

July 27, 2009

Timothy Slone
District Ranger
Wayne National Forest, Ironton Ranger District
6518 State Route 93
Pedro, OH 45659-8912

TAILS: 31420-2009-F-0858

Dear Mr. Slone:

This letter is in response to your July 9, 2009 request for site-specific review, pursuant to section 7 of the Endangered Species Act of 1973, as amended, regarding the Habitat Enhancement and Fuels Management Project on the Ironton Ranger District of the Wayne National Forest (WNF). The Forest Service proposes to improve habitat and reduce fire hazard on a total of 2,228 acres using one or more of the following methods: prescribed burning, thinning, and brush control. According to your information, the proposed project area includes approximately 728 acres in the Lake Vesuvius project area, 1,267 acres in the Bluegrass project area, 2.3 acres in the Fradd Hollow project area, and 230 acres in the Handley Branch project area. We understand that the overall purpose of these treatments is to improve plant vigor, reduce natural fuels buildup, and to maintain the current Fire Regime Condition Class (FRCC) or move the FRCC progressively over the next ten years from a 3 to a 2. According to your information, the proposed action includes the creation or use of firelines along 16.5 miles for the Lake Vesuvius area, 12.0 miles for the Bluegrass area, 2.5 miles for the Handley Branch area, and 0.3 miles for the Fradd Hollow area. Therefore, the amount of incidental take (IT) for this project, as proposed, includes 70 miles (length of fireline multiplied by four burns over course of project). This review represents a Tier 2 consultation, as explained below.

On November 22, 2005, the U.S. Fish and Wildlife Service (Service) issued a programmatic biological opinion (PBO) for the Wayne National Forest's Revised Land and Resource Management Plan (Forest Plan). This PBO established a two-tiered consultation process for Forest Plan activities, with issuance of the programmatic opinion being Tier 1 and all subsequent site-specific project analyses constituting Tier 2 consultations. Under this tiered process, the Service will produce tiered biological opinions when it is determined that site-specific projects are likely to adversely affect federally listed species. When may affect, not likely to adversely affect determinations are made, we will provide written concurrence and section 7(a)(2) consultation will be considered completed for those site-specific projects.

In issuing the PBO (Tier 1 biological opinion), we evaluated the effects of all Forest Service actions outlined in your Biological Assessment on the federally listed Indiana bat (*Myotis sodalis*), bald eagle (*Haliaeetus leucocephalus*), American burying beetle (*Nicrophorus americanus*), northern monkshood (*Aconitum noveboracense*), running buffalo clover (*Trifolium stoloniferum*), small whorled pogonia (*Isotria medeoloides*), Virginia spiraea (*Spiraea virginiana*), fanshell mussel (*Cyprogenia stegaria*), and the pink mucket pearly mussel (*Lampsilis abrupta*). We concurred with your determinations of not likely to adversely affect for the bald eagle, American burying beetle, northern monkshood, small whorled

pogonia, Virginia spiraea, fanshell mussel, and the pink mucket pearly mussel. We also concurred with your determination of likely to adversely affect for the Indiana bat and running buffalo clover.

Your current request for Service review of the Habitat Enhancement and Fuels Management Project is a Tier 2 consultation under the November 22, 2005, PBO. We have reviewed the information contained in the Biological Evaluation (BE), received by our office on July 13, 2009, describing the effects of the proposed project on federally listed species. You have indicated that the proposed action will have no effect on the fanshell mussel, pink mucket pearly mussel, and the American burying beetle and thus, consultation is not required for these species for this project. Additionally, the Service questioned possible impacts to timber rattlesnake (*Crotalus horridus horridus*) a species for which no Federal listing status has been assigned, though the Service has initiated a pre-listing Conservation Action Plan to support state and local conservation efforts. According to a phone conversation with Kari Kirshbaum, the Ironton District Wildlife Biologist, on July 27, 2009, the only known concentration of this species occurs more than 4 miles from the nearest burn unit. Therefore, due to avoidance measures including the cessation of activity if this species is spotted in the area, and the placement of fire lines away from rocky outcrops, we agree that no impact is anticipated for the timber rattlesnake.

You have additionally indicated that the proposed action may affect, not likely to adversely affect the small whorled pogonia, northern monkshood, and the running buffalo clover because habitat for these species is found within the project area, though no individuals or communities were located during surveys at time of flowering, and because the proposed action may benefit these species through opening the canopy and midstory and non-native invasive species (NNIS) control. *We concur that the proposed action may affect, not likely to adversely affect these species due to avoidance and minimization measures.*

We concur with your determination that the action is likely to adversely affect the Indiana bat. As such, this review focuses on determining whether: (1) this proposed site-specific project falls within the scope the Tier 1 PBO, (2) the effects of this proposed action are consistent with those anticipated in the Tier 1 PBO, and (3) the appropriate standards and guidelines identified in the Forest Plan are adhered to.

That is, this letter serves as the Tier 2 biological opinion for the proposed Habitat Enhancement and Fuels Management Project. As such, this letter also provides the level of incidental take that is anticipated and a cumulative tally of incidental take that has been authorized and exempted under the PBO.

Description of the Proposed Action

Pages 5-11 of your Wildlife BE include the location and a thorough description of the proposed action. Handley Branch is approximately 230 acres consisting of native warm season grasses and wooded uplands, last burned in March 2005. Fradd Hollow site is approximately 2 acres consisting of high quality oak barren community, last burned in March 1997. Bluegrass is approximately 1,266 acres consisting of high quality oak barrens, and contains an area hard-hit by the 2003 ice storm, causing many trees, limbs, and branches to fall and increase forest fuels, which was last burned in 2004. Lake Vesuvius is approximately 730 acres of mixed community types and has not been burned, warranting prescribed burns to enhance recreation opportunities and open the understory. According to your information, prescribed burns typically occur in early spring or late fall when atmospheric conditions are best for smoke dispersal, and may occur in late summer (after August 15th). Prescribed burns will be conducted as frequently as once every 2 to 3 years initially to kill sprouts of species such as maple (*Acer spp.*), spicebush (*Lindera spp.*), and green briar (*Smilax spp.*). Some standing dead trees may need to be felled along the fireline for safety and fire control purposes, though preferably, snags will be protected from burning, especially if they are suitable Indiana bat roost trees, by removing woody debris and duff surrounding the base of the snag. According to your BE, GFW-TES-9, all shagbark and shellbark hickory

trees $\geq 6''$ dbh will be retained unless they present a safety hazard or to avoid adverse impacts to steep slopes, erodible soils, floodplains, or wetlands. Additionally, SFW-TES-10 states that, during non-hibernation season (April 15th- September 15th), to not cut other potential Indiana bat roost trees. Potentially suitable Indiana bat maternity roost trees will not be removed unless they are determined to be a hazard, and then will be cut between September 15th to April 15th, and a FS biologist may conduct an emergence survey before removal. Firelines will be kept at least 50' from rock outcrops, and lighting will not occur within 10' of the edge of streams, ponds, or wetlands. Mowing of Handly Branch prescribed burn Unit #1 will occur between October 1 and April 1.

Status of the Species

Species descriptions, life histories, population dynamics, status and distributions are fully described on pages 13-24 for the Indiana bat in the PBO and are hereby incorporated by reference. The most recent population estimate indicates that 501,260 Indiana bats occur rangewide (King 2007). The current revised Indiana Bat Recovery Plan: First Revision (2007) delineates recovery units based on population discreteness, differences in population trends, and broad level differences in land-use and macrohabitats. There are currently four recovery units for the Indiana bat: Ozark-Central, Midwest, Appalachian Mountains, and Northeast. All of Ohio falls within the Midwest Recovery Unit.

In 2007, white nose syndrome (WNS) was found to fatally affect several species of bats, including the Indiana bat in eastern hibernacula. The skin of WNS-affected bats is colonized by a psychrophilic fungus (*Geomyces destructans*). To date, WNS is known from New York, Massachusetts, Vermont, Connecticut, New Hampshire, Pennsylvania, New Jersey, Virginia, and West Virginia (all within the Northeast Recovery Unit). Roughly 70,000 Indiana bats, approximately 15% of the total population, occur in the affected states and are vulnerable to WNS at this time. However, no indication of WNS exists in Ohio or the WNF. In May, 2008, a Review of New Information (RONI) was prepared by the WNF to address WNS, and states that the discovery of WNS does not present a seriously different picture with regard to the environmental effects disclosed in the Environmental Impact Statement for the 2006 Forest Plan.

Environmental Baseline

The action area for this project encompasses approximately 2,228 acres of land within the Ironton District of the WNF, while the cumulative effects analysis area for the proposed project includes the entire Ironton District. Over the course of the current Forest Plan, approximately 8,970 acres of timber harvest and 29,300 acres of prescribed burns will occur on the Ironton District of the WNF. According to your information, previous wildfires and prescribed burns during the spring, summer or fall may have resulted in disturbance to individuals or loss of roost trees. No maternity roost trees have been discovered to date on the WNF, though lactating and post-lactating females have been captured, suggesting the presence of maternity colonies.

Since the issuance of the PBO in 2005, the environmental baseline in the WNF has only changed minimally. On the WNF, 244.69 acres (36.59 acres for permanent road construction, 8.3 acres for temporary road construction, and 199.8 acres for skid trails and log landings) and 68.06 miles of projects have been applied toward your incidental take, not including this project.

Status of the species within the action area

Since 1997, 24 Indiana bats have been captured during netting surveys (16 males and 8 females) and a maximum of 333 individuals have been observed in the Ironton hibernaculum. Of those, 9 Indiana bats were captured in the summer and 3 in the fall within the Ironton Unit of the WNF. Four Indiana bats have been captured within 5 miles of the Lake Vesuvius project area, 1 captured within 5 miles of the Bluegrass project area, 1 within 5 miles of the Fradd Hollow project area, and no Indiana bats have been

captured within 5 miles of the Handley Branch project area. The proposed Lake Vesuvius action area is approximately 4 miles from the nearest swarming site, and approximately 1.4 miles from the capture of 1 male Indiana bat along Paddle Creek, and approximately 2 miles east of several mine portals, of which 5 appear to be suitable Indiana bat habitat. According to your information, prescribed fires should be planned when convection patterns would lift smoke up, and never be allowed to reach the vicinity of swarming sites or hibernacula. Given the above, we do not believe hibernating or swarming bats will be affected by the proposed project.

Indiana bats found in the action area likely hibernate in Ohio or south in Kentucky or Indiana (Gardner & Cook 2002). At this time, we do not know of any incidences of WNS within the believed hibernation range of the bats summering in the action area. Thus, based on the best scientific data available, Indiana bats occupying the action area are not currently, nor are they anticipated to be over the life of the proposed project, affected with WNS.

Effects of the Action

Based on our analysis of the information provided in your BE for the Habitat Enhancement and Fuels Management Project, we have determined that the effects of the proposed action are consistent with those contemplated and fully described on pages 18-22 of the BE.

Potential direct adverse effects to the Indiana bat from this project could occur due to loss of occupied secondary or lesser important roost trees, exposure to smoke and heat, disturbance from noise and human presence, and the dispersal of smoke and particulate matter into hibernacula and swarming sites.

Potential indirect adverse effects to the Indiana bat include the temporary alteration of foraging habitat, and loss of roost trees. For the proposed action, we do not anticipate direct impacts due to loss of primary maternity roost trees as standards and guidelines are in place to avoid taking snags and hickories in the summer, thus eliminating the likelihood of taking an unknown primary roost tree. Thus, direct impacts will occur only if an undetected secondary or a less important roost tree is cut while occupied by individual roosting males or females. Cutting undetected secondary roost trees any time of the year may result in fitness consequences at the individual level (i.e. injury or death), but as only a few individuals will be affected, no negative population-level consequences are anticipated.

Although impacts may not be avoided, implementation of the Forest Plan standards and guidelines provided on pages 10-11 in the PBO will minimize adverse effects. The WNF will adhere to standards and guidelines that protect suitable roosting, foraging, and hibernation habitat for the Indiana bat now and into the future. Additionally, any potential maternity roost trees will be avoided.

Cumulative Effects

Cumulative effects include the effects of State, tribal, local, or private actions that are reasonably certain to occur within the action area considered in this biological opinion. Future Federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the Act. We are not aware of any additional effects beyond those contemplated in the PBO (page 22) at this time.

Conclusion

We believe the proposed Habitat Enhancement and Fuels Management Project is consistent with the PBO. After reviewing site specific information, including 1) the scope of the project, 2) the environmental baseline, 3) the status of the Indiana bat and its potential occurrence within the project area and surrounding Wayne NF land, 4) the effects of the action, and 5) any cumulative effects, it is the Service's biological opinion that this project is not likely to jeopardize the continued existence of the Indiana bat. As explained in the Effects of the Action section, we anticipate that there may be individual

fitness consequences but do not expect any colony or population level fitness implications. Thus we do not anticipate any appreciable reductions in reproduction, numbers, or distribution for Indiana bats rangewide.

Incidental Take Statement

The Service anticipates that the proposed action will result in incidental take associated with fire line creation (70 miles). It is anticipated that occupied secondary roost or less important roost trees may be unknowingly cut. These trees are likely to be occupied by either singly roosting males or a few females. It is reasonable to assume that only a subset of these individuals will be directly taken through injury or death and that most of the individuals in the occupied roost tree will escape, and hence not be incidentally taken. Although very difficult to predict, we anticipated in the PBO that one unknown occupied roost tree could be cut during road construction over a ten year period. As incidental take is difficult to detect, the PBO established habitat acreages as a surrogate for tracking take. This project includes 70 miles of the cumulative total of incidental take for the implementation of the WNF’s Revised Forest Plan. This brings the total amount of incidental take to 138.06 miles and 248.27 acres (see table below). This project, added to the cumulative total of incidental take for the implementation of the WNF’s Revised Forest Plan, is well within the level of incidental take anticipated in the PBO through 2015.

Activity	IT anticipated in PBO	IT for this project	Cumulative IT granted to date (including this project)
Permanent Road Construction	392 acres	0	36.59
Temporary Road Construction	146 acres	0	8.3
Skid Trails & Log Landings	740 acres	0	199.8
Utility Development	50 acres	0	0
Fire Lines	750 miles	70	138.06

We determined that this level of anticipated and exempted take of Indiana bats from the proposed project, in conjunction with the other management actions taken by the WNF pursuant to the PBO to date, is not likely to result in jeopardy to the species.

The Forest Service is implementing all pertinent Indiana bat standards and guidelines, specifically GFW-TES-9 and SFW-TES-10 stipulated in the Forest Plan and on pages 88-94 of the PBO. In addition, the Forest Service is monitoring the extent of incidental take that occurs on a project-by-project basis. These measures sufficiently minimize the impact of the anticipated incidental take, and thus, no further Reasonable and Prudent Measures are necessary.

This fulfills your section 7(a)(2) requirements for this action; however, should the proposed project be modified or the level of take identified above be exceeded, the Forest Service should promptly reinitiate consultation as outlined in 50 CFR 402.16. As provided in 50 CFR §402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the continued implementation of the Revised Wayne National Forest Land and Resource Management Plan and projects predicated upon it may affect listed species in a manner or to an extent not considered in this opinion; (3) the continued implementation of the Revised Wayne National Forest Land and Resource Management Plan and projects predicated upon it is

subsequently modified in a manner that causes an effect to federally listed species not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease, pending reinitiation. Requests for reinitiation, or questions regarding reinitiation, should be directed to the U.S. Fish and Wildlife Service's Ohio Field Office.

We appreciate your continued efforts to ensure that this project is consistent with all provisions outlined in the Forest Plan and PBO. If you have any questions regarding our response or if you need additional information, please contact Julie Proell at extension 19 in this office or by email at Julie_Proell@fws.gov.

Sincerely,

Mary M. Knapp, Ph.D.
Supervisor