



## United States Department of the Interior

### FISH AND WILDLIFE SERVICE

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January 26, 2010

Timothy M. Hill  
Office of Environmental Services  
Ohio Department of Transportation  
P.O. Box 899  
Columbus, OH 43216-0899

TAILS: 31420-2010-F-0258 (PID 78677)

Attn: John Baird  
Bill Cody  
RE: **CLA-794-0.60 (PID 78677)**

Dear Mr. Hill:

This letter is in response to your December 15, 2009 request for site-specific review pursuant to section 7 of the Endangered Species Act of 1973, as amended, received in our office on December 17, 2009, regarding the realignment of SR-794 in Clark County, Ohio. The project, as proposed, will relocate SR-794 further north of the Air National Guard Base and Beckley Municipal Airport in Springfield. The project will also include the construction of one new culvert, replacement of an existing culvert, and relocation of a portion of one channel. We understand that the project will require 24.61 acres of permanent right-of-way and will result in impacts of up to 805 linear feet of streams (in two unnamed tributaries to Mud Run and one unnamed tributary to Mill Creek) and 0.003 acre of wetland. In addition, 17 suitable Indiana bat roost trees may be removed for the project.

#### **FEDERALLY LISTED SPECIES:**

The project is located within the range of the Federally Endangered Indiana bat (*Myotis sodalis*); the Federally Threatened eastern prairie fringed orchid (*Platanthera leucophaea*); and the Federal Candidate Species eastern massasauga (*Sistrurus catenatus catenatus*).

ODOT has determined that this project will have *no effect* on the **eastern prairie fringed orchid** and **eastern massasauga**; therefore, these species are not expected to be impacted by the project.

ODOT has determined that this project *may affect and is likely to adversely affect* the **Indiana bat**. The remainder of this letter addresses impacts to this species.

#### **INDIANA BAT - TIER 2 BIOLOGICAL OPINION:**

On January 26, 2007, the U.S. Fish and Wildlife Service (Service) issued a programmatic biological opinion (PBO) for the Ohio Department of Transportation's (ODOT) Statewide Transportation Program through January 2012. This PBO established a two-tiered consultation process for ODOT 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, the Service will review those projects and if justified, 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 ODOT actions outlined in your Biological Assessment on the federally listed Indiana bat. Your current request for Service review of the SR-794 realignment project is a Tier 2 consultation under the January 26, 2007, PBO. We have reviewed the information contained in the letter and supporting materials submitted by your office describing the effects of the proposed project on federally listed species. 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 of 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 conservation and mitigation measures identified in the biological assessment are adhered to.

That is, this letter serves as the Tier 2 biological opinion for the proposed SR-794 realignment 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 in the PBO.

#### Description of the Proposed Action

Pages 1-2 of your letter, along with the December 2009 Level One Ecological Report you submitted, include the location and a thorough description of the proposed action. The action, as proposed, involves the realignment of SR-794 to a location further north of the Air National Guard Base and Beckley Municipal Airport in Springfield, Ohio. The purpose of this project is to relocate a section of SR-794 away from the 178<sup>th</sup> Fighter Wing of the Ohio Air National Guard Springfield Base and the Beckley Municipal Airport to comply with Department of Defense clearance requirements and to allow for anticipated future air-base growth in the area. Seventeen trees that exhibit suitable summer roost habitat characteristics for the Indiana bat will be removed for the project. ODOT will implement the following conservation measures to avoid, minimize, and/or mitigate adverse impacts to the Indiana bat: 1) any unavoidable tree removal will take place between September 30 and April 1 to avoid direct impacts (avoidance measure A-1), and 2) credit for the Indiana bat summer ecology study (Gehrt/Swanson, 2008-2010) will be applied to mitigate adverse impacts to the bat (mitigation measure M-6). **The Service appreciates ODOT's use of the revised tree clearing dates of September 30 and April 1.**

#### Status of the Species

Species description, distribution, life history, population dynamics, and status are fully described on pages 13-26 for the Indiana bat in the PBO and are hereby incorporated by reference. Since the issuance of the PBO in 2007, there has been no change in the status of the species.

Species descriptions, life histories, population dynamics, status and distributions are fully described on pages 23-30 for the Indiana bat in the PBO and are hereby incorporated by reference. The most recent population estimate indicates 468,184 Indiana bats occur rangewide (King 2008). 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. To date, WNS is known from New York, Massachusetts, Vermont, West Virginia, Pennsylvania, New Jersey, New Hampshire, Connecticut, and Virginia. Roughly 70,000 Indiana bats, approximately 15% of the total population, occur in the affected states and are vulnerable to

WNS at this time. The extent of the impact this syndrome may have on the species rangewide is uncertain but based on our current limited understanding of WNS, we expect mortality of bats at affected sites to be high (personal communication, L. Pruitt, 2008).

#### Environmental Baseline

The environmental baseline for the species listed above was fully described on pages 21-26 of the PBO and is hereby incorporated by reference. Since the issuance of the PBO in 2007, there has been no change in the environmental baseline.

#### *Status of the species within the action area*

Since the issuance of the PBO in 2007, there have been no new Indiana bat capture records within the vicinity of this project. Your letter and supporting materials state that suitable habitat exists within the action area, thus we are assuming presence.

#### Effects of the Action

Based on analysis of the information provided in your letter and supporting materials, we have determined that the effects of the proposed action are consistent with those contemplated and fully described on pages 31-35 of the PBO. Adverse effects to the Indiana bat from this project could occur due to the removal of 4.81 acres of wooded habitat, including 17 potential roost trees. As no trees exhibiting characteristics of maternity roost habitat will be removed for the project, the Service anticipates that any effects on an extant maternity colony will be insignificant. In addition, implementation of seasonal cutting restrictions will avoid direct adverse effects to individual bats.

**However, photos included in the December 2009 Level One Ecological Report you submitted indicate the presence of several large dead or dying trees in the project area. These trees exhibit high-quality Indiana bat roosting habitat with potential to become suitable maternity colony roost sites in the near future. Due to the relative paucity of wooded habitat in the West Management Unit (as delineated in the PBO), the Service recommends that these trees be saved wherever possible.**

Adult male and non-reproductive female Indiana bats may be indirectly exposed to loss of roosting habitat. In general, effects on these individual bats would be less severe than the effects associated with individuals of maternity colonies. Adult male and non-reproductive female Indiana bats are not subject to the physiological demands of pregnancy and rearing young.

Males and non-reproductive females typically roost alone or occasionally in small groups. When these individuals are displaced from roosts they must utilize alternative roosts or seek out new roosts. Because these individuals are not functioning as members of maternity colonies, they do not face the challenge of reforming as a colony. Roost tree requirements for non-reproductive Indiana bats are less specific whereas maternity colonies generally require larger roost trees to accommodate multiple members of a colony. Therefore, it is anticipated that adverse indirect effects to non-reproductive bats will be less than the effects to reproductively active females. The Service anticipates that indirect effects to non-reproductive Indiana bats from the loss of roosting habitat will be insignificant.

In addition, scientific research on the Indiana bat that is funded by ODOT (mitigation measure M-6) promises to enhance our knowledge of Indiana bat maternity colony behavior relative to roosting, foraging, and rearing of offspring in the central-Ohio region. The study will also estimate the proportion of colony residents that survive, reproduce, and return to the colony among successive years. These findings will refine our understanding of maternity colony site fidelity and its associated effects on reproduction and survival, as described above.

We are not aware of any non-federal actions in the action area that are reasonably certain to occur. Thus, we do not anticipate any cumulative effects associated with this project.

#### Conclusion

We believe the proposed SR-794 realignment 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 assumed presence within the project area, 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.

#### Incidental Take Statement

The Service anticipates that the proposed action will result in incidental take associated with projects in the West management unit. Incidental take for this project is approximately 4.81 acres, resulting in the cumulative incidental take of 84.95 for this management unit. This project, added to the cumulative total of incidental take for the implementation of ODOT's Statewide Transportation Program, is well within the level of incidental take anticipated in the PBO through 2012 (see table below).

<b>Management Unit</b>	<b>IT anticipated in PBO</b>	<b>IT for this project</b>	<b>Cumulative IT granted to date</b>
West	1,565 acres	4.81 acres	84.95 acres
Central	2,280 acres	0 acres	27.50 acres
Northeast	4,679 acres	0 acres	141.00 acres
East	6,370 acres	0 acres	58.74 acres
South	7,224 acres	0 acres	52.09 acres
<b>Statewide</b>	<b>22,118 acres</b>	<b>4.81 acres</b>	<b>364.28 acres</b>

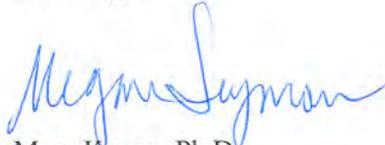
We determined that this level of anticipated and exempted take of Indiana bats from the proposed project, in conjunction with the other actions taken by ODOT pursuant to the PBO to date, is *not likely to result in jeopardy* to the species.

We understand that ODOT is implementing all pertinent Indiana bat conservation measures, specifically A-1 and M-6 stipulated in the Biological Assessment on pages 29-31. In addition, ODOT is monitoring the extent of incidental take that occurs on a project-by-project basis. These measures will minimize the impact of the anticipated incidental take.

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, ODOT should promptly reinstate 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 ODOT's Statewide Transportation Program 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 ODOT's Statewide Transportation Program and projects predicated upon it are subsequently modified in a manner that cause 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 Wildlife Service's Columbus, Ohio Field Office.

We appreciate your continued efforts to ensure that this project is consistent with all provisions outlined in the Biological Assessment and PBO. If you have any questions regarding our response or if you need additional information, please contact Karen Hallberg at extension 23.

Sincerely,

  
for Mary Knapp, Ph.D.  
Field Supervisor

cc: ODNR, DOW, SCEA Unit, Columbus, OH  
Ohio Regulatory Transportation Office, Columbus, OH (*email only*)  
OEPA, Columbus, OH (*email only*)