



STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
NASHVILLE, TENNESSEE 37243-0435

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July 12, 2017

Via Electronic Mail to Travis.A.Wiley@usace.army.mil

Attn: Travis Wiley, Project Manager
Department of the Army
Nashville District, Corps of Engineers
110 9th Avenue South, Room A-405
Nashville, Tennessee 37203

Dear Mr. Wiley:

The Tennessee Department of Environment and Conservation (TDEC) appreciates the opportunity to provide comments on the U.S. Army Corps of Engineers (USACE) – Nashville District, *City of Cleveland Flood Risk Management Study* Draft Integrated Feasibility Report and Environmental Assessment (IFR/EA) with an Unsigned Finding of No Significant Impact (FONSI). The purpose of the Draft IFR/EA report is to analyze potential solutions for flooding problems associated with the Candies and South Mouse Creek watersheds in Cleveland, Tennessee. In determining a preferred alternative solution to flooding issues in Cleveland, Tennessee, USACE evaluated eighteen plans for cost efficiency and flood risk reduction effectiveness.¹ Plan 17 was determined to have the greatest net economic benefit, and leaves considerably less residual risk in the floodplain relative to the other plans considered in the Draft IFR/EA. The Draft IFR/EA Plan 17 recommends the following actions:

- Flood Detention Structures: Two regional detention structures would delay the release of flood waters downstream to Fillauer Branch.²
- Construction of Channel Benches: Four channel benches would be constructed to increase flood conveyance. The benches would be excavated above the ordinary high water mark of their respective tributaries in order to minimize environmental impacts to the stream bed, to the extent possible.³

¹ The Draft IFR/EA only fully evaluated 5 plans; Plans 13, 16, 17, and 18 as well as a No Action Alternative. Plans 13, 16, 17, and 18 all incorporated varying levels of flood detention structure construction, construction of channel benches, and other non-structural measures, such as buyouts and elevation measures.

² A regional detention structure on a tributary to Fillauer Branch, north of Neely Circle NE and a regional detention structure located on the main stem of Fillauer Branch. The location of the site is just downstream of the railroad crossing over Fillauer Branch near Carolina Street.

³ This includes (1) the construction of a channel bench, approximately 30 feet wide, along 1,400 linear feet of the left descending bank of South Mouse Creek between South Lee Highway and Smith Drive; (2) the construction of a channel bench, approximately 50 feet wide, along 1,200 linear feet of the right descending bank of South Mouse Creek to allow for increased conveyance through the damage center in order to relieve flood damages; (3) proposes a channel widening on Fillauer Branch, east of Northwest Ocoee Crossing Road and South of

- **Non-Structural Measures:** Buildings would be removed in flood prone areas. The nonstructural component of the plan includes buyout and elevation measures located in various damage centers throughout the watershed. This measure would not result in a significant reduction in elevation of floodwater, but would permanently remove 16 repetitive loss buildings from recurring future damages and potential loss of life in the highest hazard areas.

TDEC has reviewed the Draft IFR/EA with Unsigned FONSI and provides the following comments.

Cultural Resources

TDEC concurs that Plan 17 as proposed in the Draft IFR/EA will require an archaeological investigation of Site 40BY19 prior to construction activities to determine the site's eligibility for inclusion on the National Register of Historic Places (NHRP).⁴ TDEC recommends that the Final IFR/EA includes results of the Site 40BY19 investigation or a plan for how site investigation will be conducted.

Plant and Animal Resources

TDEC has no specific comments regarding Plan 17 or the Draft IFR/EA alternatives with regard to plant and animal resources. TDEC recommends that the requesting agency contact the Tennessee Wildlife Resource Agency (TWRA). TWRA manages information related to state listed rare animal species and should be consulted.⁵

Water Resources

The two regional detention structures proposed in Plan 17 may qualify as dams if they meet the State of Tennessee definition of a "dam" as defined by the "Rules and Regulations Applied to the Safe Dams Act of 1973".⁶ If the detention structures meet the definition of a dam then they will need construction certificates from the Safe Dams program.⁷ TDEC recommends that the Final IFR/EA include discussion

Northwest Keith Street which consists of a newly constructed bench approximately 30 feet wide along 1,000 linear feet of the right descending bank; and (4) the construction of a channel bench, approximately 20 feet wide, along 700 linear feet of the right descending bank of a tributary to Fillauer Branch between Weeks Drive and Sycamore Drive.

⁴ State of Tennessee archaeological site files indicates that site 40BY19 consists of several Cherokee farmsteads.

⁵ Please contact Rob Todd, rob.todd@tn.gov, 615-781-6577 with TWRA to ensure that legal requirements for protection of state listed rare animals.

⁶ TDEC Division of Water Resources Rule 0400-45-07-.02 "Dam" means any artificial barrier, together with appurtenant works, which does or may impound or divert water, and which either (1) is or will be twenty (20) feet or more in height from the natural bed of the stream or watercourse at the downstream toe of the barrier, as determined by the Commissioner, or (2) has or will have an impounding capacity at maximum water storage elevation of thirty (30) acre-feet or more. Provided, however, that any such barrier which is or will be less than six (6) feet in height, regardless of storage capacity, or which has or will have a maximum storage capacity not in excess of fifteen (15) acre-feet, regardless of height, shall not be considered a dam, nor shall any barrier, regardless of size, be considered a dam, if, in the judgment of the Commissioner, such barrier creates an impoundment used only as a farm pond. Diversion weirs, roadbeds, water tanks, and wastewater impoundment barriers as defined in this section are not dams. In general, the Division of Water Resources prefers non-structural alternatives such as removal of flood-prone structures from the floodplain, and robust municipal stormwater management policies and ordinances, over structural alterations to state waters. Structural alternatives that involve creating instream detention structures may result in a significant impact to water resources. Off-line detention measures should be vigorously explored, and any instream detention may require compensatory mitigation to result in no net loss to state waters.

⁷ If the detention structures are designed and paid for, with at least 50% of construction cost being covered by the USACE, then the dam will be designed to USACE specifications and override the state standards. For more information on the TN Safe Dams Program please visit <https://www.tn.gov/environment/article/permit-water-certificate-of-approval-and-safety-for-dams>.

regarding the regional detention structure specifications and the regulatory oversight necessary for their certification.

Solid Waste Management

TDEC recommends that any wastes associated with the construction (e.g. building removal), operation, maintenance, and repair of Plan 17 and the other alternative's proposed actions be managed in accordance with the Solid and Hazardous Waste Rules and Regulations of the State of Tennessee.⁸ TDEC recommends that the Final IFR/EA reference that any wastes that are generated during the construction process or uncovered during site preparation are subject to the Solid and Hazardous Waste Rules and Regulations of the State of Tennessee.

TDEC appreciates the opportunity to comment on this Draft IFR/EA with Unsigned FONSI. Please note that these comments are not indicative of approval or disapproval of the proposed action or its alternatives, nor should they be interpreted as an indication regarding future permitting decisions by TDEC. Please contact me should you have any questions regarding these comments.

Sincerely,



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cc: Lacey Hardin, TDEC, APC
Lisa Hughey, TDEC, SWM
Tom Moss, TDEC, DWR
Mark Norton, TDEC, DOA
Stephanie Williams, TDEC, DNA

⁸ Reference TDEC SWM Rule 0400 Chapter 11 for Solid Waste and Chapter 12 for Hazardous Waste <http://sos.tn.gov/effective-rules>.