

**FINDING OF NO SIGNIFICANT IMPACT**  
**TENNESSEE VALLEY AUTHORITY**  
STATE ROUTE 53 FROM HUNTSVILLE TO INTERSTATE 65  
IN ARDMORE, MADISON, AND LIMESTONE COUNTIES, ALABAMA

**Proposed Action and Need**

On May 5, 2009, the Alabama Department of Transportation (ALDOT) submitted to the Tennessee Valley Authority (TVA) a request for approval for stream obstructions under Section 26a of the *TVA Act* needed to widen an approximately 4-mile-long section of State Route (SR) 53 from north of Rideout Road to south of County Road 19 (Jeff Road) in Madison County, Alabama (see Attachment 1). SR 53 is a major transportation route connecting Ardmore to Huntsville.

The project would require placement of fill in streambeds and wetlands at seven sites for construction of roadbed, culverts, riprap, etc. Two southbound lanes and a median are proposed on the west side of the existing two-lane highway. Locations needing Section 26a approval are:

Site 1 – A 0.21-acre wetland impact adjacent to an unnamed tributary of Dry Creek for 118 linear feet of a 30-inch-diameter culvert extension and relocation of a 300-foot ditch into a 225-foot constructed ditch

Site 2 – A 2.02-acre wetland impact adjacent to an unnamed tributary of Dry Creek for a 117-foot extension of a 24-inch-diameter pipe

Site 3 – A 126-foot, seven-barrel culvert would be replaced with a 165-foot, six-barrel culvert

Site 4 – A 105-foot extension to a single-barrel culvert

Site 5 – Isolated pocket of wetlands to be impacted by about 0.75 acre of road fill

Site 6 – A 126-foot, five-barrel culvert to be replaced with a 182-foot, four-barrel culvert

Site 7 – A single-barrel culvert would be extended by 103 feet, and about 250 feet of an ephemeral channel would be relocated into a new channel with an 18-inch-diameter pipe for a driveway crossing

The purpose of the project is to upgrade SR 53 to a four-lane roadway between Huntsville and Interstate (I-) 65. The need for the project is demonstrated in existing substandard design features, increased traffic on the roadway, and increasing emphasis on SR 53 as an artery for commuter and through traffic. Traffic congestion on the roadway is described as a level of service ranking of "F," which represents the worst condition in which roadway operations break down, completely causing extensive delays and congestion.

The approximately 4-mile SR 53 section under review is part of a highway improvement plan for 20.4 miles of SR 53 between Huntsville and I-65 in Ardmore, Alabama. The overall project for improvements to SR 53 from Huntsville to I-65 consists of adding two lanes adjacent to the

existing two-lane roadway at Huntsville to a point south of Ardmore; from this point, the project consists of a divided, four-lane roadway on a new location that bypasses Ardmore to the south and ties to the existing I-65/SR 53 interchange.

On December 23, 1998, the Federal Highway Administration (FHWA) completed an environmental assessment (EA) for the entire 20.4-mile SR 53 highway widening project. This document is attached and incorporated by reference. A finding of no significant impact (FONSI) was approved by the FHWA for the overall project on June 21, 1999 (see Attachment 2 for the FHWA EA and FONSI).

Because of the length of time between the preparation of the original 1998 FHWA EA/1999 FHWA FONSI and the initiation of further project reviews, an EA/FONSI reevaluation for the southernmost 1.65-mile section of SR 53 (from Mastin Lake to Rideout Road in Huntsville, Madison County) was completed by the ALDOT on June 6, 2003, and signed by FHWA on June 19, 2003 (see Attachment 3). The first 1.65-mile construction segment has been completed. TVA previously reviewed this southernmost section of the SR 53 highway widening project (Section 26a application from ALDOT dated August 5, 2005) and completed a Categorical Exclusion Checklist (CEC 10829) on October 31, 2005.

A second EA/FONSI reevaluation for the pending Section 26a review regarding the 4-mile (middle) section of SR 53 from Huntsville to I-65 in Ardmore was completed by the ALDOT on January 23, 2009 (see Attachment 4). The FHWA approved the reevaluation on January 30, 2009.

A third SR 53 highway segment, from Jeff Road to Harvest Road, will be reviewed in the future by TVA upon receiving a Section 26a approval request for this section.

### **Alternatives**

As discussed in the 1998 FHWA EA, all reasonable alternatives, including no action, postponing the action, transportation system management, mass transit, and build alternative (widening to the west of the existing SR 53 and widening to the east of SR 53 or a combination of widening to the west and east) have been evaluated in relation to the project.

### **Impacts Assessment**

The 20.4-mile SR 53 widening project would convert approximately 529 acres of land consisting primarily of agricultural, residential, wetland, and open pasture to roadway use. The proposed ALDOT SR 53 widening project is consistent with the *Huntsville Area Transportation Study Year 2015 Transportation Plan* and programmed for Surface Transportation Area Program funding. Impacts to prime farmland would be insignificant. No significant floodplain encroachments would occur.

No threatened or endangered species (or critical habitat) are known to occur in the project area. The proposed project is not expected to impact protected species. A review of TVA's Natural Heritage database indicated that two Alabama state-listed species, the Tennessee cave salamander and a cave beetle, are located within 3 miles of the project site and were not previously addressed in the 1998 FHWA EA. As these are cave-obligate species and the closest known cave is greater than 0.5 mile from the project site, there would be no effect to these species from the roadway construction. Two additional aquatic species, the armored snail and the slackwater darter, were also identified in the project area by TVA. The U.S. Fish and Wildlife Service (USFWS) was notified regarding these species and reaffirmed that it had "no objection" to the proposed action.

The overall SR 53 widening project impacts 9.48 acres of wetlands. In accordance with Executive Order 11990, "Protection of Wetlands," impacts to wetlands would be avoided where practicable, and if avoidance were not possible, then impacts would be minimized and/or mitigated. Overall, project wetland mitigation would come from an area wetland mitigation bank and would be determined after final plans are completed in conjunction with the U.S. Army Corps of Engineers (USACE) permitting under Section 404 of the *Clean Water Act*. The pending approximately 4-mile section of SR 53 widening proposed by ALDOT would involve impacts to about 2.23 acres of wetlands and streambeds at seven sites. The applicant proposes to mitigate the wetland impacts of the work by purchasing 2.23 credits from a local wetland mitigation bank. One credit at this bank has been previously determined to provide 2 credits (2:1) mitigation.

Impacts to water quality would be temporary, and no overall adverse impact to water quality is anticipated. Best management practices (BMPs) to control erosion and sedimentation would be utilized. A National Pollutant Discharge Elimination System permit from the Alabama Department of Environmental Management (ADEM) would be required.

ALDOT utilizes education, identification, and elimination to prevent the introduction and spread of invasive species. Over 1,100 construction personnel have been trained on ALDOT's policies regarding the subject including distribution of a training poster to all construction projects in the state to help with identification of invasive vegetation. ALDOT construction specifications contain restrictions aimed at preventing the spread of invasive vegetation in mulch used during vegetation establishment operations, and ALDOT maintenance personnel are actively pursuing eradication of certain species and participate in statewide and regional discussions of the topic. TVA deems these methods acceptable to prevention of the spread of invasive species.

The overall SR 53 widening project would require the acquisition of right-of-way from eight potentially hazardous material sites (including gas stations/convenience stores and automobile facilities). Several sites may require additional hazardous material investigations when final project plans are developed.

Air and noise impacts would primarily be short term and temporary during roadway construction. There would be no appreciable change in air quality. Minor noise impacts were predicted for 21 sites on the preferred alternative. Noise abatement was considered infeasible. Visual impacts would be insignificant.

The preferred alternative does not affect historic properties eligible for the National Register of Historic Places. The Alabama State Historic Preservation Officer (SHPO) determined that no rural historic districts exist in the study area.

No communities or neighborhoods are isolated or bisected by the proposed action. The project would not involve disproportionate impacts to any minority group. The project would involve relocating 81 residences, 24 businesses, and two nonprofit organizations. There would be no active farm relocations.

### **Mitigation**

The ALDOT plans to mitigate the 2.23 acres of wetland impacts at a ratio of 2:1 by purchasing credits from the Jackson County Wetland Mitigation Bank in Stevenson, Alabama, and will provide copies of purchased wetland credits to both TVA and the USACE.

## **Public and Intergovernmental Review**

ALDOT presented public involvement meeting opportunities during the course of the study to notify the public of the project and to receive input from local residents. The 1999 FHWA FONSI discusses several public involvement meetings including those held on August 28, 1997, and March 4, 1999. Eighty-five percent of public meeting attendees were in favor of the proposed widening project.

ALDOT prepared an EA/FONSI reevaluation for the SR 53 middle section dated January 23, 2009, and requested that the FHWA concur that its previous approval remains valid. The FHWA issued a concurrence on January 30, 2009. The attachments to the reevaluation included an updated concurrence from the USFWS (letter from ALDOT to USFWS dated October 27, 2006, and USFWS stamped approval dated November 7, 2006); a letter reaffirming concurrence with project activities from the Alabama Historical Commission dated June 5, 2008; a confirmation memorandum dated January 22, 2009, from an air/noise analyst that no new structures are present and no further study is necessary; and an e-mail dated August 1, 2008, from an ALDOT hazardous material coordinator who conducted a follow-up investigation and identified no additional sites.

Joint TVA/USACE Public Notice No. 09-45 was issued on May 26, 2009, with the comment period ending on June 26, 2009 (see Attachment 5). The USFWS responded by e-mail dated June 22, 2009, that no significant adverse effects on fish and wildlife resources are expected to result from the proposed wetland and stream fill associated with the pending SR 53 widening project (Rideout Road to Jeff Road) and that it has no objection to issuance of the Department of the Army permit. In a letter dated June 25, 2009, the Alabama SHPO determined previous and continued concurrence with the project, provided the scope of work remains the same. On August 12, 2009, the USACE completed an EA for the proposed action (see Attachment 6).

The Alabama Department of Conservation and Natural Resources (ALDCNR) responded by letter dated June 17, 2009, that the project is unlikely to impact state-protected wildlife and freshwater fisheries species and concurred with proposed mitigation in an approved mitigation bank. ALDCNR also encouraged the proper installation and implementation of BMPs in order to minimize erosion and migration of sediments into wetland and stream areas.

ADEM issued a 401 Water Quality Certification on July 13, 2009.

## **Conclusion and Findings**

TVA has independently reviewed the impacts assessed in the 1998 FHWA EA and 1999 FHWA FONSI and the 2003 EA/FONSI reassessment and determined that the scope, considerations of alternatives, and contents are appropriate and that the impacts on the environment have been adequately addressed. TVA, therefore, has decided to adopt the FHWA EA. Based on the review, there are no significant adverse impacts, either individually or cumulatively, on the project impact area or its environment. TVA has evaluated the project for compliance with Executive Order 11988 on Floodplain Management and determined that no alternative to widening the highway along its existing alignment within the floodplain is available due to the associated cost of relocating a highway. No threatened or endangered species have been identified in the 4-mile SR 53 section of highway under review. No archaeological resources will be affected by the current undertaking. Wetland impacts would be mitigated through the purchase of 2.23 credits in the Jackson County Wetland Mitigation Bank.

Based on the FHWA EA and subsequent reassessment, we conclude that issuance of a Section 26a permit for new and replacement culverts and wetland fill described in the May 5, 2009,

application from ALDOT would not be a major federal action significantly affecting the environment. Therefore, preparation of an environmental impact statement is not required.



Daniel H. Ferry, Senior Manager  
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Date Signed

**Attachments**

1. May 5, 2009, ALDOT Joint Application Form to the Department of the Army and TVA
2. June 21, 1999, FHWA FONSI and December 23, 1998, FHWA EA
3. June 6, 2003, ALDOT EA/FONSI Reevaluation
4. January 23, 2009, ALDOT EA/FONSI Reevaluation
5. May 26, 2009, Joint Public Notice 09-45
6. August 12, 2009, USACE Final EA and FONSI