

**Categorical Exclusion Form
Catoosa Wildlife Management Area
Cumberland County, Tennessee**

Project: BR-A151(1), A152(1) Replacement of Potter Ford Road Bridge over Obed River and Otter Creek Bridge over Daddy's Creek

Date: February 24, 2009

Project description, including location:

The Eastern Federal Lands Highway Division of the Federal Highway Administration (FHWA), in cooperation with the Tennessee Wildlife Resources Agency (TWRA), TN Department of Transportation, and the National Park Service Obed Wild and Scenic River proposes to re-establish an adequate transportation system within the Catoosa Wildlife Management Area (WMA) by replacing the Potter Ford Road Bridge, which was washed out, and replacing the existing, but structurally compromised, Otter Creek Road Bridge.

This project is needed because there is limited connectivity between the two sections of the Catoosa WMA without the presence of Potter Ford Road Bridge over Daddy's Creek. The collapse of the Potter Ford Road Bridge has rendered that road unusable, requiring a detour in excess of twenty miles. Otter Creek Road Bridge crossing the Obed River is structurally compromised and therefore poses safety concerns. The road and bridge network is used by the National Park Service and TWRA personnel in refuge resources management activities and the public for recreation purposes such as hunting, fishing, canoeing, and hiking.

The Potter Ford Road Bridge would be built with a design that will use the existing approaches with some modifications and be aesthetically blended into the surrounding area. The vertical profile of the bridge would be raised higher to provide greater protection against high water flow.

The Otter Creek Road Bridge would be rebuilt at a new location approximately one hundred feet upstream, roughly the site of the old ford crossing. The facility would be comparable in design to the Potter Ford Road Bridge, and would include a higher profile to improve similar vertical and horizontal deficiencies in both approach and structure.

Describe the category used to exclude the action from further NEPA:

23 CFR 771.117 (d)(3) Bridge rehabilitation, reconstruction or replacement

Describe any public or agency involvement effort conducted:

A meeting was held on February 14, 2002, with regulatory agencies to discuss the project. Issues brought forth during this meeting include:

- The approach to these bridges is a series of narrow gravel roads with switchback roads may impact the delivery of cranes, bridge beams, concrete trucks, etc.
- The design of the bridges should be aesthetically blended into the surrounding area in order to minimize visual impacts.
- The project area includes designated critical habitat for the spotfin chub. Any work in these areas has the potential to affect this federally-listed species.
- The bridge piers for the previous Potter Ford Road Bridge are still located in the stream channel. A decision must be made as whether to remove these piers after weighing the impacts to the stream and wildlife.
- Should the Otter Creek Road Bridge be replaced, a decision must be made as whether to remove these piers after weighing the impacts to the stream and wildlife.
- Schedules hunts in the spring and fall, however TWRA has agreed to set up safety zones if needed.

On March 13, 2008, the Tennessee Historical Commission stated that, "After considering the documentation submitted, we concur that there are no National Register of Historic Places listed or eligible properties affected by this undertaking... Therefore, this office has no objections to your proceeding with the project."

The FHWA initiated formal consultation with the U.S. Fish and Wildlife Service (FWS) on August 19, 2008 because the proposed replacement of the Potter Ford Road Bridge over the Obed River and the replacement of the Otter Creek Road Bridge over Daddy's Creek located in Cumberland County, Tennessee, would adversely impact the spotfin chub (*Erimonax monachus*), purple bean (*Villosa perpurpurea*), Cumberland bean pearlymussel (*Villosa trabalis*), Cumberland rosemary (*Conradina verticillata*), and Virginia spiraea (*Spiraea virginiana*), per section 7 of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.). A Biological Opinion, containing an incidental take statement and required terms and conditions and reasonable and prudent measures, was received on February 9, 2009. The FWS determined that this level of expected take is not likely to result in jeopardy to the species or destruction or adverse modification of critical habitat.

Reasonable and Prudent Measures: We believe the following reasonable and prudent measures are necessary and minimize impacts of incidental take of the spotfin chub, Cumberland bean pearlymussel, and purple bean:

1. Instream work will be done to avoid direct effects to the listed species.
2. If pouring of concrete at the project sites is necessary, it will be conducted in a way that avoids or minimizes the potential for spillage.
3. Construction of bridge piers will be done in a way that minimizes impacts to the stream habitat.
4. Removal of the existing bridge over Daddys Creek will be done in a manner that will minimize the potential for adverse impacts to the stream.

Terms and Conditions: In order to be exempt from the prohibitions of section 9 of the Act, the Federal Highway Administration must comply with the following terms and conditions, which carry out the reasonable and prudent measures described above and outline required reporting/monitoring requirements. This/these terms and conditions are

non-discretionary.

1. Instream work will be done from October 1 through May 1 to avoid the spawning season of the spotfin chub, purple bean, and Cumberland bean pearl mussel.
2. If pouring of concrete is necessary to construct the bridge piers, thorough inspection of the forms will be conducted before pouring begins to ensure that concrete will not leak into the stream. A person with authority to halt construction will be onsite during pouring. If leakage or spillage of concrete into the stream is observed, pouring will cease immediately and will not resume until appropriate corrective measures are implemented to prevent further spillage or leakage. This office will be notified as soon as possible concerning the spill/leak and corrective measures that were implemented.
3. Bridge piers will be constructed in a shape and orientation that will not impede stream flows and will not accumulate debris.
4. Equipment will not be operated in the stream channel during construction or to accomplish removal of the existing bridge. Pieces of the bridge will not be dropped into the stream and dragged to the streambank. If a piece of the bridge inadvertently falls into the stream, it will be lifted out by crane. Bridge piers will be removed only as close to the surface of the stream bottom as possible.

The National Park Service reviewed the project under Section 7(a) of the Wild and Scenic Rivers Act (16 U.S.C. 1271 et seq.), and determined that provided a mutually agreeable solution for pier construction and the stated requirements are strictly adhered to, the project as described would not "invade or unreasonably diminish" the scenic, recreations, geological, and fish and wildlife values present in the area. The stated requirements include:

- Retaining the services of a regional malacologist, with the required federal permits, relocate with assistance from the NPS, potentially impacted mussels should take place at both construction sites as close to the initiation of any in-stream work as is possible.
- Monitoring to detect increases in turbidity, changes in pH, and specific conductance, alkalinity, and acidity throughout the life of the project and in all areas subject to construction impacts. Turbidity, pH, and specific conductivity should be monitored daily, while alkalinity and acidity can be monitored weekly. Monitoring results should be sent to the Park's Resource Management Specialist.
- Disturbance of the streambed should be kept to an absolute minimum. Any material placed in the streams should be fully contained to prevent introduction of foreign material into the stream or adverse effects to stream pH. The aquatic substrate should be returned to pre-construction conditions or conditions suitable for mussel recolonization. Park personnel will perform video surveillance as documentation.

Supplemental Information

Background: Potter Ford Road Bridge over the Obed River and Otter Creek Bridge over Daddy's Creek are both located within the Catoosa WMA; however both bridges are also located within the Obed Wild and Scenic River corridor.

The 82,000-acre Catoosa WMA, located in Cumberland and Morgan Counties, is one of the state's premier nature and wildlife areas. In 1949 the Tennessee Game and Fish Commission,

now the TWRA, established a tentative purchase boundary, which encompassed approximately 90,000 acres.

The Catoosa WMA lies within the Emory River drainage, which is divided by a number of major stream drainages, including the Obed River, Daddy's Creek, Clear Creek, and Otter Creek. The terrain is moderately rolling, ranging in elevation from 1,100 feet to 2,300 feet, with deep canyons cut by the streams. More than 98 percent of the Catoosa WMA is now forested.

As a part of the management program, the wildlife populations have been restored, and the Catoosa WMA is one of the most popular places in the region for hunters seeking big or small game. The deer herd is in excellent condition and regularly produces trophy bucks, and wild turkey numbers continue to climb. Also present are the exotic European wild boar, which can be hunted during all of the deer seasons. Small game includes fox squirrels, gray squirrels, ruffed grouse, raccoons, quail, rabbits, and mourning doves. The streams in the Emory River drainage offer anglers the opportunity to seek a number of game fish. Smallmouth bass, rock bass, bluegill, and muskellunge are the most prevalent species. Many of these waters are in remote and rugged country, and access to them is limited. Parts of some of the streams are floatable, and many of these stretches are included in the Obed Wild and Scenic River System.

Due to the increasing pressure being applied by outdoor users of all kinds, the TWRA has closed Catoosa WMA and several other WMAs to entry between sunset and sunrise. This is intended to reduce the effect of the activities that are considered incompatible to established wildlife management practices. For management purposes Catoosa WMA is divided into two sections, Genesis (west side) and Bicolor (east side). Daddy's Creek is the dividing line for the two sections.

Since WMAs were purchased by funds generated by hunters, the TWRA regards hunting as the first and foremost priority on these areas. Currently, off-road vehicles and horses are permitted, but only on certain roads and trails. Overnight camping is allowed on designated areas by permission of the area manager. Such camping is subject to the limitation on the permit.

The Wild and Scenic Rivers Act, Public Law 90-542, declared the following as the policy of the United States:

“that certain selected rivers of the Nation, which, with their immediate environments possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values, shall be preserved in free-flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of future generations.”

The Act also states that these rivers would be preserved “in their free flowing condition to protect the water quality... and to fulfill other vital national conservation purposes.”

In 1976, Public Law 94-486 amended the original Act to establish the Obed Wild and Scenic River encompassing 45.2 river miles on portions of the Obed and Emory Rivers, and Clear, and Daddy's Creeks in Morgan and Cumberland Counties, Tennessee. The National Park Service has the primary management responsibilities for the Obed Wild and Scenic River. Lands currently within Obed Wild and Scenic River boundaries that are part of the Catoosa WMA will continue to be owned and managed by the State of Tennessee, TWRA, in such a way as: “to protect the wildlife resources and the primitive character of the area and without further

development of roads, campsites, or associated recreational facilities unless deemed necessary by that agency for wildlife management purposes.”

The Obed Wild and Scenic River is located in Morgan and Cumberland Counties in East Tennessee on the Cumberland Plateau. The park includes parts of the Obed River, Clear Creek, Daddys Creek and the Emory River. Over 45 miles of creeks and rivers are included in the wild and scenic river area. These waterways have cut rugged gorges with bluffs as high as 500 feet above the whitewater in the streams. Outdoor recreation such as whitewater boating, rock climbing, hiking, and fishing are popular seasonal activities in the Obed Wild and Scenic River.

The proposed project:

1.0 Does not induce significant impacts to planned growth or land use for the area

The replacement of the bridges over the Obed River and Daddy’s Creek will not induce significant impacts to planned growth or land use for the area. The new bridges would not add capacity, or provide access to a previously inaccessible area.

2.0 Does not require the relocation of significant numbers of people

There would be no private properties or residences impacted by the replacement of the bridges.

3.0 Does not have a significant impact on any natural, cultural, recreational, historic, or other resource

Natural: The area surrounding both bridges is primarily forested. The upland vegetation is comprised of mixed oaks, red maple, Virginia pine, and hemlock.

The Otter Creek Road Bridge would be constructed at a new location, which is approximately 100 feet upstream. Vegetation would be cleared to accommodate the bridge and the road accessing the bridge. Approximately 1400 square yards would be impacted; however most of this area is the existing road bed. A staging area approximately 450 square yards in size would be used adjacent to the south approach. The existing bridge and road not being using for the new crossing would be removed, and the area would be revegetated, accounting for approximately 200 square yards, which would help to balance the impact of the new bridge.

The Potter Ford Road Bridge would be constructed at the existing location of the roadway, which is the previous location of the bridge; therefore vegetation would experience negligible impacts. A small amount of clearing to access the project site, as well as trampling of vegetation by construction equipment would be expected.

The road leading to both bridge sites is narrow with tight curves. It would be necessary to remove a limited number of trees so that the construction equipment such as cranes could access the site and deliver the bridge beams to the site.

Many species of wildlife are known to occur within the boundaries of Obed WSR. However, relatively few vertebrate studies have been undertaken in the gorges of the park. Forty-one

mammals and 138 species of birds have been observed within the Obed WSR. Common species suspected to be resident in the area of the trail include white-tailed deer (*Odocoileus virginianus*), gray fox (*Urocyon cinereoargenteus*), red fox (*Vulpes fulva*), gray squirrel (*Sciurus carolinensis*), raccoon (*Procyon lotor*), and cottontail rabbit (*Citrus unshiu*). Raptors including osprey have been spotted in the area, but at this time there is no evidence of any nesting within the proposed trail area.

The clearing of vegetation for the construction of the Otter Creek Road Bridge would impact wildlife; however because the wildlife management area is comprised of 82,000 acres, the species would be able to relocate, and the existing area which would be unused by the new road and bridge would be returned to a natural state. The construction activity, including the increased noise levels, increased human presence would impact wildlife during the construction of the project and cause wildlife to move away from the project area. Once the project is completed wildlife would be expected to return.

Federally listed species and critical habitat are located in the study area. It was determined that the project would adversely impact the spotfin chub (*Erimonax monachus*), purple bean (*Villosa perpurpurea*), Cumberland bean pearl mussel (*Villosa trabalis*), Cumberland rosemary (*Conradina verticillata*), and Virginia spiraea (*Spiraea virginiana*), per section 7 of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.). A Biological Opinion, containing an incidental take statement and required terms and conditions and reasonable and prudent measures, was received on February 9, 2009 from the U.S. Fish and Wildlife Service (FWS). The FWS determined that this level of expected take is not likely to result in jeopardy to the species or destruction or adverse modification of critical habitat. The terms and conditions and reasonable and prudent measures will be incorporated into the project. The National Park Service also provided requirements per Section 7(a) of the Wild and Scenic Rivers Act regarding the relocation of mussels from the project area by a malacologist, water quality monitoring, and measures to eliminate the introduction of foreign material from the streambed. These measures will be incorporated into the project.

Both bridges are located in mapped floodplains. The two crossings are low-water bridges, and therefore are designed to keep the superstructure out of the water for the 2-year event. At both sites there is erodible streambed material above layers of sandstone and shale.

Daddy's Creek: The proposed bridge increases the 100-year water surface elevation by 1.04 ft right at the proposed bridge, and then quickly dissipates below 1 ft upstream. The freeboard will improve from the existing structure, for the two year event from -5.47 feet to 2.04 feet. At the 100-year event the freeboard would improve from -15.51 feet to -6.80 feet.

Obed River: The west end of the girder will be in the water for the 2-year event; however, there will be 0.77 ft of clearance at the east end. The maximum increase in WSEL for the 100-year event is 0.15 ft, which meets the floodplain requirements. The previous structure was washed out, so freeboard cannot be compared, however the freeboard for the two year event would be -0.44 feet, and for the 100-year event -12.48 feet. The vertical profile of the bridge will be raised to provide greater protection against overtopping.

The new bridges would improve conditions from the previous conditions, and the bridges would essentially be replaced in kind. There would be no significant impacts to floodplains from the proposed action.

Cultural/Historic: The Potter Ford Road Bridge over the Obed River was constructed in 1978, and was washed out several years ago. The Otter Creek Road Bridge over Daddy's Creek was built in 1950. The study area includes a previously disturbed gravel parking lot and exposed rock with very little topsoil. The study area is also steeply graded. The Tennessee Historical Commission concurred that there are no National Register of Historic Places listed or eligible properties affected by this undertaking.

Recreation: Potential conflict with scheduled hunts on the Catoosa WMA is possible. They have agreed to close off areas for construction to accommodate.

There would be no significant impact on any natural, cultural, recreational, historic, or other resource.

4.0 Does not involve significant air, noise, or water quality impacts

Air: Capacity would not be added by the proposed project. The construction of the bridges must increase fugitive dust from the placement of gravel and ground disturbance.

Noise: Noise would increase temporarily during construction, but would return to pre-construction levels.

Water Quality: Best Management Practices for Erosion and Sediment Control would be implemented during construction. Water quality monitoring would also be implemented.

There would be no significant impact on air noise or water quality.

5.0 Does not have significant impacts on travel patterns

The Otter Creek Road Bridge over the Daddy's Creek would be replaced in-kind, and the Potter Ford Road Bridge over the Obed River would replace the washed out structure. This currently unusable road would restore connection within the WMA, and alleviate the need for a detour route in excess of twenty miles. Therefore; there would be no significant impacts on travel patterns.

6.0 Does not otherwise, either individually or cumulatively have any significant environmental impacts

The proposed action will not have any significant impacts or significant cumulative impacts.

23 CFR 771.117 Categorical exclusions (CEs) are actions which meet the definition contained in 40 CFR 1508.4, and, based on past experience with similar actions, do not involve significant environmental impacts.

THE PROPOSED ACTION WILL:	YES	NO
Induce significant impacts to planned growth or land use for the area		X
Require the relocation of significant numbers of people		X
Have a significant impact on any natural, cultural, recreational, historic, or other resource		X
Involve significant air, noise, or water quality impacts		X
Have significant impacts on travel pattern		X
Otherwise, either individually or cumulatively have any significant environmental impacts		X

If any box is checked yes, the action may not be categorically excluded and an EA or EIS must be prepared. If none are checked yes, attach Environmental Screening Form, notes from consultation with agencies and/or the public, notes of site visits and any other material related to the environmental impact of the proposal. This becomes the NEPA piece of the statutory compliance file.

On the basis of the environmental impact information in the statutory compliance file, with which I am familiar, I believe the project should be categorically excluded from further NEPA analysis.

Prepared by:

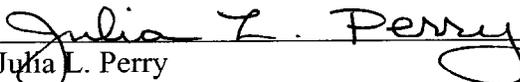


Lisa T. Landers
Environmental Protection Specialist
Federal Highway Administration
Eastern Federal Lands Highway Division

2/25/09

Date

Reviewed for Legal Sufficiency by:

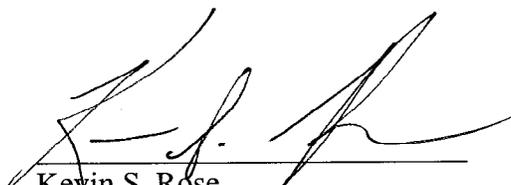


Julia L. Perry
Legal Counsel
Federal Highway Administration
Eastern Federal Lands Highway Division

March 18, 2009

Date

On the basis of the environmental impact information in the statutory compliance file, with which I am familiar, I am categorically excluding the described project from further NEPA analysis. No exceptional circumstances (i.e., all boxes in the ESF are marked "no") or conditions apply and the action is fully described in 23 CFR 771.117(c)(9).



Kevin S. Rose
Environmental Compliance Specialist
Federal Highway Administration
Eastern Federal Lands Highway Division

3/24/09

Date

Environmental Screening Form

Project: BR-A151(1), A152(1) Replacement of Potter Ford Road Bridge over Obed River and Otter Creek Bridge over Daddy's Creek

Date: February 24, 2009

	Yes	No	Don't Know
1. Described fully in one of the list of categorically excluded actions?		x	
2. Consultation with any affected agencies or tribes complete?		x	
3. Site visit completed?	x		
4. Are any significant impacts possible on the following physical, natural, or cultural resources?*		x	
A. Geological resources - soils, bedrock, streambeds, etc.		x	
B. From geohazards?		x	
C. Air Quality, Traffic, or from Noise		x	
D. Water Quality or Quantity		x	
E. Streamflow characteristics		x	
F. Marine or Estuarine Resources		x	
G. Land Use, including agricultural lands		x	
H. Rare or unusual vegetation-old growth timber, riparian, alpine, etc.		x	
I. Species of special concern (plant or animal; state or federal listed or proposed for listing) or their habitat		x	
J. Unique ecosystems, biosphere reserves, World Heritage sites		x	
K. Unique or important wildlife or wildlife habitat		x	
L. Unique or important fish or fish habitat		x	
M. Introduce or promote non-native species (plant or animal)		x	
N. Recreation resources		x	
O. Visitor experience, aesthetic resources		x	
P. Cultural resources, cultural landscape, etc.		x	
Q. Minority and Low Income Populations		x	

	Yes	No	Don't Know
R. Socioeconomics		x	
S. Energy Resources		x	
T. Other agency or tribal land use plans or policies		x	
U. Resource, including energy, conservation potential		x	
V. Urban quality, gateway communities, etc.		x	
W. Long term management of resources or land/resource productivity		x	

* Insert the word "none" in the "no column" if the reason that a resource is not impacted is because the resource is not found in the project area.

This form is meant to be annotated with relevant information, such as notes of site visit, personnel conducting the site visit, agency officials contacted and their responses, etc. A site visit is required to complete this form, and so is required to categorically exclude a project (sec 3-4), prepare an EA or prepare an EIS.

If the answers to questions 1-3 are yes, and all answers to number 4 are no, complete the categorical exclusion checklist. If any of the answers to question 4 are don't know, complete an EA. If any are answered yes, either a mitigated EA or EIS is required.