BGEPA (and the Migratory Bird Treaty Act, MBTA) in conjunction with other legal authorities to prevent an unlawful take from occurring.

In particular, 18 U.S.C. § 371 makes it a crime for any person to “*conspire* to commit any offense against the United States.” The government has relied on this provision to prosecute not only actual “takings” in violation of federal wildlife protection laws, but also the predicate actions necessary to bring such takings to fruition. See, for example:

- (1) *U.S. v. Vance Crooked Arm*, 788 F.3d 1065 (9th Cir. 2015) (the act of placing deer carcasses to attract and capture bald and golden eagles charged as conspiracy under 18 U.S.C. § 37);
- (2) *Cerritos Gun Club v. Hall*, 96 F.2d 620 (9th Cir. 1938) (prosecution for luring migratory game fowl to be shot in violation of the MBTA and the federal conspiracy provision);
- (3) The U.S. Department of Justice (Idaho District) convicted a farmer of conspiracy for attempting to illegally bait ducks (Department of Justice 2016); and
- (4) *U.S. v. Gannaway* (No. 11-13506, 2012 WL 1750120 (C.D. Ill. 2011) (conviction for conspiracy to violate the Clean Air Act based on the “defendant’s knowing and voluntary participation in the conspiracy, and the commission of an overt act in furtherance of it.”).

Accordingly, contrary to the erroneous assumption underlying the proposed rule, it is clear that the government need not await the actual taking of an eagle but, rather, may undertake appropriate enforcement action to prevent harm to protected wildlife before it occurs.

If, for example, the FWS *knows* that an industrial wind power project is being constructed in a location occupied by Bald or Golden eagles (as well as other migratory birds of conservation concern), it is not powerless to wait for animals protected by federal law and international treaties to be killed, injured, and otherwise “taken” by wind turbines, just as it need not sit idly by while bird baiting or other acts preparatory to an unlawful take occur. FWS is therefore wrong in asserting that it lacks any authority to “prohibit development in areas that are important to eagles,” and that the most it can do, is “*recommend*” that a company not build its project in a high-risk site that will predictably kill eagles and/or other migratory birds in flagrant violation of federal law.

Prevention of harm to protected wildlife is particularly important during construction and operation, especially given the government’s record of after-the-fact enforcement. Prosecutions for killing eagles and other protected bird species have been negligible. Only three wind energy companies (Duke Energy, PacifiCorp and AES Laurel Mountain LLC) have been prosecuted and fined for killing federally protected birds—a small fraction of the hundreds of U.S. wind energy facilities that have likely been violating federal law with impunity (Clarke 2014b). Even the DEIS concedes that a 2013 analysis “showed that wind-turbine deaths of Bald and Golden Eagles have been documented at least at 35 wind-energy facilities besides Altamont in 14 states” (DEIS, Page 172). Moreover, the companies have settled for what are miniscule fines for major corporations—hardly the kind of penalties likely to deter large corporate entities such as Duke Energy from violating BGEPA or, most important, to motivate them not to build their projects in important eagle habitat.

Given the FWS’s infrequent enforcement (the strengthening of which *must* be an alternative given serious consideration in the FWS’s NEPA process for the rule), it is not surprising that wind power and other industries ignore BGEPA and routinely construct their projects in or in proximity to the essential habitats of eagles and other migratory birds (Casey 2015).

Dilulo (2010) said, “It is a well-known doctrine in criminology that in order to ensure compliance with the law, punishment must be swift, certain, and severe enough to deter future violations. Certainty is arguably the most important factor.” Indeed, the Environmental Protection Agency (EPA) has known for years that the most effective way to ensure compliance with the statutes that the agency administers is not through the granting of permits of absurdly long duration but, rather, through meaningful and certain *enforcement* of statutes such as the Clean Air Act and Clean Water Act (see Performance.gov 2016).

There is no discernible reason why FWS does not learn from EPA’s experience and adopt a meaningful enforcement regime that could actually convince companies that BGEPA and MBTA compliance is just as important as, e.g., compliance with federal pollution control statutes. FWS never explains either how the adoption of a 30-year permit will actually influence companies *not* to construct their projects in the most important eagle habitats, or will result in any increase in BGEPA compliance unless it is also accompanied simultaneously by an increase in enforcement.

Neither the proposed rule nor the DEIS presents any evidence whatsoever to support FWS’s central rationale that permits of longer duration will convince more companies to comply with BGEPA. Put differently, if the availability of permits of five-years’ duration with the prospect of renewal has been insufficient by itself (i.e., with no meaningful enforcement regime) to convince companies to apply for permits, what empirical *evidence* exists that the availability of 30-year permits (with “internal” FWS reviews rather than affirmative renewal decisions) will be sufficient by itself (again, with no meaningful enforcement regime) to convince the very same companies to obtain permits? The proposed rule and DEIS merely assert that the rule change will “increase compliance” (FWS 2016b), without furnishing even a scintilla of evidence in support.

A recent attempt to collect survey information related to FWS’s Land-based Wind Energy Guidelines is illustrative of the problem. Not one individual wind energy company responded. As the FWS admits, “acquiring the wind energy industry’s response to surveys and limited public outreach is challenging because of FOIA requests that may reveal take of federally-protected species, and the recent prosecution of a wind energy company for violation of the MBTA. Even companies that are not currently under investigation tend towards the conservative approach of nonresponse” (FWS 2014, page 2).

Moreover, the FWS’s speculation that longer-term permits will increase BGEPA compliance is not only unsubstantiated but also makes no sense. A company that is willing to risk breaking the law rather than obtain a five-year permit with the prospect of renewals will be equally willing to risk breaking the law rather than obtain a 30-year permit that requires monitoring, mitigation, and other requirements that the company could otherwise avoid.

This is especially true if, as the FWS asserts (again, with no supporting evidence), that the five-year internal reviews will be just as protective as the renewal decisions that it would be compelled to undertake under existing law. (See DEIS, page 71, asserting that the proposed rule would not reduce eagle protections because “most renewals would not require incorporation of

substantial new information, and thus not trigger the need for additional NEPA”). It could hardly be plainer that if FWS’s objective is to increase BGEPA compliance, as it proclaims, the solution is meaningful enforcement of existing law, not permits of excessively long duration.

Further, under the FWS’s current voluntary system, incidental take permits are not required, but taking an eagle without a permit is illegal. The critical question then is, how is FWS going to find out if protected species have been taken, since, except in Hawaii, it relies solely on the regulated industry to volunteer that they have broken the law?

While enforcement risk is minimal, wind energy developers can theoretically be fined, prosecuted, or face expensive mitigation or compensation should they kill federally protected species. Consequently, reliance on voluntary industry self-monitoring and reporting is guaranteed to ensure under-reporting of eagle deaths and injuries. No for-profit industry can be effectively regulated based solely on voluntary self-monitoring and -reporting of wildlife crimes. Reporting and monitoring must be mandatory and carried out by neutral third parties rather than by the regulated companies themselves or consultants who are beholden to them for their livelihoods. Otherwise, credibility will always be an issue.

Even under its current voluntary guidelines, FWS has the ability to regulate the industry, including influencing siting. For example, if FWS recommended that a project not be placed at a particular site due to high risks to federally-protected species, but the developer ignored the recommendation or failed to obtain appropriate incidental take permits under BGEPA and ESA, then the FWS could subject that facility to enhanced scrutiny, including independent monitoring of bird and bat fatalities (as occurs in Hawaii) and/or unannounced visits by law enforcement. The developer could also be warned that, if protected species are killed, FWS will refer the case to the Justice Department and request prosecution to the greatest extent of the law, including the possibility of temporary or permanent shut down. Even this level of enforcement would encourage investors to ensure that developers were doing everything they could to minimize take.

Individuals who kill federally protected eagles or possess their parts can be fined as much as \$250,000 per bird and spend up to two years in jail (Frauenfelder 2009). The FWS’s revised rule, however, gives the wind industry a free pass to kill thousands of eagles with little or no consequence. What’s more, the public is not going to be able to find out how many eagles are actually being killed.

The primary beneficiary of 30-year permits will be the wind energy industry, not our nation’s eagles, other native birds, and bats. The DEIS recognizes this itself on page xiii:

“...extending the maximum duration of incidental take permits to 30 years would create beneficial impacts to applicants over long-term for renewable energy and public infrastructure projects because the tenure would more closely match the long-term financial agreements or contracts.”

FWS argues that 30-year permits will not be functionally different from five-year permits because there will be interim five-year reviews. FWS states:

“During each five-year review, we would reassess post-construction monitoring, take rates, including disturbance, fatalities; effectiveness of measures to reduce take; the appropriate amount and effectiveness of compensatory mitigation; and the status of the eagle population. Depending on the findings of the review, we may make changes to a permit as necessary, including updating fatality projections for the facility; requiring implementation of additional conservation measures that are practicable for the permittee to implement; updating monitoring requirements; or adjusting compensatory mitigation requirements. Additional post-implementation monitoring may be required to determine the effectiveness of additional conservation measures.” (FWS 2016b, page 82).

FWS does not explain the justification for 30-year permits if it is indeed going to conduct this level of analysis every five years. This is especially true if it “always retain[s] the ability to suspend and/or revoke the permit.” (FWS 2016b, page 84). Either the five-year reviews will, as FWS claims, afford as much eagle protection as the existing five-year renewal process—in which case the longer permit duration cannot, by itself, incentivize companies to seek permits that they would otherwise decline to seek—or, as ABC fears, the five-year reviews will prove to be far less protective of eagles, thus severely undermining the fundamental eagle protection purpose of BGEPA.

We continue to agree with FWS’ 2009 justification of the five-year rule, which stated:

“...the rule limits permit tenure to five years or less because factors may change over a longer period of time such that a take authorized much earlier would later be incompatible with the preservation of the bald or golden eagle. Accordingly, [FWS] believe [s] that five years is long enough period within which a project proponent can identify when the proposed activity will result in take.” (74 Fed. Reg. at 46,856).

ABC also disagrees with the removal from the proposed rule of the concept of “advanced conservation practices,” which require reducing take to the point where it is unavoidable. The proposed rule instead requires permittees to implement all “practicable” best management practices and other measures and practices that are reasonably likely to reduce eagle take.

“Practicable” is defined as “available and capable of being done after taking into consideration existing technologies, logistics and cost in light of a mitigation measure’s beneficial value to eagles and the activity’s overall purpose, scope and scale.” This proposal is far too lenient, leaves unacceptable room for subjective interpretation, and is inconsistent with FWS’s authority to permit the taking of eagles only when “it is compatible with the preservation of the bald eagle or the golden eagle ...” (16 U.S.C. § 668a).

ABC also questions how well this approach would work in practice. There are, for example, few proven methods of mitigation to reduce bird kill (Arnett and May 2016), which means that “practicable” essentially means that anything goes. In fact, the only mitigation method that FWS will consider to offset Golden Eagle mortality is the retrofitting of associated power lines and towers. Even this requirement is based on shaky science. Studies on the effectiveness of retrofitting power lines in reducing bird mortality have been mixed; furthermore, this mitigation

is the responsibility of power utility companies and should not be considered a reasonable offset for additional mortality related to wind turbines.

30-Year Permits: Inadequate Data

FWS does not keep track of which projects have contacted them under the Wind Energy Guidelines (WEG). Nor does it have a national database on which projects have submitted Environmental Assessments or Avian Protection Plans and which have not. Nor does it have any idea as to the number of projects that are adhering to its guidelines versus those that are not. These quotes from a recent response to an ABC FOIA request are telling:

“The FWS does not maintain a list of wind energy facilities that have contacted the agency regarding adherence to the WEG. The FWS also does not maintain a list of wind energy facilities that have Avian Protection Plans on file...the FWS also does not maintain a list of wind energy facilities that have pre-construction Environmental Assessments on file.” (Kreger 2016).

FWS cannot possibly understand or assess the efficacy of its WEG or BGEPA guidance in regulating the wind energy industry’s impact on our nation’s wildlife without having access to such data. For example, what percentage of the total number of U.S. wind energy projects in operation have conducted Environmental Assessments, have Avian Protection Plans, have followed FWS recommendations for siting, or have followed through on FWS recommendations for mitigation? Having failed to gather and assess this data, FWS has no reasonable ground for believing that the proposed 30-year rule will encourage industry to seek take permits or indeed pay any attention at all to wildlife mortality issues.

The importance of FWS keeping accurate, real time data on eagle mortality at large commercial wind projects and their associated infrastructure, locally, regionally, and nationally, cannot be overstated. We recently used the FOIA process to ask FWS for data on eagle mortality at wind projects following the Pagel et al. (2013) study. It took FWS over a year to respond. In the end, it could produce records of only 25 deaths (4 Bald Eagles and 21 Golden Eagles) during the past three years (Allen, 2016). That figure grossly understates actual eagle mortalities. There are vastly more eagles killed at Altamont alone annually (67 on average) (Smallwood and Thelander 2008) and the PacifiCorp case involved the loss of 38 Golden Eagles (Anon 2015, U.S. Dept. of Justice, 2015). The Pagel et al. (2013) study itself is often used by the wind industry to argue that the number of eagles killed is miniscule, when the authors themselves admitted that the records on which their results were based were likely incomplete due to a failure to report eagle deaths.

FWS cannot reach its goal of stable or increasing Bald or Golden Eagle populations without access to such data on local, regional, and national levels. The discrepancies in FWS’ answers to our FOIA request and recently released FWS data (Millsap et al. 2016) are huge. In addition,

ABC contacted FWS Law Enforcement’s National Eagle Repository (<https://www.fws.gov/eagleRepository/>), which is the recipient of eagle carcasses from throughout the entire nation. We asked whether data are maintained on causes of death for the

2,000-3,000 eagle carcasses that are received at the Repository each year and were told that no such records are kept.

All of this suggests that the FWS does not actually know how many Golden Eagles wind turbines and their associated infrastructure kill annually, and that estimated levels of “sustainable take” are purely theoretical based on untested models. It may therefore be impossible for FWS to attain its goal of “stable or increasing breeding populations” over 100 years, which, in turn, is integral to FWS’s statutory mandate to ensure both the short- and long-term “preservation” of eagles (16 U.S.C. § 668a). Furthermore, we found this curious statement by FWS concerning their new status report on Bald and Golden Eagles:

"The Status Report, Bald and Golden Eagles: Status, Trends, and Estimation of Sustainable Take Rates in the United States, estimates population sizes, productivity, and survival rates; cumulative effects to local area populations; and effects of unauthorized take of golden eagles. The report is a science-based, final product. Accordingly, the Service is not seeking public comment on it." (FWS 2016a, page 1).

If this study provides the scientific foundation for the revised rule, then it must be open for public comment. In addition, it is unclear whether the study was even peer-reviewed. If it was, then FWS should have stated that outside review by qualified, unaffiliated biologists with appropriate background in population modeling and assessment had done a review and found the methodology to be appropriate and the conclusions supported.

30-Year Permits: Public Involvement in the Permitting Process

We also object to the proposal that the five-year “internal” review process will be closed to the public, tribes, and concerned conservation organizations. FWS is making no commitment to involve the public in any manner in the five-year reviews, and it is unclear whether information from these reviews will ever be publically available, or if companies will be permitted to claim an exemption under Exemption 4 of the FOIA to avoid public scrutiny. The issue of public involvement and access was specifically addressed by the District Court in revoking the FWS’s 30-year take rule:

“[T]here is no serious dispute that a six-fold increase in the maximum duration of programmatic eagle take permits will have the effect of reducing public participation in permitting decisions. Over the lifespan of a thirty-year permit, a project might be subject to NEPA’s public participation requirements only once when the permit is first issued. By contrast, a project under a five-year permitting regime would be subject to NEPA’s public participation requirements six times during that same thirty-year period. FWS’ apparent compromise to make eagle mortality data compiled by permittees every five years “available to the public” in some unspecified manner is no substitute for the public’s right under NEPA to participate in permitting decisions. 50 C.F.R. 22.26(h). Nothing in the Final 30-year Rule requires FWS to provide the agency’s analysis of that data to the public, and Federal Defendants acknowledge that under the new rule the public may only become involved “if” FWS decides that there is “a need for a significant permit amendment.” A 30-year permit would decrease opportunities for public stakeholder involvement because decisions on issuance and reissuance are subject to NEPA analysis and tribal consultation.” (Shearwater et al. 2015 WL474881, Page 17).

We agree with that analysis and see no evidence that the FWS has reconsidered its position on the value of public involvement in the five-year “internal” review process. We strongly suggest that either: (1) the five-year rule remain in place; or (2) that public involvement in the five-year “internal” review process be specifically provided for in the final rule.

Rather than grapple with the serious legal implications of cutting the public out of the process while BGEPA permits remain in effect for decades, the DEIS asserts—with no accompanying analysis or support—that retaining the requirement for affirmative renewal decisions after five years “might *slightly* increase the potential for public scrutiny at the time of permit renewal. This is because a few permits for which substantial changes in operation or new information is available *might* require additional NEPA analysis at the time of renewal,” but that “most renewals would not require incorporation of substantial new information, and thus not trigger the need for additional NEPA.” (FWS 2016c, page 71).

If this assertion is correct – i.e., that there is little practical difference between a process based on five-year renewals and one predicated on 30-year permits with five-year reviews – then the purported rationale for the rule makes no sense, because companies that have been willing to risk violating the law under the present system will make precisely the same calculation under the new system.

In any case, FWS has not even begun to substantiate the proposition—squarely rejected by the District Court—that there will be no significant difference from the standpoint of public involvement. FWS’s assertion that it will bypass any NEPA compliance with respect to “most” renewal decisions because there will be no “substantial new information” during a 30-year period is completely lacking in any factual support (or qualitative explanation). Furthermore, it thoroughly contradicts, without explanation, what the FWS said when it adopted the five-year maximum duration in 2009, i.e., that the “rule limits permit tenure to five years or less *because factors may change over a longer period of time such that a take authorized much earlier would later be incompatible with the preservation of the bald eagle or the golden eagle.*” (74 Fed. Reg. at 46,856, emphasis added).

Moreover, even if FWS were correct that only a small number of permit renewal decisions would trigger the need for new NEPA compliance and hence public involvement, that still means that the rule change will wholly preclude participation by informed groups like ABC and other independent avian experts and thus impair, rather than facilitate, eagle conservation. As we know from experience with Altamont and other projects, even a relatively few projects placed in horrendously poor locations can decimate local eagle populations.

Eliminating the public’s affirmative *right* to participate in renewal decisions in favor of an “internal review” that renders any public involvement dependent on the unfettered discretion of over-worked and under-resourced FWS personnel is unlikely to be welcomed by the conservation community and sets a bad precedent. At the very least, as the District Court’s ruling makes plain, FWS must take a “hard look” at the significant change in public involvement that the agency is proposing, rather than attempt to downplay it with generic unsupportable

assertions. The agency's failure to do so will expose it to another successful legal challenge on NEPA and BGEPA grounds.

Golden Eagles

ABC remains seriously concerned about the fate of the Golden Eagle population under the FWS's proposed rule. Uncertainty about Golden Eagle populations, especially the small eastern population, and lack of knowledge about their behavior, migratory movements, and habitat use are the biggest weakness of this rule.

The recently released FWS report (Millsap et al. 2016) is not good news for Golden Eagles:

"We used banding data obtained from the United States Geological Survey Bird Banding Lab from 1968–2014 to estimate contemporary age-specific survival rates. We also used a data set of unbiased cause-of-mortality information for a sample of 386 satellite-tagged golden eagles from 1997–2013 to estimate the effect of current levels of anthropogenic mortality on those survival rates. Anthropogenic factors were responsible for about 56% of satellite-tagged golden eagle mortality, but rates of anthropogenic mortality varied among age-classes, ranging from 34% for first-year eagles to 63% for adults. We estimated the maximum rate of population growth for the golden eagle in the U.S. in the absence of existing anthropogenic mortality was 10.9% (20th quantile = 9.7%). Sustainable take under these conditions is close to 2,000 individuals (20th quantile = 1,600). However, available information suggests ongoing levels of human-caused mortality likely exceed this value, perhaps considerably. Thus, the data from satellite tags lends further support to the suggestion from the demographic models that current survival rates may be leading to a decline in population" (FWS 2016b, p 13).

FWS recognizes that: "Golden Eagle populations in the United States may not be able to sustain any additional, unmitigated mortality and the threshold for this species is zero." (FWS 2016b, page 17). Yet, remarkably, FWS has still concluded that:

"...some take [of Golden Eagles east of the 100th meridian] can be permitted with implementation of offsetting mitigation." (FWS 2016, page 7).

These two statements are contradictory if the goal is a stable or increasing population over 100 years, particularly if offsetting mitigation does not work. It is especially contradictory if one considers the new goal that FWS is proposing (which ABC supports) of "maintaining increasing populations in all eagle management units and persistence of local populations throughout the geographic range of both species." (FWS 2016b).

Eagles, especially Golden Eagles, are well documented to be vulnerable to mortality from collisions with wind turbine blades, which may have blade tips rotating at over 150 miles an hour (Pagel et al, 2012). The notoriously poorly-sited Altamont Wind Resource Area has been responsible for over 2,000 Golden Eagle deaths since it began operation (Smallwood and Thelander 2008). Both species are also killed by collisions and electrocution at associated power lines and towers (Loss et al. 2014).

The threat that unabated wind energy development poses to Golden Eagles is increasing rapidly, as evidenced from the recent controversy surrounding the proposed Rocky Forge Wind Energy project in Botetourt County, Virginia, which could threaten the small, remaining eastern Golden Eagle population (Hutchins and Neas 2016). The developer's paid consultant saw few eagles during its general bird surveys during a two-year period (West, Inc. 2016), allowing the developer to argue in its application that, "There is a low eagle use of the area compared to other Appalachian ridgelines and the project poses a low risk of impact." But, *every* pre-construction risk assessment for wind projects we have reviewed downplays the projected impacts on wildlife. The consultant is being paid to reach that conclusion. Indeed, a consultant who failed even once to conclude in favor of the wind project over wildlife would not be in business for long. This also ignores cumulative effects, since Golden Eagles are sparsely distributed throughout the east during the winter, yet their habitat requirements put them in direct conflict with wind turbines.

Bald Eagles

Bald Eagle populations have been less impacted by wind energy development than Golden Eagles thus far because wind energy companies have not yet concentrated their activities in areas used heavily by Bald Eagles. Bald Eagles are tied to water, however, and once turbines start going up near freshwater lakes and large river systems, and offshore and onshore in marine coastal areas, mortality is likely to increase.

Extensive wind energy development near the Great Lakes, for example, could be devastating to Bald Eagles and a wide variety of migratory raptors and songbirds that gather and move in vast concentrations along the shoreline and over the lakes on their way to breed in the boreal forests of Canada. That is why FWS has recommended that wind energy development occur a minimum of three miles away from the lakeshore. The Nature Conservancy has recommended five miles. Nonetheless, wind energy companies are still choosing to build both offshore and onshore around the Great Lakes. For example, there is a concerted effort to establish wind energy in Northeastern Ohio and Northern New York in and near Lake Erie and Lake Ontario, both areas known to host vast numbers of birds and bats each spring and fall (e.g., France et al. 2012). Because FWS guidelines are voluntary, there are no disincentives for ignoring FWS recommendations and apparently little or no desire to regulate the industry, particularly with regard to siting. Examples are the proposed Lighthouse Wind Energy project in New York and the Camp Perry Wind Energy Project in Ohio. In the latter case, which is on public lands, \$200,000 of public money was spent on building a turbine base even before the FWS had rendered a Biological Opinion, which brings up numerous questions. Furthermore, the FWS submitted a finding of No Significant Impact after having previously asked the developer to move the project elsewhere due to the risk to federally protected species. FWS records indicate that there are more than 50 active Bald Eagle nests within 10 miles of the Camp Perry project, the highest concentration in the state, not to mention regular sightings of endangered species such as Kirtland's Warbler in the region.

The revised 30-year Eagle Take Rule will allow wind energy facilities to cumulatively kill up to 4,200 Bald Eagles and 2,000 Golden Eagles annually with no prosecution, which is a substantial

increase in eagle take quotas over the previous rule (FWS 2016b, pages 13, 16). These numbers are based on FWS's recent estimates of Bald and Golden Eagle populations in the United States, said to be 143,000 and 40,000, respectively. Bald Eagles just came off the endangered species list and are nowhere near their pre-DDT numbers. Golden Eagle populations are likely in decline (see below) and deserve increased protection, not substantially increased threats. Authorized take of the magnitude contemplated by the proposed rule—on top of the even greater amount of *unauthorized* take conceded by the FWS--will likely continue unabated even under the optimistic assumptions inherent in the proposal. This is not “compatible with the preservation of the bald eagle or the golden eagle” (16 U.S.C. § 668a).

In any event, when the American people are fully apprised of the thousands of *permitted* eagle deaths contemplated by the proposal, they are not going to tolerate large numbers of iconic eagles killed by poorly-sited wind energy and other projects. As the DEIS itself points out, these are not only our national birds and symbols of our democracy, but also sacred to First Nations. Indeed, the public and media response to FWS's revised eagle rule that would allow up to 4,200 Bald Eagles and 2,000 Golden Eagles to be harvested “sustainably” by wind energy projects annually with impunity has already been decidedly negative (e.g., Armitage 2016, Bryce 2016, Daily 2016, Molinet 2016, Opar 2016).

Other Protected Species

FWS will often be considering Eagle Incidental Take Permits in areas where other migratory and resident birds of conservation concern reside. When these birds are classified as Threatened or Endangered under ESA, then ESA Section 7 consultation is required. The presence of Endangered species (e.g., Kirtland's Warbler, Piping Plover, Whooping Crane) during some stage of their lifecycle is having no apparent effect on the siting of wind energy projects. This is of great concern, not only for Endangered species, but also for declining grassland birds, which are heavily affected by wind turbines and their associated infrastructure (Leddy et al 1999, Shaffer and Buhl 2015 Mahoney and Chalfoun 2016). Greater Sage-Grouse and Prairie Chickens, both species of conservation concern, are greatly impacted by wind energy development and their associated power lines and towers (Schroeder 2010, Pearce-Higgins et al. 2012, Stevens et al. 2013, Hovick et al. 2014, LeBeau 2014, Kirol et al. 2015, Shirk et al. 2015, Winder et al 2015). A federal appeals court recently stopped a large wind energy project in southeast Oregon despite the Bureau of Land Management's positive environmental review. The primary reason was concerns about the project's impact on Greater Sage-Grouse (Associated Press 2016).

Further, because the proposed rule will have cumulative effects on Endangered and Threatened species that share habitats with eagles, FWS must engage in section 7 consultation on the entire rule. FWS's assertion that the issuance of a BGEPA permit is not the “direct cause of habitat degradation” (FWS 2016c, page 95), and hence such degradation need not be addressed as part of the NEPA process or in section 7 consultation, is legally unsupportable. Since BGEPA categorically prohibits the “take” of eagles without FWS permission, a FWS authorization of eagle takes that could not otherwise lawfully occur surely *is* the legal “cause” of not only the

deaths of eagles and other wildlife from turbine operation, but also the associated habitat degradation due to road and associated infrastructure construction.

FWS's mission is to protect our native wildlife, particularly Threatened, Endangered and other imperiled species, not to promote and ensure the development of wind energy projects, particularly if they are poorly-sited from the perspective of wildlife conservation.

Unproven Mitigation

FWS's proposed rule relies heavily on compensatory mitigation as a method to offset any incidental take of eagles. Yet, there are few reliable methods of mitigation for bird kill at wind energy facilities. As Arnett and May (2016) recently said:

"While the conceptual framework and predictive modelling for compensatory measures are well-established, empirical evidence demonstrating effectiveness and achievement of no-net loss for wildlife populations is lacking. Similarly, few studies have evaluated effectiveness of minimization measures and other forms of mitigation. Evaluating effectiveness of pre-construction wildlife assessments and habitat modeling in predicting wildlife mortality at wind facilities remains a research need. Additionally, lack of population data for many species of wildlife hinders knowledge of population-level impacts and effectiveness of mitigation measures."

This injects a great deal of uncertainty into the entire process. As ABC has said on many occasions, "wind energy development in the United States has gotten way out ahead of the science and regulatory framework" (Hutchins et al. 2016). While the FWS argues that this revised Eagle Take Rule is science-based, in reality, it can perhaps be more accurately characterized as a huge experiment with our public trust resources at risk. Neither the proposed rule, nor the DEIS, presents any evidence that effective mitigation measures exist that can even begin to offset the thousands of *authorized* eagle deaths contemplated by the rule.

We note that fines were levied against the poorly sited Duke and PacifiCorp wind energy projects in Wyoming for killing large numbers of federally protected birds, including Golden Eagles (Cappiello, 2013, Anon. 2015, Dept. of Justice 2015). The number of federally protected birds, including Golden Eagles, taken by the soon-to-be-approved, poorly sited Chokecherry-Sierra Madre (CCSM) Wind Energy Project could greatly exceed the take from the Duke and PacifiCorp cases combined. As demonstrated in Altamont, more than 2,000 Golden Eagles have been lost over the past few decades of wind energy operation (Smallwood and Thelander 2008); once these turbines go up, they are not coming down, regardless of their impacts on federally protected birds and other wildlife.

Wind Energy Development and Climate Change

This Administration, some segments of the public, and even some conservation organizations seem to be treating large scale, commercial wind energy as if it were our only hope to address global climate change. In fact, there are many other alternative approaches, such as forest, soil, ecosystem, and biodiversity conservation, energy efficiency, reduction in meat consumption, and

distributed solar on our already-built environment that would be just as effective, but not have the same destructive impacts on wildlife as large, commercial wind projects. Even the DEIS recognizes that the contribution of wind energy to addressing climate change will be minimal at best:

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

ABC questions whether the sacrifice of millions of our Nation’s ecologically important birds and bats justifies building any large, commercial wind energy facility in an area with high concentrations of birds and bats. The ecological services—pest control, pollination, and seed dispersal—that birds and bats provide are worth billions to the U.S. economy (Sekercioglu, 2015, Sekercioglu et al. 2016). Yet, many of North America’s bird species are in precipitous decline, with over a third in need of concerted conservation action (North American Bird Conservation Initiative 2016).

We should remember that hydroelectric dams were once touted as our Nations’ answer to clean, renewable energy, but are now being torn down due to their unexpected negative impacts on wildlife (e.g., salmon) and their habitats (Howard 2016, Yaggi 2016). Poorly-sited large, commercial wind facilities have a similar profile.

In addition, the Department of Energy, FWS, and the wind energy industry should be supporting the development of bladeless, bird- and bat-friendly wind energy technology. Many examples of innovative approaches to wind energy are being developed by entrepreneurs (e.g., Grover 2015, Anon. 2016, www.Sheerwind.com).

Measurement of Success

ABC generally supports FWS’s intended measurement of the persistence of eagle populations. The 2009 regulation suggested that the preservation standard was to be “consistent with the goal of maintaining stable or increasing breeding populations.” The new standard will be quantitative in nature, which ABC considers appropriate. The new rule’s preservation standards are also improved and are to be: *“consistent with the goals of maintaining stable or increasing breeding populations in all eagle management units and persistence of local populations throughout the geographic range of both species.”* (FWS 2016b, emphasis added).

Meeting these standards will require regular monitoring of the status of eagle populations locally, regionally and nationally. According to the plan, the FWS intends to do this once every six years. However, a lot can change in six years, and four years would be a better interval, especially for Golden Eagle populations, which are likely in decline.

Furthermore, Flyways should not be used as the unit of management, for they are too large and ill defined to serve as workable Eagle Management Units (EMUs). Their use will lead to the justification of killing of more eagles by poorly sited wind energy projects by increasing the managed population size. The EMUs should instead be states or logical combinations of states (e.g., FWS regions).

A Flyway based EMU would also be less compatible with state fish and wildlife agency plans to conserve eagles. Many states are likely to have more detailed knowledge of their eagle populations and the location of active eagle nests than does the FWS. FWS's preferred policy, as stated, seems to be to preserve local populations. If so, a Flyway based EMU would not allow for the kind of detailed monitoring that will be necessary to confirm stable or increasing local populations. It certainly will not be sufficient to determine if affected local populations are persisting in the face of rapid wind energy development and other cumulative anthropogenic sources of mortality (which, according to the DEIS, is 63% of total losses for adult Golden Eagles).

Enforcement Generally

The FWS does not explain what consequences there will be if the numbers of eagles killed by permitted wind energy facilities regularly exceed the limits established by Eagle Incidental Take Permits. As explained, currently, BGEPA is being enforced inconsistently (Clarke 2014b); many eagles have been taken with few, if any, consequences for wind energy developers, particularly in the Altamont Wind Resource Area in California (Smallwood and Thelander 2008).

ABC urges more consistent enforcement of existing wildlife protection laws, including ESA, BGEPA and MBTA. ABC recommends that wind energy companies be informed *a priori* what the consequences would be if mortality at their facilities regularly exceeds the limits established by FWS. Those consequences should be fines, additional (proven) mitigation requirements, prosecution, and eventually curtailment or even permanent facility shut down if the problem cannot be successfully addressed.

As mentioned earlier, wind energy facilities that fail to implement FWS recommendations on siting, mitigation or compensation, incidental take permitting, or consultation under Section 7 of the ESA (when relevant), should also be subject to increased scrutiny, such as unannounced inspections by law enforcement and follow up prosecutions.

Voluntary regulatory systems with no sanctions are ineffective. America's experiments with industry self-regulation have been disastrous at times, the most recent example being the Nation's financial sector. Wind developers are for-profit companies. Their goal is to make money for their investors, not to protect wildlife. If adherence to a voluntary guideline will cost them money, they are unlikely to adhere. To expect otherwise is both naive and a grave impediment to FWS's duty to conserve Golden and Bald Eagles.

Transparency and Importance of Neutral Mortality Data Collection

Transparency of bird and bat kill data has been a continuing and serious problem with wind energy development in the United States. With a weak correlation between pre-construction risk assessments and post-construction mortality (Ferrer et al. 2012), the public and concerned conservation organizations will only know what the actual losses have been if: (1) mortality data are collected by independent, third party experts using standardized methods; and (2) these data are made publically available. We agree with Johnson et al. (2016), the experts that have conducted all major North American mortality studies to date, who state:

"Because fatality studies generally are conducted by or financially supported by the wind industry, a skeptic might question if results of studies demonstrating high rates of fatalities are made as easily available as results from innocuous wind farms. Legal requirements for wind energy developers to ensure accessibility of study results would resolve many problems associated with analyses, such as those reviewed here."

The FWS's Choke Cherry-Sierra Madre (CCSM) EIS, for example, predicts minimal impact on eagle populations. However, the final word on whether or not these predictions are accurate and mitigation is effective will only come after the project is built and operational (Ferrer et al. 2012). The data must be collected by independent, third-party experts and be transparent to the public and interested conservation organizations. The DEIS does not address this issue at all, preferring instead to let the wind industry self-report and self-regulate, with little or no actual oversight.

FWS has stated that:

"The current regulations provide that eagle mortality reports from permitted facilities will be available to the public. We will also release mortality data on other migratory birds if we receive that data as a condition of the permit, provided no exemptions of the Freedom of Information Act (FOIA) (5 U.S.C. 552) apply to such a release. If we receive mortality data on a voluntary basis and we conclude it is commercial information, it may be subject to Exemption 4 of the FOIA, *which prevents disclosure of voluntarily submitted commercial information when that information is privileged or confidential.*" (FWS 2016b, page 82, emphasis added)¹

That statement strongly suggests that FWS will accede to the wishes of companies that desire to shield from the public their impacts on public trust resources—which is hardly consistent with the purposes of BGEPA, MBTA, or the FOIA. Any wind energy company could declare that disclosure of eagle kill data could hurt its bottom line or is somehow "confidential" business

¹ In making this statement, FWS appears to be under the mistaken impression that all of the exemptions to the FOIA are mandatory, i.e., that the FWS *must* withhold information simply because it falls within a FOIA exemption. That is not the law. Agencies can and do make discretionary releases of materials that would otherwise be subject to FOIA exemptions all the time. Consequently, there is nothing to preclude the Service from providing in its BGEPA regulations that information on eagle and other bird deaths will be released to the public as a matter of course unless such disclosure is prohibited by *another* federal law (i.e., other than FOIA).

information, with the result that virtually all eagle mortality data will likely continue to remain unavailable to the public and concerned conservation organizations.

None of these data should remain confidential, and they should not be submitted voluntarily, or collected and reported by the regulated party. Recreational hunters are not allowed to kill native game animals without obtaining a license, so why should wind energy companies get a pass to kill federally protected species without independent oversight? These are public trust resources being taken; our Nation's ecologically, aesthetically, and culturally important native birds and bats are not owned by wind energy companies, but by the American people and held in trust for this and future generations. The primary mission of the Service itself is to conserve wildlife, not to provide immunity tools for-profit corporations to kill wildlife without prosecution, and facilitate their concealment of that killing from the public. The public has a right to know how many and what kind of birds and bats the wind industry is killing. (See also the President's recent memorandum, "Mitigating Impacts on Natural Resources from Development", which specifically calls for improved transparency (<https://www.whitehouse.gov/the-press-office/2015/11/03/mitigating-impacts-natural-resources-development-and-encouraging-related>)).

We know that bird losses at wind energy developments is in the hundreds of thousands at minimum (Loss et al. 2013, Smallwood 2013, Erickson 2014) and millions when collisions and electrocutions at associated power lines and towers are included (Loss et al. 2015). However, we have no idea as to precisely how many and what kind of birds are being killed—only rough estimates based on data collected by paid consultants to the wind industry and using a wide variety of different, often incompatible methods (Smallwood 2013, Johnson et al. 2016). Besides the fact that most of these data are collected and reported by regulated parties, other methodological problems have made it difficult to assess the actual impact of wind energy development on bird mortality. According to Loss (2016):

"For well-studied infrastructure types (wind energy and power lines), further study is needed to increase randomization, replication and duration of studies and to assess and account for biases that limit the accuracy and precision of mortality estimates (e.g., scavenger removal, searcher detection, and biases related to injured birds dying outside of searched areas). Comparisons of relative impact also will require the development and implementation of modeling approaches that capture the full annual cycles of species."

The use of industry-paid consultants to conduct post-construction mortality studies itself is highly problematic (Johnson et al. 2016). Industry self-reporting is a direct conflict of interest. Independent data collection of post-construction bird and bat mortality must be the rule, not the exception (see Clarke 2014a). Hawaii is currently the only state where independent, third-party experts using standardized methods collect mortality data and data are made available to the public on request (Hutchins 2016). The same system needs to be used on the mainland. If it can be done in Hawaii, why not elsewhere? Johnson et al. (2016), the experts who conducted all of the major wind turbine fatality studies on North American birds to date, recently said:

"Because fatality studies generally are conducted by or financially supported by the wind industry, a skeptic might question if results of studies demonstrating high rates of fatalities are made as easily

available as results from innocuous wind farms. Legal requirements for wind energy developers to ensure accessibility of study results would resolve many problems associated with analyses, such as those reviewed here."

FWS has given this some consideration saying that it is:

"investigating the use of third party environmental compliance monitors. There are benefits to using third party monitors, particularly the more objective observation and reporting of wildlife injuries and mortalities. However, there can be considerable costs to using third party monitors, and so it may be considered unreasonably burdensome from some smaller operations. It may be a viable option for permits for large, utility-scale projects." (FWS 2016b, page 81).

Wind energy companies are already paying for these studies. These payments could instead be given to FWS and used to hire trusted, qualified, third party, independent experts to conduct these studies using standardized methods. The reports would be submitted directly to the regulatory agency instead of going through the regulated party, thus effectively eliminating this direct conflict of interest and greatly improving credibility. The results would also be maintained on a web site and accessible to the public and concerned conservation organizations. This level of independence, standardization, and transparency is necessary to find out precisely how many and what types of birds (and bats) are actually being taken by wind energy facilities. It is also essential for properly regulating the industry and for determining the effectiveness of mitigation and appropriateness of compensation.

Eagle Nests

ABC generally agrees with most of FWS's proposed changes to its eagle nest take permitting requirements. There would be no distinction between one time and multiple nest take permits. Only "inactive" nests could be taken except in the case of safety emergencies. In those cases, in-use nests could only be removed prior to egg laying, which may allow the eagles to re-nest elsewhere. It remains to be seen, however, how this will work in reality. ABC is aware of examples in both Colorado and North Carolina where permits were not granted before eagle nest removal and/or controlled burning activities under active eagle nests by the state wildlife agency occurred, and FWS cited no need for permitting. Furthermore, requisite monitoring of incidental take permits has been based on one monthly visit for only one hour (FWS permits MB82833B-0, MB21233B-0, MB31949A-0, MB093383-1, MB093383-0 in Colorado). Such cursory reports result in no valuable data related to permitting and are not consistent with the intent and language of the revised Eagle Rule, which require "regular visits to the proximity of the nesting site...where disturbance is likely to occur to observe whether eagles are using the area" (FWS 2016b, page 29). In addition, the proposed new rule could exacerbate the problem in that no meaningful consideration is given to the loss of habitat that accompanies a nest take, especially in areas that are experiencing rapid growth and development. Displaced nesting pairs may have no other recourse but to seek new nests in areas already saturated with nesting eagles, thus causing inter-pair territorial conflict with other eagles or raptor species. The new proposal eliminates the requirement that suitable nesting habitat be available to accommodate displaced pairs for emergency takes (see FWS 2016b, page 38).

Summary and Conclusions

Many issues will need further consideration and improvement before finalization of this revised rule. The range of alternatives set forth in the DEIS is unreasonably and unlawfully constricted, especially since the stated objective of the proposed rule is to increase compliance with BGEPA and better protect eagles, rather than to facilitate wind power projects in eagle habitat, the earlier rationale for a 30-year rule. FWS *must* therefore consider and solicit public comment on an alternative that would maximize BGEPA compliance through the most obvious and straightforward approach, i.e., by significantly increasing enforcement, both before and after projects are constructed in eagle habitat, and by imposing sufficient penalties to deter rampant violations of the Act. Such an alternative must be considered as a stand-alone option, as well as in connection with any consideration of long-term permits, since FWS's own analysis makes it abundantly clear that long-term permits alone will accomplish nothing except needlessly preclude public involvement in BGEPA decision-making and thus place eagle populations at risk.

In addition to taking a "hard look" at an enforcement approach to increasing BGEPA and NEPA compliance, FWS must also consider an alternative that is designed to increase, rather than reduce, public involvement in agency decision making. FWS should expressly provide for public comment on all initial applications for long-term (and other) permits. This means that FWS should either: (1) retain the existing five-year renewal process or; (2) explicitly provide that every five-year "internal review" will be made available for public review and input (along with all of the data on which it is based) before FWS makes a final decision on whether to require modification, suspension, or revocation of a permit.

If FWS is correct that there will be little new information at each five-year interval, then making that fact available to the public along with an opportunity to provide input will have little effect on the vast majority of permittees. Where, however, there is new information (including information that the concerned public may be aware of that FWS is not), it is critical that the public have an opportunity to provide input before FWS makes decisions that bear on the Nation's eagle populations.

ABC recommends:

- (1) That FWS's WEG be made mandatory.
- (2) That FWS must consider and solicit public comment on an alternative that would maximize BGEPA compliance through the most obvious and straightforward approach, i.e., by significantly increasing enforcement, both before and after projects are constructed in eagle habitat, and by imposing sufficient penalties to deter violations of the Act.
- (3) That any proposed wind energy project to be built in an area known to be inhabited by federally-protected species during some portion of their lifecycle *be required* to obtain incidental take permits under BGEPA and/or ESA.

- (4) That all post-construction bird and bat mortality data at wind energy facilities be collected by independent, third party experts using standardized methods, be reported directly to FWS, and be open to the public upon request (as currently occurs in Hawaii).
- (5) That the wind energy industry (which is already paying for their own studies) contribute to a fund that the FWS will use to hire independent experts to conduct pre-construction risk studies and post-construction bird and bat mortality studies.
- (6) That FWS adopt a process by which the public and concerned conservation organizations will be routinely involved in the “internal” five-year reviews if a 30-year permit is approved. Otherwise, to adhere to the NEPA provisions for public involvement in the permitting process, the FWS will need to continue with a five-year permitting system.
- (7) That FWS use state-based (or collection of states, for example, FWS Regions) as EMUs rather than the proposed Flyway based system.
- (8) That FWS pay special attention to Golden Eagle populations as it monitors the cumulative impact of the rapidly developing wind industry and its associated infrastructure (especially power lines and towers). The small, possibly distinct, eastern Golden Eagle population should be given special attention, and wind energy development should be avoided along the migratory pathway of the eastern population to prevent the need for listing this population under the ESA.
- (9) That FWS develop a comprehensive, meaningful system for enforcing BGEPA along with the ESA and the MBTA.
- (10) That FWS use partnership and cooperation with the wind energy industry to ensure compliance with the WEG and wildlife protection laws, but that it also be clear about the consequences (disincentives, punishments) should that cooperation not be forthcoming since wind energy companies are currently defying FWS recommendations on siting and failing to work with the FWS under the WEG.
- (11) That FWS be clear *a priori* about what the consequences will be when a wind energy facility regularly exceeds its take limit under BGEPA or ESA.
- (12) That the wind energy industry be required to support research to ascertain proven methods of eagle conservation that can act as independent compensation for unavoidable losses, rather than offsetting losses that are the responsibility of another (related) industry through electrical pylon modifications.

Thank you for the opportunity to comment. These comments are being submitted on behalf of ABC and other plaintiffs in *Debra Shearwater et al., Plaintiffs, vs. Dan Ashe, Director, U.S. Fish and Wildlife Service; Sally Jewell, Secretary, U.S. Department of the Interior*.

Sincerely,



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Director, Bird Smart Wind Energy Campaign

Cc: D. Ashe, J. Ford, G. Shire, B. Millsap

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