United States Department of the Interior

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April 25, 2013

Ms. Elizabeth McNichols, Acting District Ranger
Potosi-Fredricktown Ranger District
Mark Twain National Forest
P10019 W. State Hwy 8
Potosi, Missouri 63664

Dear Ms. Nichols:

This letter is in response to your March 4, 2013, request for site-specific review, pursuant to section 7 of the Endangered Species Act of 1973, as amended, on the proposed Trace Creek/Council Bluff Reroute Project on the Potosi-Fredericktown Ranger District (District) in Iron County, Missouri. On September 16, 2005, the U.S. Fish and Wildlife Service (Service) issued a Programmatic Biological Opinion (Programmatic BO) for the Mark Twain National Forest (MTNF) 2005 Forest Plan (Forest Plan). This Programmatic BO established a two-tiered consultation process for Forest Plan activities, with the issuance of the programmatic opinion being Tier 1 and all subsequent site-specific project analyses constituting Tier 2 consultations. When it is determined that a site-specific project is likely to adversely affect federally listed species, the Service will produce a "tiered" biological opinion.

In issuance of the Programmatic BO (Tier 1 biological opinion), the Service evaluated the effects of all U.S. Forest Service actions outlined in the Forest Plan for the MTNF. The Programmatic BO evaluated the effects of Forest Service management program activities, including timber management and prescribed burning, on the gray bat (*Myotis grisescens*), Hine's emerald dragonfly (*Somatochlora hineana*), Indiana bat (*Myotis sodalis*), Mead's milkweed (*Ascelpias meadii*), Pink mucket pearlymussel (*Lampsilis abrupta*), Running buffalo clover (*Trifolium stoloniferum*), Scaleshell mussel (*Leptodea leptodon*), Topeka shiner (*Notropis topeka*), Tumbling Creek cavesnail (*Antrobia culveri*), and Virginia sneezeweed (*Helenium virginicum*). We concurred with your programmatic determinations of "no effect" for Virginia sneezeweed, running buffalo clover, and Topeka shiner. We concurred with your programmatic determinations of "may affect, not likely to adversely affect" for the Hine's emerald dragonfly, Tumbling Creek cavesnail, pink mucket, scaleshell, and gray bat. We also concurred with your programmatic determination of "may affect, likely to adversely affect" for Mead's milkweed and Indiana bat.

In June 2009, the Service provided MTNF with an amended Programmatic BO that addressed running buffalo clover and updated the status of the species for the Indiana bat.

Your request for Service review of the proposed activities associated with the Trace Creek/Council Bluff Reroute Project is a Tier 2 consultation. We have reviewed the information contained in the Trace Creek/Council Bluff Reroute Project Biological Evaluation (BE), submitted by your office on March 4, 2013, describing the potential effects of the proposed project on the above federally listed species. **We concur with your determination that the only species that may occur within the project area are gray bats and Indiana bats**.

Description of the Proposed Action

The Potosi/Fredericktown District is proposing to relocate approximately 1.6 miles of the Trace Creek section of the Ozark Trail to the toeslope south of its current location and to relocate a 300-foot section of the Council Bluff Trail 20-40 feet above the floodplain. The trails are located near Council Bluff Recreation Area in Iron County. The proposed action is necessary because beaver activities have caused flooding and erosion in the project area, which has created trail damage and a safety concern for public use.

Specific activities associated with the proposed action include clearing vegetation to establish trail corridor and tread and rehabilitating those portions of the existing trails which have been rerouted. The trail corridor will be approximately eight feet wide, and vegetation will be cleared using chain saws and a trail dozer. According to information provided in the BE, most snags which must be removed will be felled between the months of November and April. However, it may be necessary to remove some suitable Indiana bat roosting trees after April 1.

Because distance to the nearest gray bat hibernaculum is greater than 11 miles, and management activities will be conducted during the day time when gray bats are in caves, no adverse effects are anticipated for the gray bat. **Therefore, the Service concurs with the determination of "may affect, not likely to adversely affect" for the gray bat**.

As described in the Service's Programmatic BO, and based on the site-specific biological assessment, adverse effects are likely to occur to the Indiana bat. The following tiered biological opinion is based on those adverse effects.

Tiered Biological Opinion

The following tiered biological opinion is based on likely adverse effects to the Indiana bat from activities associated with the Trace Creek/Council Bluff Reroute Project. In conducting our evaluation of the potential impacts of the project on Indiana bats, our review focused on determining whether: (1) this proposed project falls within the scope of the Programmatic BO issued for the MTNF's Forest Plan; (2) effects of this proposed action are consistent with those anticipated in the Tier 1 Programmatic BO; and (3) the

appropriate implementing terms and conditions associated with the reasonable and prudent measures identified in the Tier 1 biological opinion are adhered to. This Tier 2 Biological Opinion also identifies the incidental take anticipated with the Trace Creek/Council Bluff Reroute Project for the 2013-2015 planning seasons. It conforms to the Service's Programmatic BO (page 14) pertaining to individual projects the Service reviews following the issuance of the Programmatic BO.

Status of the Species

Species description, life history, population dynamics, status and distribution for the Indiana bat range-wide and for Missouri are fully described on pages 23-32 of the 2005 Programmatic BO and the 2009 amendment to the Programmatic BO and are hereby incorporated by reference.

Since development of the 2009 amendment to the Programmatic BO, White-nose syndrome (WNS) has been confirmed in bats in Missouri in four locations (Fig. 1). Spread of the fungus into Missouri, combined with the documented deaths of Indiana bats in other locations from WNS, further threatens the species with extinction.

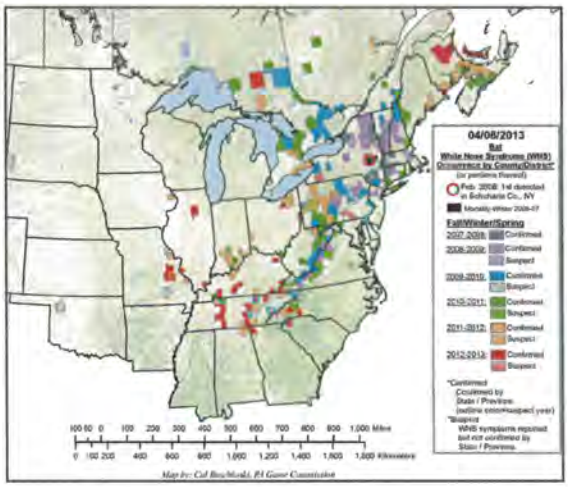

Figure 1. Documented occurrence of White Nose Syndrome (WNS) as of April 8, 2013. Map courtesy of Cal Butchkiski, Pennsylvania Game and Fish Commission.

Environmental Baseline

The environmental baseline for the MTNF was established and fully described in detail on pages 12-13 and 34-45 of the Service's 2005 Programmatic BO. Since issuance of the Service's Programmatic BO, the environmental baseline on the MTNF has changed only slightly.

In the early spring 2006, several tornadoes have destroyed towns and forest land within the 29 county area of the MTNF. Approximately 3,000 acres of the MTNF was affected by these events, though the entire 3,000 acres was not entirely destroyed (Jody Eberly, MTNF pers. comm.). In 2008, wind storms affected approximately 50 acres of forest land on the MTNF.

Status of the Species with the Project Area

There is one known Indiana bat hibernaculum on the Potosi/Fredericktown Ranger District (Cave Hollow Cave), which is located approximately 11 miles from the project area. No other Indiana bat hibernacula are known to occur near the project area. Because fall and spring swarming habitat on MTNF typically occurs within 5 miles of Indiana bat hibernacula, swarming activity is unlikely to occur within the project area.

There are no known Indiana bat maternity colonies in the project area. However, roosting habitat exists at the project site, and maternity roost trees have been documented in other areas on the Potosi/Salem Ranger District. Given the proximity of these records and suitable habitat within the project area, it is reasonable to assume that Indiana bats may occur in the project area during the summer and migration.

Effects of the Action

Based on our analysis of information provided in your March 4, 2013 BE for the Trace Creek/Council Bluff Reroute Project, we have determined that the potential effects of the proposed action are consistent with those addressed in the Programmatic BO and are hereby incorporated by reference.

No Indiana bats have been documented in the immediate project vicinity. However, suitable roosting habitat exists within the project area and Indiana bats may occur in the project area during the summer and migration.

Approximately 1.6 acres[1] of trees will be removed during project activities. Direct effects could occur to the Indiana bat if an occupied roost tree is removed when the new trail corridors are established. In most instances, an Indiana bat would rouse and fly the roost tree it was occupying was cut knocked down. However, it is possible that individuals could be injured or killed if they do not rouse in time to fly away or if they were non-volant. In addition, returning bats are likely to expend energy locating replacement roost trees if roosts trees used in previous years are removed. An analysis of the likelihood of roost trees being occupied can be found on pages 57 of the Programmatic BO. Project activities could also result in indirect effects to the Indiana bat from the temporary loss of roosting habitat.

A complete discussion of these effects can be found in the "Effects of the Action" section, on pages 45-64 of the Service's September 16, 2005 Programmatic BO.

Conclusion

[1] Total length of trail to be rerouted is approximately 8,750 ft. with a trail corridor of 8 ft.

The actions and effects associated with the proposed Trace Creek/Council Bluff Reroute Project are consistent with these identified and discussed in the Service's Programmatic BO. After reviewing the size and scope of the project, the environmental baseline, the status of Indiana bat, and its potential occurrence within the project area, the effects of the action; and any cumulative effects, **it is the Service's biological opinion that this action is not likely to jeopardize the continued existence of the Indiana bat**.

Incidental Take Statement

The Service anticipates that the proposed actions associated with the Trace Creek/Council Bluff Reroute Project will result in the incidental take of Indiana bat habitat as outlined in Table 1. The type and amount of anticipated incidental take is consistent with that described in the Programmatic BO and does not cause the total annual level of incidental take in the Programmatic BO (page 67-69) to be exceeded.

Table 1. Anticipated incidental take associated with the Trace Creek/Council Bluff Reroute Project.

Activity	Acres Affected in the Proposed Project Area	Cumulative Acres Affected in FY13 To Date	Total Annual Anticipated Level of Incidental Take (in acres) in the 2005 Programmatic BO
Hazard Tree Removal	1.61	157.6*	4,400

*Provided in the BE; does not include the 1.61 acres to be affected in the proposed project area.

The Forest Service must implement all pertinent reasonable and prudent measures and implementing terms and conditions stipulated in the Programmatic BO to minimize the impact of the anticipated incidental take of Indiana bats, and to be exempt from the take prohibitions of section 9 of the Act. We have determined that no new reasonable and prudent measures, beyond those specified in the Programmatic BO, are needed to minimize the impact of incidental take anticipated for the Trace Creek/Council Bluff Reroute Project.

This fulfills your consultation requirements for this action. Should the proposed project be modified or if the level of take identified above is exceeded, reinitiation of consultation as outlined in 50 CFR 402.16, is required.

We appreciate your efforts to ensure that this project is consistent with all provisions outlined in the Programmatic BO. If you have any questions regarding our response or if you need additional information, please contact Trisha Crabill at 573-234-2132 x 121.

Sincerely,

Amy Salveter
Field Supervisor

cc: USFS, Mark Twain National Forest, Wildlife, Rolla, MO (Theresa Davidson)