

**U.S. ARMY CORPS OF ENGINEERS  
NASHVILLE DISTRICT**

**FINDING OF NO SIGNIFICANT IMPACT  
AND  
FINDING OF COMPLIANCE**

**Proposed Center Hill Dam Seepage  
Rehabilitation  
Supplement 2**

DeKalb County, Tennessee

1. The US Army Corps of Engineers (Corps) has studied alternatives to stop leakage at Center Hill Dam (CEN). This study was conducted under the authority of the Center Hill project's original authority. The Center Hill project was authorized by the Flood Control Act approved June 28, 1938 (Public No. 761, 75th Congress, 3<sup>rd</sup> session). In July, 2005, an Environmental Assessment (EA), evaluating grouting alternatives to control the seepage, was completed. That EA resulted in a Finding of No Significant Impact (FONSI) signed on July 17, 2005. The preferred alternative as listed in that EA and FONSI is to inject grout in a grout line on both the right and left sides of the dam. During the design of the grouting alternative, a more effective remediation treatment was identified and a Supplemental EA was prepared in May 2006. Further refinements to the construction plans identified two additional possible actions in addition to No Action.

*Alternative 1, No Action* was identified as adopting the previously described grouting and repair plan.

*Alternative 2, Grouting Along the Highways*, would consist of shifting the grout lines to extend along the roads. This alternative would make it easier to place the drilling and grouting equipment and ensure increased accuracy and consistency in hole alignment. It would also increase the safety of the construction crews; however, at least one lane of the highways would have to be closed and traffic regulated for up to two years.

*Alternative 3, Cutting the Hillside Along the Previous Grout Lines*, would consist of excavating a trench to establish a work platform. The excavation would be up to 120 feet deep, much like a road cut, and would follow the path of the previous grout lines. The operation would be safer for the public as

fewer road closures would be involved and most of the work would avoid the roads altogether. Safety would also be improved for the construction employees as the excavated area would offer a relatively level work surface as opposed to trying to operate large heavy equipment on a steep hillside. Accuracy, consistency, and overall quality of the hole alignment would be improved. There may also be considerable cost savings.

2. An EA was prepared following the National Environmental Policy Act (NEPA), Council for Environmental Quality (CEQ) regulations implementing NEPA (40 CFR, 1500-1517), and Corps of Engineers Regulations ER 200-2-2 *Policy and Procedures for Implementing NEPA* (33 CFR, 230). The EA was prepared to describe existing conditions and evaluate potential impacts associated with the proposed action and No Action alternatives.

3. The EA does not reveal significant impacts resulting from any of the proposed actions. There would be some minimal long-term loss of vegetation and forested habitat would be temporarily lost within the footprints of disposal areas. Once construction is complete the disposal areas would be allowed to re-forest. Typical construction impacts (noise, sedimentation, air quality, etc.) would be reduced by use of appropriate best management practices. Possible impacts to the state-listed species, Harper's umbrella-plant (*Eriogonium longifolium var. harperi*), would be avoided by placing exclusion cages around individual plants. Some individuals in the direct path of construction would be lost. The Corps will coordinate with the Tennessee Department of Natural Heritage to locate individual plants.

4. Pursuant to the Fish and Wildlife Coordination Act (FWCA) of 1958, and Endangered Species Act, coordination with the U.S. Fish and Wildlife Service (USFWS), Tennessee Wildlife Resources Agency (TWRA), and the Tennessee Division of Heritage was conducted for the two previous EAs. In a letter dated May 18, 2004, the USFWS stated that the Price's potato bean (*Apios priceana*) and the gray bat (*Myotis grisescens*) may be located within the area of potential effect. USFWS also requested that Biological Assessments (BA) be prepared for the two species. According to a phone conversation on February 7, 2005 with the USFWS, Price's potato bean is most likely not located within the area of potential effect. In a letter dated May 2, 2006, the USFWS stated that collection records available do not indicate that federally listed or proposed endangered or threatened species occur in the impact area of the proposed action. Also, based on the best information available at this time, we believe that requirements of Section 7 of the Endangered Species Act of 1973, as amended, have been fulfilled. Comments received from TWRA in a letter dated April 17, 2006, stated that they had continued concerns with the trout fishery in the tailwaters below Center

Hill Dam and how it would be affected by the loss of seepage flow and if grout was allowed to wash out into the tailwaters during and after construction. They stated that they were not opposed to the project based on the assurances that a new house unit generator capable of maintaining 200 cfs of oxygenated flow and protective measures to keep grout from washing out into the tailwaters were in place prior to any injection of grout. These concerns have been addressed in the EA. No comments were received from the Division of Heritage. These agencies were asked for additional comments during the circulation of the draft of this EA.

5. None of the work described by this EA would take place either below ordinary high water of in a blue-line stream. Section 404 notification is not, therefore, required. An Aquatic Resources Alteration Permit (ARAP) has been previously obtained for other work related to the repairs on the dam. Although an new ARAP is not required, a National Pollution Discharge Elimination System permit for Stormwater runoff would be obtained prior to the initiation of any construction operations.

6. Section 106 of the National Historic Preservation Act of 1966 requires each federal agency take into account the effects of its undertakings on historic properties included in or eligible for listing in the National Register of Historic Places. According to the February 15, 2006, letter from the Tennessee Historical Commission, the previously proposed activities would not adversely affect any property that is eligible for listing in the National Register of Historic Places. The State Historic Preservation Officer (SHPO) therefore has no objection to the implementation of the project as described by the No Action alternative. This opinion was restated by the SHPO in a letter dated March 24, 2006. These new proposed activities are being coordinated with the SHPO.

7. Chapter 6, Environmental Commitments and Compliance, of the EA discusses the status of permits and environmental compliance. In order to mitigate for flow lost to stopping the seepage, an orifice gate will be installed on one of the sluice gates. This will be able to produce the 200 cfs required flow identified in a recent Corps Study. There are no unresolved issues. There are no wetlands within the project area. Finally, the proposal is in compliance with Executive Order 12898 on Environmental Justice. Each of the alternatives would have some minor negative impacts and each has its merits.

8. I have reviewed the report, public and agency comments, and the Second Supplemental EA for the Center Hill Seepage Study in DeKalb County, Tennessee. In light of the general public interest, I have determined that none of the alternatives would constitute a major federal action significantly affecting the quality of the human environment within the meaning of the

National Environmental Policy Act of 1969, as amended. Accordingly, I have concluded that an Environmental Impact Statement is not required. Having weighed the potential benefits that may be accrued against the reasonable foreseeable detrimental effects, I conclude that the alternative may be appropriately selected based on engineering and cost considerations and that the grouting and construction of Center Hill Dam, as proposed, is in the public interest.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Bernard R. Lindstrom  
Lieutenant Colonel  
Corps of Engineers  
District Engineer

Coffey/PM-P  
Adcock/EC-CD-S  
Firsching/OC  
Canaday/PM  
Wilson/PM  
Phillips/DE-S  
Mann/XO  
Straus/DD  
Lindstrom/DE