



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Asheville Field Office
160 Zillicoa Street
Asheville, North Carolina 28801

June 25, 2013

Mr. Josh Deyton, P.E.
Division 14 Bridge Management Engineer
North Carolina Department of Transportation
253 Webster Road
Sylva, North Carolina 28779

Dear Mr. Deyton:

Subject: Division 14 Bridge Replacement Projects

On May 31, 2013, we received your email requesting our comments on a list of Division 14 proposed bridge replacements. We are submitting the following comments and recommendations in accordance with the provisions of section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. §§1531-1543); the National Environmental Policy Act (42 U.S.C. §4321 et seq.); and the Migratory Bird Treaty Act (MBTA) (16 U.S.C. §§1536, 1538).

General Recommendations for Replacing Structures that Cross Rivers and Streams - We generally recommend the use of clear-spanning bridge structures designed, at a minimum, to accommodate the active channel width. Use of culverts is discouraged. Properly sized spanning structures will provide for the passage of aquatic species and accommodate the movement of debris and bed material. Furthermore, spanning structures usually: (1) can be constructed with minimal in-stream impacts, (2) do not require stream-channel realignment, and (3) retain the natural streambed conditions; and the horizontal and vertical clearances may be designed to allow for human and wildlife passage beneath the structures. If possible, bridge supports (bents) should not be placed in the streams. Bents can collect debris during flood events, resulting in the scouring of bridge foundations. In-stream bents can also result in hydrologic changes, such as bed scour or deposition, which may adversely affect in-stream habitat. Deck drains of the spanning structures should not discharge directly into the streams; instead, they should drain through a vegetated area before entering the streams. Removal of vegetation in riparian areas should be minimized. Armoring of the bank with riprap should be minimized. The reseeding of disturbed areas should be performed promptly after grading, and seed mixes should consist of native vegetation in order to prevent the spread of invasive plant species. New structures should be constructed without the use of in-stream causeways or work pads whenever possible. When causeways are necessary, using the largest washed stone practicable for the application will prevent unnecessary damage to in-stream habitat and will facilitate complete removal. We recommend that all equipment be refueled and receive

maintenance outside of the riparian zone. Refueling and maintenance should take place in designated refueling sites that are provisioned to quickly contain any spills of fuel, lubricants, and other fluids.

Because some of the subject projects occur within an upper drainage of the Tennessee River Valley, Section 26a of the Tennessee Valley Act (TVA Act) may require a permit from the Tennessee Valley Authority (TVA) if there will be impacts to the floodplain. Section 26a of the TVA Act contains regulations regarding both the location of construction projects and the types of activities carried out within the Tennessee River or any of its tributaries. A tributary is defined as any watercourse whose contents, if not obstructed, diverted, or consumed, will ultimately flow into the Tennessee River; thus, TVA's jurisdiction extends to the limits of the Tennessee River watershed. Section 26a is designed to ensure that construction along the shoreline and in waters of the Tennessee River system does not have a negative effect on the agency's management of the river system or its ability to carry out what the TVA Act describes as the "unified development and regulation of the Tennessee River." By copy of this letter we are notifying TVA of the proposed projects.

Additional Recommendations for Replacement of Structures Over Waterways that Drain to Critical Habitat for the Appalachian Elktoe – The Appalachian elktoe (*Alasmidonta raveneliana*) was listed as an endangered species on November 23, 1994. It once had a fairly wide distribution in western North Carolina but has been eliminated from the majority of its historic range. The decline of this species has been attributed to several factors, including siltation resulting from past logging, mining, agricultural, and construction activities; the run-off and discharge of organic and inorganic pollutants from industrial, municipal, agricultural, and other point and nonpoint sources; habitat alterations associated with impoundments, channelization, and dredging; and other natural and human-related factors that adversely modify the aquatic environment. The Appalachian elktoe continues to decline in most of its remaining populations, including recent dramatic reductions in the Little Tennessee River. One of the primary causes of the decline of the Appalachian elktoe is degradation of its habitat by excessive sediment deposition. We believe stream instability in the smaller tributaries that drain to Appalachian elktoe habitat has significant cumulative effects on the quality of the occupied habitat and that the design and implementation of crossing structures can significantly affect stability. Due to the long service life of stream-crossing structures, we must consider the long-term indirect effects of these structures on the health of the watershed. We request the assistance of the North Carolina Department of Transportation (NCDOT) in developing strategies and designs that avoid near-term effects to this species resulting from initial disturbance associated with the construction and maintenance of stream-crossing structures as well as the long-term effects of these structures as they interact with the whole watershed.

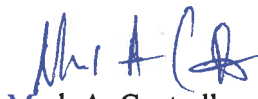
Migratory Birds - The MBTA (16 U.S.C. 703-712) prohibits the taking, killing, possession, transportation, and importation of migratory birds (including the bald eagle), their eggs, parts, and nests, except when specifically authorized by the Department of the Interior. To avoid impacts to migratory birds, we recommend conducting a visual inspection of the bridges and any other migratory bird nesting habitat within the project area during the migratory bird nesting season of March through September. If migratory birds are discovered nesting in the project impact area, including on the existing bridges, the NCDOT should avoid impacting the nests during the migratory bird nesting season (March through September). If birds are discovered nesting on the bridges during years prior to the proposed construction date, the NCDOT, in consultation with us, should develop measures to discourage birds from establishing nests on the bridges by means that will not result in the take of the birds or eggs, or the NCDOT should avoid construction and demolition activities during the nesting period.

Bald Eagle - The bald eagle has been removed from the federal list of endangered and threatened species due to its recovery. However, this species continues to be afforded protection by the Eagle Act (16 U.S.C. 668-668d) and the MBTA (16 U.S.C. 703-712). The Eagle Act, enacted in 1940 and amended several times, prohibits anyone without a permit issued by the Secretary of the Interior from "taking" bald eagles, including their parts, nests, or eggs. "Take" is defined as to "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb." "Disturb" means "To agitate or bother a bald or golden eagle to the degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, causing injury, death, or nest abandonment." In addition to immediate impacts, these definitions also cover impacts that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present if, upon an eagle's return, such alterations agitate or bother the eagle to a degree that interferes with or interrupts normal breeding, feeding, or sheltering habits and causes injury, death, or nest abandonment.

If any active nests are located within a half mile of the project sites, we request that work at the sites be restricted from mid-January through July in order to prevent adverse impacts to the bald eagle. This will prevent disturbance of the eagles from the egg-laying period until the young fledge, which encompasses their most vulnerable times. We ask that you consult with this office before construction begins to confirm that the eagles have left the nest. Once this has been confirmed, construction may begin.

The attached table summarizes our comments for the proposed projects. Included in the table is a U.S. Fish and Wildlife Service (USFWS) File Number that will aid us in referencing the appropriate file in the future. Please include this number in any future correspondence. Projects in the table with no specific comment regarding listed species have general recommendations listed to reference the recommendations listed above; these projects were not assigned an individual file number and are filed together as nationwide permit applications, indicated by "NWP" in the file number column. If you have any questions, please contact Mr. Jason Mays of our staff at 828/258-3939, Ext. 226.

Sincerely,



Mark A. Cantrell
Acting Field Supervisor

Attachment

Electronic copies to:

Ms. Lori Beckwith, Asheville Regulatory Field Office, U.S. Army Corps of Engineers,
151 Patton Avenue, Room 208, Asheville, NC 28801-5006
Ms. Marla J. Chambers, Western NCDOT Permit Coordinator, North Carolina Wildlife
Resources Commission, 12275 Swift Road, Oakboro, NC 28129
Ms. Amy Euliss, North Carolina Division of Water Quality, Winston-Salem Regional Office,
585 Waughtown Street, Winston-Salem, NC 27107
Mr. Chuck Howard, Tennessee Valley Authority, 400 W. Summit Hill Drive, Knoxville, TN
37902-1499

Bridge #	County	USFWS Comments	USFWS File #
190036	CHEROKEE	Indiana bat (cut trees outside roosting season April 15 - October 15, inspect bridge for bat usage prior to demolition)	13-244
190065	CHEROKEE	Indiana bat (cut trees outside roosting season April 15 - October 15, inspect bridge for bat usage prior to demolition)	13-245
190226	CHEROKEE	Indiana bat (cut trees outside roosting season April 15 - October 15, inspect bridge for bat usage prior to demolition)	13-246
190126	CHEROKEE	Indiana bat (cut trees outside roosting season April 15 - October 15, inspect bridge for bat usage prior to demolition)	13-247
210076	CLAY	Indiana bat (cut trees outside roosting season April 15 - October 15, inspect bridge for bat usage prior to demolition)	13-248
370087	GRAHAM	Cochran Creek flows to Appalachian elktoe critical habitat, request a bridge structure and Design Standards for Sensitive Watersheds; Indiana bat (cut trees outside roosting season April 15 - October 15, inspect bridge for bat usage prior to demolition)	13-249
370107	GRAHAM	Indiana bat (cut trees outside roosting season April 15 - October 15, inspect bridge for bat usage prior to demolition)	13-250
370095	GRAHAM	Indiana bat (cut trees outside roosting season April 15 - October 15, inspect bridge for bat usage prior to demolition)	13-251
440314	HENDERSON	General recommendations	NWP
440318	HENDERSON	General recommendations	NWP
440214	HENDERSON	General recommendations	NWP
440048	HENDERSON	General recommendations	NWP
440215	HENDERSON	General recommendations	NWP
440192	HENDERSON	General recommendations	NWP
740144	POLK	Nearby records for white irisette. A survey should be conducted for this species late May through July.	13-252
740125	POLK	Nearby records for white irisette. A survey should be conducted for this species late May through July.	13-253
740197	POLK	Nearby records for white irisette. A survey should be conducted for this species late May through July.	13-254

550308	MACON	Watauga Creek flows to Appalachian elktoe critical habitat and has records of spotfin chub ~3.5 km downstream from project site, request a bridge structure and Design Standards for Sensitive Watersheds; Indiana bat (cut trees outside roosting season April 15 - October 15, inspect bridge for bat usage prior to demolition)	13-255
550315	MACON	Indiana bat (cut trees outside roosting season April 15 - October 15, inspect bridge for bat usage prior to demolition)	13-256
550310	MACON	Indiana bat (cut trees outside roosting season April 15 - October 15, inspect bridge for bat usage prior to demolition)	13-257
550192	MACON	Indiana bat (cut trees outside roosting season April 15 - October 15, inspect bridge for bat usage prior to demolition)	13-258
550220	MACON	Matlock Creek flows to Appalachian elktoe critical habitat and the stream has records of spotfin chub, request a bridge structure and Design Standards for Sensitive Watersheds; Indiana bat (cut trees outside roosting season April 15 - October 15, inspect bridge for bat usage prior to demolition)	13-259
550223	MACON	Indiana bat (cut trees outside roosting season April 15 - October 15, inspect bridge for bat usage prior to demolition)	13-260
550120	MACON	Multiple listed species may be affected in the Little Tennessee River, request a bridge structure and Design Standards for Sensitive Watersheds, Indiana bat (cut trees outside roosting season April 15 - October 15, inspect bridge for bat usage prior to demolition)	13-261
550217	MACON	Indiana bat (cut trees outside roosting season April 15 - October 15, inspect bridge for bat usage prior to demolition)	13-262
550029	MACON	Nearby records of small whorled pogonia, a survey should be conducted for this species mid May through early July. Indiana bat (cut trees outside roosting season April 15 - October 15, inspect bridge for bat usage prior to demolition)	13-263
870028	TRANSYLVANIA	Nearby records of small whorled pogonia, a survey should be conducted for this species mid May through early July	13-264
870009	TRANSYLVANIA	Nearby records of mountain sweet pitcher plant and swamp pink. If wetlands are going to be disturbed a survey for these plants should be conducted during their flowering periods, April - October for mountain sweet pitcher plant and April - May for swamp pink.	13-269

870015	TRANSYLVANIA	Turkey Creek discharges to occupied habitat for Appalachian elktoe ~3.2km downstream. A bridge structure and Design Standards for Sensitive Watersheds would benefit the habitat downstream.	13-270
870163	TRANSYLVANIA	Glade Creek discharges to occupied habitat for Appalachian elktoe ~2.4km downstream. A bridge structure and Design Standards for Sensitive Watersheds would benefit the habitat downstream.	13-271
870011	TRANSYLVANIA	Nearby records of mountain sweet pitcher plant and swamp pink. If wetlands are going to be disturbed a survey for these plants should be conducted during their flowering periods, April - October for mountain sweet pitcher plant and April - May for swamp pink.	13-272
870137	TRANSYLVANIA	Nearby records of mountain sweet pitcher plant and swamp pink. If wetlands are going to be disturbed a survey for these plants should be conducted during their flowering periods, April - October for mountain sweet pitcher plant and April - May for swamp pink.	13-273
870127	TRANSYLVANIA	Williamson Creek discharges into occupied habitat for Appalachian elktoe ~2.3km downstream. A bridge structure and Design Standards for Sensitive Watersheds would benefit the habitat downstream.	13-274
870022	TRANSYLVANIA	General recommendations	NWP
870090	TRANSYLVANIA	General recommendations	NWP
870162	TRANSYLVANIA	Silver Creek discharges to occupied habitat for Appalachian elktoe ~5.4km downstream. A bridge structure and Design Standards for Sensitive Watersheds would benefit the habitat downstream.	13-275
870106	TRANSYLVANIA	General recommendations	NWP
430314	HAYWOOD	General recommendations	NWP
430309	HAYWOOD	General recommendations	NWP
430310	HAYWOOD	General recommendations	NWP
430102	HAYWOOD	General recommendations	NWP
430317	HAYWOOD	General recommendations	NWP
430334	HAYWOOD	General recommendations	NWP
430273	HAYWOOD	General recommendations	NWP
430372	HAYWOOD	General recommendations	NWP
430315	HAYWOOD	General recommendations	NWP
430305	HAYWOOD	Nearby record of small whorled pogonia. A survey should be conducted for this species mid May through early July.	13-276
430020	HAYWOOD	General recommendations	NWP
430326	HAYWOOD	General recommendations	NWP

490055	JACKSON	Long Branch discharges into critical habitat for Appalachian elktoe ~2.2km downstream. A bridge structure and Design Standards for Sensitive Watersheds would benefit the habitat downstream.	13-277
490164	JACKSON	Rock gnome lichen and spruce fir moss spider are known from nearby and at similar elevation. A survey should be conducted for these species.	13-278
490182	JACKSON	General recommendations	NWP
490337	JACKSON	General recommendations	NWP
490103	JACKSON	General recommendations	NWP