



United States Department of the Interior

FISH AND WILDLIFE SERVICE

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February 11, 2008

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

TAILS: 31420-2009-F-0267 (PID 18811)

Attn: Donald Rostofer
Megan Michael
RE: **BRO-CR21-3.05 (PID 18811)**

Dear Mr. Hill:

This letter is in response to your December 23, 2008 request for site-specific review pursuant to section 7 of the Endangered Species Act of 1973, as amended, received in our office on December 29, 2008 regarding the realignment of White Oak Valley Road (CR-21) in Brown County, Ohio. The project as proposed will improve curve geometry and improve intersections with TR-27 and TR-23. Two bridges will be replaced as part of this project: 1) the bridge over White Oak Creek and 2) the bridge over Unity Creek. The new bridge over Unity Creek will be replaced on the same alignment as the existing bridge, with a longer culvert. The new bridge over White Oak Creek will be wider and longer than the existing bridge and will be constructed on a new alignment, 164-311 feet downstream of the existing bridge. As stated in your letter and Ecological Survey Report (ESR), the project will result in impacts to 1.2 acres of forested habitat, including 23 potential Indiana bat roost trees, 2 of which exhibit suitable maternity roost habitat. No impacts to wetlands, ponds, or potentially jurisdictional ditches are proposed.

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 (*Myotis sodalis*). Your current request for Service review of the White Oak Valley Road realignment project (PID 18811) is a Tier 2 consultation under the January 26, 2007, PBO. We have reviewed the information contained in the ESR 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 White Oak Valley Road 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.

FISH & WILDLIFE COORDINATION ACT COMMENTS:

The Service is concerned with impacts to stream habitat and the loss of riparian habitat along streams. As stated in your ESR, there is a population record for the State Threatened bigeye shiner (*Notropis boops*) in White Oaks Creek, starting at the CR21 bridge and continuing downstream. Therefore, the Service supports the Ohio Department of Natural Resources' recommendation that no in-water work be conducted between April 15 and June 30 to reduce impacts to aquatic species and their habitat.

Description of the Proposed Action

Page 1 of your letter and page 1-2 of the ESR include the location and description of the proposed action. The action as proposed involves the realignment of White Oak Valley Road (CR-21), including the replacement of two bridge structures. The project as proposed will improve curve geometry of CR-21 and improve intersections with TR-27 and TR-23. Approximately 1.2 acres of forested habitat will be impacted by the project, including 23 trees that exhibit characteristics that indicate potential summer roost habitat for the species, including 2 that exhibit potential maternity roost habitat. 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) tree planting to create future suitable habitat, create future travel corridors, and restore connectivity of forested areas (M-4).

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, and Connecticut (all within the Northeast Recovery Unit). Roughly 50,000 Indiana bats, approximately 10% of the total population, occur in the affected locations 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 ESR states 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 ESR for the White Oak Valley Road realignment project and our review of available habitat surrounding the project area, 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 1.2 acres of forested habitat, including 21 potential roost trees and 2 potential maternity roost trees. Therefore, 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.

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.

ODOT has committed to minimize/mitigate tree removal impacts for this project by planting native deciduous hardwood trees, of species that will be chosen from the list provided by USFWS in the Programmatic agreement. These trees will be planted on-site, where the existing roadway is now located and in the adjacent floodplain that will be cleared to remove the existing bridge. These trees will offer habitat for the Indiana bat in the future and will help to maintain connectivity within the riparian corridor.

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 White Oak Valley Road 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 South management unit. Incidental take for this project is 1.2 acres, resulting in the cumulative incidental take of 32.50 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).

Management Unit	IT anticipated in PBO	IT for this project	Cumulative IT granted to date
West	1,565 acres	0 acres	46.44 acres
Central	2,280 acres	0 acres	8.57 acres
Northeast	4,679 acres	0 acres	86.40 acres
East	6,370 acres	0 acres	43.77 acres
South	7,224 acres	1.2 acres	32.50 acres
Statewide	22,118 acres	1.2 acres	217.68 acres

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-4 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 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 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 Reynoldsburg, 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,

Mary Knapp, Ph.D.
Field Supervisor

cc: ODNR, DOW, SCEA Unit, Columbus, OH
Ohio Regulatory Transportation Office, Columbus, OH