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Via First Class Mail and Electronically at www.regulations.gov

Public Comments Processing
Attn: FWS-R5-ES-2013-0090
Division of Policy and Directives Management
U.S. Fish and Wildlife Service
4401 N. Fairfax Drive, MS 2042-PDM
Arlington, VA 22203

Re: Early Scoping Comments for Proposed Application for Incidental Take Permit and Habitat Conservation Plan

To Whom It May Concern:

On behalf of the Center for Biological Diversity, Defenders of Wildlife, Earthjustice, Juniata Valley Audubon Society, Sierra Club Pennsylvania Chapter, and Delaware Riverkeeper Network (collectively, “Commenters”), we respectfully submit these comments on a proposed application by the Pennsylvania Game Commission (“PGC”) and the Pennsylvania Department of Conservation and Natural Resources (“DCNR”) for an Incidental Take Permit (“ITP”) and a Habitat Conservation Plan (“HCP”) for forestry activities on State lands that provide habitat for the federally listed endangered Indiana bat (*Myotis sodalis*) and the northern long-eared bat (*Myotis septentrionalis*).

We urge the U.S. Fish and Wildlife Service (“FWS”) to deny PGC and DCNR’s application because an ITP cannot legally be issued for these two bat species. Specifically, the Endangered Species Act (“ESA”) prohibits the issuance of an ITP if the proposed taking will “reduce the likelihood of the survival and recovery of the species in the wild.” 16 U.S.C. § 1539(a)(2)(B)(iv). Given the recent dramatic decline in Indiana and northern long-eared bat populations, the taking of even a few individuals of either species could reduce the likelihood of the survival and recovery of the species. Neither PGC nor DCNR have provided any evidence that the proposed take of either of these two species can occur without reducing the likelihood of the survival and recovery of the species. Consequently, the issuance of an ITP for Indiana bats or northern long-eared bats would violate the ESA and the FWS implementing regulations.

I. Background

In recent years, populations of North American bats, particularly in the Northeast, have suffered steep declines. Millions of bat fatalities have been attributed to White-nose Syndrome (“WNS”), a deadly fungal disease first identified in 2006 and, according to the FWS, the cause

of “the most precipitous decline in North American wildlife in our history.”¹ Recent studies have estimated an 88% decrease in the total number of hibernating bats, with 98% and 72% declines in hibernating northern long-eared and Indiana bats, respectively,² and have concluded that these perilous population declines are exacerbated by the additive nature of both WNS and numerous human-induced environmental stressors.³

Indeed, the FWS recently determined that the listing of the northern long-eared bat was warranted, primarily due to the species’ catastrophic decline caused by WNS.⁴ There is no evidence the impact of the disease will lessen as it continues to spread west and northward across the rest of the species’ range. The federally-listed Indiana bat, also, has suffered population declines attributable to the spread of WNS, and the species’ range now is nearly entirely coincident with the area affected by WNS. A recent study by U.S. Geological Survey and FWS scientists projected the Indiana bat population will fall to just 14% of its pre-WNS numbers range-wide by 2022.⁵

In addition to the threats posed by WNS, both Indiana and northern long-eared bats are vulnerable to a host of other dangers, including “wind energy development, habitat modification, destruction, and disturbance (e.g., vandalism to hibernacula, roost tree removal), effects of climate change, and contaminants.”⁶

While Pennsylvania epitomizes the catastrophic impact of WNS on bat populations—the Commonwealth has lost 99% of its northern long-eared bat population,⁷ and the Indiana bat has declined 76% since WNS⁸—Pennsylvania’s sizable State lands are vital to the recovery and survival of rare, forest-dependent species, such as bats. The recovery of WNS-decimated bat populations will depend in substantial part on the availability of high-quality summer habitat as well as secure hibernacula.

The FWS has assessed the summer habitat needs of both the Indiana bat⁹ and the northern long-eared bat.¹⁰ In addition the Center for Biological Diversity’s petition for listing the northern long-eared bat summarized available scientific literature regarding the species’ summer

¹ Consensus Statement of the Second WNS Emergency Science Strategy Meeting, Austin, Texas, May 27-28, 2009, available at <http://www.batcon.org/pdfs/whitenoise/ConsensusStatement2009.pdf>

² Bat Conservation Int’l, Impacts of Shale Gas Development on Bat Populations in the Northeastern United States 7 (June 2012), available at http://www.delawareriverkeeper.org/resources/Reports/Impacts_of_Shale_Gas_Development_on_Bats.pdf.

³ *Ibid.*

⁴ U.S. Fish and Wildlife Service, Endangered and Threatened Wildlife and Plants; 12-Month Finding on a Petition to List the Eastern Small-Footed Bat and the Northern Long-Eared Bat as Endangered or Threatened Species; Listing of the Northern Long-Eared Bat as an Endangered Species, 78 Fed. Reg. 61,046 (Oct. 2, 2013) (hereinafter “Northern Long-Eared Bat Proposed Listing”).

⁵ Thogmartin, W.E., C.A. Sanders-Reed, J.A. Szymanski, P.C. McKann, L. Pruitt, R.A. King, M.C. Runge, and R.E. Russell. 2013. White-nose syndrome is likely to extirpate the endangered Indiana bat over large parts of its range. *Biological Conservation* 160: 162-172.

⁶ P. 126, Northern Long-Eared Bat Proposed Listing.

⁷ Greg Turner, Endangered Mammal Specialist, Pennsylvania Game Commission, 2013 unpublished data.

⁸ *Ibid.*

⁹ FWS, Indiana Bat Draft Recovery Plan, First revision (2007), http://www.fws.gov/midwest/Endangered/mammals/inba/inba_drftrecpln16ap07.html; see also Luensmann, Peggy S. 2005. *Myotis sodalis*. In: Fire Effects Information System, [Online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (Producer), available at <http://www.fs.fed.us/database/feis/> [2013, December 5].

¹⁰ Pp. 40-43, Northern Long-Eared Bat Proposed Listing.

habitat needs.¹¹ While specific geographic location, sex, and reproductive status all appear to influence the selection of habitat by both species, the overarching conclusions of applicable research are that both the Indiana bat and the northern long-eared bat appear moderately to strongly dependent on the availability of larger, older trees and snags for roosting, and on larger patches of relatively undisturbed forest, preferably near bodies of water, for foraging. Large, older trees that are located in areas of forest with lower canopy cover are of particular importance because they serve as the location of Indiana bat maternity colonies. Thus, the removal of trees from forested lands, either by clearcutting or other techniques, and the fragmentation of habitat, whether by logging, road-building, construction of pipeline corridors, or other activities, creates a real threat to the recovery and survival of these vulnerable species. The northern long-eared bat, in particular, appears highly sensitive to forest fragmentation and reduction in canopy cover.¹²

II. The ESA Prohibits the Issuance of a Permit that Authorizes the Taking of Endangered Bats that Would Jeopardize the Recovery and Survival of the Species.

The ESA provides for the issuance of an ITP only where the proposed taking will not “reduce the likelihood of the survival and recovery of the species in the wild.” 16 U.S.C. § 1539(a)(2)(B)(iv); *see also Friends of Endangered Species, Inc. v. Jantzen*, 760 F.2d 976, 982 (9th Cir. 1985). Given the dramatic declines in northern long-eared and Indiana bat populations, which have brought these species to the brink of extirpation in Pennsylvania, the loss of even a few individuals could imperil the recovery and survival of the species. As applicants for the ITP, PGC and DCNR bear the burden of demonstrating that issuance of an ITP will not jeopardize survival and recovery of the Indiana and northern long-eared bat, and there is no scientific evidence to support such a conclusion. Thus, the blanket permission sought by the proposed ITP to disturb millions of acres of potential bat habitat across Pennsylvania and to take endangered bats is impermissible under the ESA.

Commenters urge the FWS to analyze thoroughly the significance of *any* additional species losses that might be caused by the proposed forest management activities, and that the analysis also take into account other activities that are or may affect the viability of the two bat species. Members of the species that have survived the WNS epidemic thus far may possess immune, physiological, or behavioral traits that will allow the species to persist and eventually recover in the face of WNS. Thus, every individual bat is now of potentially critical value to the maintenance of the species as a whole and should be protected accordingly.

¹¹ Center for Biological Diversity, Petition to List the Eastern-Small Footed Bat *Myotis leibii* and Northern Long-Eared Bat *Myotis septentrionalis* as Threatened or Endangered Under the Endangered Species Act (2010), available at http://www.biologicaldiversity.org/species/mammals/eastern_small-footed_bat/pdfs/petition-Myotisleibii-Myotisseptentrionalis.pdf

¹² Caceres, M.C., and R. Barclay. 2000. *Myotis septentrionalis*. Mammalian Species 634: 1-4; Caceres, M. C., and M. J. Pybus. 1997. Status of the Northern Long-eared Bat (*Myotis septentrionalis*) in Alberta. Alberta Environmental Protection, Wildlife Management Division, Wildlife Status Report No. 3, Edmonton, AB; Ford, W.M., Menzel, M.A., Rodrigue, J.L., Menzel, J.M., and Johnson, J.B. 2005. Relating bat species presence to simple habitat measures in a central Appalachian forest. *Biological Conservation* 126: 528-539. Forest Service Manual 2600 – Wildlife, Fish, and Sensitive Plant Habitat Management. Chapter 2670 – Threatened, endangered, and sensitive plants and animals. September 2005; Veilluex, J.P. and S. Reynolds. 2006. Northern *Myotis*. Pp. A317-A323 in New Hampshire Wildlife Action Plan. Available at http://extension.unh.edu/resources/files/Resource001071_Rep1315.pdf

III. Political Pressure in Pennsylvania Could Compromise Effectiveness of Protective Measures Included in an Incidental Take Permit and Habitat Conservation Plan.

In the unlikely event that PGC and DCNR are able to meet the burden of demonstrating with the best available scientific evidence that the proposed ITP would not reduce the likelihood of the survival and recovery of northern long-eared and Indiana bats, the Service should proceed with great caution in issuing a permit to Pennsylvania agencies given the prevailing political pressure on those agencies to generate revenue from public lands and in light of what appears to be an increasingly hostile attitude regarding species protection at the state level.

While Commenters recognize the dedication and biological expertise of many PGC and DCNR staff, the fact remains that the Commonwealth has failed to grant endangered species protection to the northern long-eared bat, little brown bat, and tri-colored bat, despite indisputable scientific evidence that these species are on the verge of disappearing from Pennsylvania, and despite recommendations for listing these species from state agency biologists and the Pennsylvania Biological Survey, an independent advisory board of scientists. Representatives of the timber industry, as well as of the oil and gas industry, have been vocal opponents of state-level protection for imperiled bats. Currently, state legislators, at the urging of industry, are attempting to gut Pennsylvania's endangered species law.¹³

The timber harvest income that could be generated by the 30 years of proposed logging creates a perverse incentive to lessen species protections that would entail limits on tree cutting. Oil and gas development activities on state lands in recent years exemplify the tension between revenue generation and forest protection. Pennsylvania is at the center of the struggle between industry demands for unconstrained commodity-driven development of state lands and land conservation and species protection interests. Thus, the effectiveness of any protective measures included in the proposed ITP and HCP likely will be affected by the political forces already at work in the Commonwealth, and FWS should carefully weigh whether the conditions, restrictions and mitigation measures in any ITP and HCP would be faithfully executed.

IV. NEPA Requires the Preparation of an EIS.

In the unlikely event the FWS determines that the issuance of an ITP is legally and scientifically appropriate, the Service must fully analyze the environmental impacts of such issuance in an EIS. The National Environmental Policy Act requires that federal agencies prepare an EIS for all "major Federal actions significantly affecting the quality of the human environment." 42 U.S.C. § 4332. The FWS's obligation to prepare an EIS extends to any federal action that "*will or may*" have a significant effect on the environment. 40 C.F.R. § 1508.3 (emphasis added). As part of its preparation of an EIS, the FWS must "[r]igorously explore and objectively evaluate" a range of alternatives to the proposed federal action, here, the issuance of an ITP and HCP. 40 C.F.R. § 1502.14(a).

NEPA establishes ten factors for determining whether an impact is significant, including multiple factors that are relevant here: the "[u]nique characteristics of the geographic area such

¹³ HB 1576/SB 1047 is currently under consideration in the Pennsylvania legislature. This bill would strip authority from the PGC and Pennsylvania Fish and Boat Commission to make final decisions regarding listing of species under state endangered species law, among other actions. Instead, a non-scientific panel under the control of the legislature would give final approval to listing.

as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas;” “[t]he degree to which the effects on the quality of the human environment are likely to be highly controversial;” “[t]he degree to which the action may establish a precedent for future actions with significant effects;” “[w]hether the action is related to other actions with . . . cumulatively significant impacts;” and “[t]he degree to which the action may adversely affect an endangered or threatened species or [critical] habitat.” 40 C.F.R. § 1508.27(b).

The scope, scale, and time frame of the proposed ITP/HCP, as well as the unprecedented and controversial nature of the threats facing the covered species, demand that the analysis occur within the framework of a full EIS, rather than the more cursory EA. The ITP/HCP will cover 3.9 million acres of public land, nearly 14% of the state, or an area larger than the state of Connecticut, and is proposed to last for thirty years. These factors alone justify the preparation of an EIS.

Moreover, population modeling suggests that current rates of decline could result in virtual extinction of the Indiana bat within less than thirty years.¹⁴ The EIS should evaluate the proposed 30-year duration of the ITP in light of this information, which strongly suggests that the proposed duration is much too long and that a time frame of ten years or less is more appropriate.

Commenters urge that the EIS avoid the kind of tunnel view that can lead to neglect of species’ overall needs, in favor of focus on a singular aspect of life history or habitat preference that happens to conveniently coincide with forest management goals. For example, while the creation of open areas around a few, select trees deemed suitable for bat roosting may mesh with thinning goals, such measures should not be regarded as sufficient to protect a species where other habitat needs—e.g., need for densely vegetated forest for foraging—may conflict with forest management goals. The FWS should ensure that the EIS carefully analyze and consider the need to preserve large, intact forest tracts in areas near historic or current hibernacula and summer-roosting habitat.

An EIS for the proposed action must include a hard look at the cumulative impact of the action when considered in connection with other activities that affect Pennsylvania’s forests and adjacent lands. Such activities include oil and gas development, road and pipeline construction, mining, wind energy projects, and other industrial and residential development that result in bat habitat loss.

Of particular importance, the EIS should include an analysis of the combined impact of physical forest disturbance and WNS on Indiana and northern long-eared bat populations. The fragmentation effects of the recent boom in shale gas extraction have been particularly profound on the Commonwealth’s forests, both on public and private land, and scientists are deeply concerned about the long-term consequences of such significant landscape alteration on wildlife.¹⁵ Given the unprecedented collapse of WNS-affected bat populations, any other adverse

¹⁴Thogmartin et al. 2013. *Id.*

¹⁵Slonecker, E.T., Milheim, L.E., Roig-Silva, C.M., and Malizia, A.R. 2013. Landscape consequences of natural gas extraction in Allegheny and Susquehanna Counties, Pennsylvania, 2004-2010. USGS Open-File Report 2013-1025, 34pp. Available at http://pubs.usgs.gov/of/2013/1025/OFR2013_1025.pdf; Begos, K. 2013. Northeast gas drilling boom threatens forest wildlife, scientists say. Huffington Post, April 2, 2013. http://www.huffingtonpost.com/2013/04/02/northeast-gas-drilling-boom_n_3000449.html; Sadasivam, N. 2013. Gas

impacts to the species are likely to be significant and must be assessed in tandem with the proposed timber management activities, and must be evaluated as part of the determination whether issuance of an ITP will reduce the likelihood of survival and recovery of the species.

In addition to presenting a full analysis of the potential environmental impacts of the proposed action, an EIS must identify measures for avoiding or mitigating such impacts. In most cases, both bat species are likely to benefit more from existing habitat being left alone than from active habitat manipulation. Thus, conservation measures should focus on avoiding, not simply mitigating, additive sources of mortality.

V. CONCLUSION

For the reasons set forth above, we ask FWS to deny the proposed application for an ITP. At the very least, we urge the FWS to conduct a comprehensive analysis of the proposed action and its environmental impact in compliance with NEPA. We appreciate the opportunity to submit these comments and look forward to further participation in this proceeding.

Respectfully submitted,



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pipeline boom fragmenting Pennsylvania's forests. Inside Climate News, Dec. 10, 2013. Available at <http://insideclimatenews.org/news/20131210/gas-pipeline-boom-fragmenting-pennsylvanias-forests?page=show>;
Drohan, P. J., M. Brittingham, J. Bishop, and K. Yoder. 2012. Early trends in landcover change and forest fragmentation due to shale-gas development in Pennsylvania: a potential outcome for the Northcentral Appalachians. *Environmental Management* 49:1061-1075; Drohan, P. J., J. C. Finley, P. Roth, T. M. Schuler, S.L. Stout, M. C. Brittingham, N.C. Johnson. 2012. Oil and Gas Impacts on Forest Ecosystems: findings gleaned from the 2012 Goddard Forum at Penn State University. *Environmental Practice* 14:394-399.