

FINDING OF NO SIGNIFICANT IMPACT
TENNESSEE VALLEY AUTHORITY
MORGAN COUNTY INDUSTRIAL PARK EXPANSION

**Administration of Appalachian Regional Commission Grant
for sewer line, grading, drainage, and access road**

**Section 26a Approval for placement of 10 log drop structures in Flat Fork
to improve habitat for fish and aquatic life**

Morgan County, Tennessee

The Proposed Actions and Required Reviews

The Morgan County Industrial Board proposes to expand its industrial park located at the intersection of Tennessee State Route (SR) 62 and Flat Fork Road about two miles east of Wartburg. The expansion would provide additional sites for industries, resulting in increased employment opportunities in the county. Morgan County is economically depressed, with one of the highest unemployment rates in the region and limited jobs for its residents.

To assist with the expansion, TVA would administer an already-approved Appalachian Regional Commission (ARC) grant of \$360,520. The grant would supplement local funds for an estimated total cost of \$450,650. The federal share of the project would be about 80 percent. The grant would provide construction funds for a new access road, grading, a new sewer line, and improved drainage. The access road would be extended into the western part of the existing industrial park property from Flat Fork Road. Four new industrial sites along the access road with about 20 developable acres would be graded. The sewer line would be extended from the existing sewer line in the floodplain of Flat Fork in the eastern part of the park to a building site at the end of the access road, and a French drain would be installed in a filled wetland.

Because the grading done as a result of the ARC grant would fill wetlands and an intermittent stream, an individual Department of the Army Permit for the fill would be required under section 404 of the Clean Water Act (CWA). Prior to issuing the permit, the USACE issued a Joint Public Notice on June 15, 2005, that they would evaluate the impacts of the fill and other actions funded by the ARC grant. The USACE issued a Final Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) containing that evaluation on October 14, 2005. The activities funded by the ARC grant are more fully described in the Public Notice and USACE EA, which are attached. (The Public Notice is Appendix B of the EA.)

As additional mitigation, the contractor would place 10 log drop structures equally spaced along 1,683 feet of Flat Fork adjacent to the industrial park. This would improve habitat for fish and aquatic life. It would require approval from TVA under

Section 26a of the TVA Act. A diagram of a typical log drop structure is contained in the Public Notice. The location for placement is shown in the map of the Mitigation Plan in the Public Notice and is the stretch of Flat Fork which will also have improvements to the riparian buffer.

Based on its independent review, TVA is adopting the USACE EA as its review of the impacts of administering the ARC grant. In addition, TVA has evaluated the impacts of the habitat improvement project involving placement of the log drop structures. This FONSI covers both TVA actions.

Impact Assessment

As discussed in the USACE EA, the most notable impacts of the actions done with the ARC grant would be the filling of 1.99 acres of wetland and 1469 feet of intermittent stream. This would cause the permanent loss of these resources. The scrub-shrub wetland and the stream banks are vegetated by a combination of woody and herbaceous species but are currently kept mown, so the habitat value is low. The stream is up to one foot wide and three inches deep and supports minimal aquatic insect life. The USACE determined that there was no practicable alternative to filling of the wetlands and the stream because the Industrial Authority owns the property, other available property is either not affordable or suitable for industrial development, and avoiding the wetlands would too greatly limit the additional development of the park. Moreover, the impact to the wetlands has been limited to the minimum necessary for additional development of the park. With the mitigation measures discussed below, both the USACE and TVA have determined that impacts to wetlands and aquatic habitat would be insignificant.

There would be no effect on federally-listed endangered or threatened species. No archaeological sites eligible for the National Register of Historic Places (NRHP) would be affected by the proposal. Grading could allow erosion of sediment which would pollute storm water, but use of best management practices as specified in the Water Quality Certification would adequately minimize this impact. Grading and construction equipment would cause minor air quality impacts from fugitive dust and engine emissions. Loss of the wetlands and intermittent stream would have minor impacts on storm water flow and downstream flood levels. The location of the new sewer line would involve work within the 100-year floodplain of Flat Fork. For purposes of consistency with Executive Order (EO) 11988, an underground sewer line is considered to be a repetitive action in the floodplain that would not result in adverse floodplain impacts because the area would be returned to pre-construction conditions after completion of the project. No new industrial buildings would be in or require fill in the 100-year floodplain. Based on the scale of the industrial park and new sites being created, impacts from construction and industrial traffic and noise are expected to be minor.

Impacts of the log drop structures in Flat Fork would generally be beneficial. The creek is listed as impaired by the state of Tennessee due to nutrients, habitat alterations, and siltation due to pasture grazing and channelization. The Tennessee dace, a fish listed as in need of management in Tennessee, occurs in Flat Fork Creek. It is expected that habitat for the fish would be enhanced by the project. Based on design and the construction techniques to be used, any siltation from soil disturbance

during placement of the structures would be minor and temporary. Their location would be within the 100-year floodplain of Flat Fork, but for purposes of consistency with EO 11988, this type of activity is considered to be a repetitive action in the floodplain that would not result in adverse floodplain impacts. Also, there is no alternative to placing the structures in the floodplain.

Mitigation

Based on the analysis in their EA and comments from agencies noted below, on October 25, 2005 the USACE granted the attached individual Department of the Army Permit for the fill. The permit requires implementation of a plan for mitigating the impacts to the wetland and intermittent stream. The basic elements of the plan are to:

- a. Replace the 1469 feet of intermittent stream with 1715 feet of new channel with a vegetated bench 9 feet wide on both sides.
- b. Establish a riparian buffer 1683 feet long and 50 feet wide along each bank of the new stream
- c. Create 8.15 acres of wetland—3.8 acres around the periphery of the small lake in the park, 3.64 acres below the dam of the lake, and 0.71 acres along both sides of the replacement stream channel
- d. Enhance a total of 0.29 acres of existing wetland in two locations of the site
- e. Install the French Drain noted above in the filled wetlands.
- f. Monitor the mitigation beginning 1 year after installation and continuing for 5 years or until deemed successful by the USACE and the TDEC. The locations of the components of the plan are shown in the Permit, and the details of the mitigation plan are given in Appendix G of the EA.

In addition, the Permit and the Water Quality Certification contain conditions regarding how the work is to be carried out to minimize impacts, particularly impacts on water quality from erosion and sedimentation. TVA would also include these erosion control measures as standard conditions of its Section 26a approval.

TVA believes that the proposed wetland enhancement and creation and the enhancements on the relocated stream and Flat Fork would fully compensate for the impacts to the original intermittent stream and wetlands.

Public and Intergovernmental Review

There were no comments from the public in response to the Joint Public Notice, which had a public comment period from June 15 until July 15, 2005. On June 30 the Tennessee Wildlife Resources Agency provided comments, requesting that the applicant establish a 50 foot vegetated riparian buffer on both sides of the relocated channel, which was done as noted in the Mitigation section above. Also on June 30, the U.S. Fish and Wildlife Service (USFWS) provided comments, stating that records available to the USFWS did not indicate that federally listed or proposed endangered or threatened species occur within the impact area of the project and that they did not anticipate significant adverse impacts to fish and wildlife or their habitats. On June 22 the Tennessee Historical Council (THC) requested an archaeological survey of the area of potential effect. This was completed and provided to THC, resulting in concurrence on August 3 that no archaeological resources eligible for the NRHP were

present. Copies of these comments are contained in Appendix D to the attached USACE EA.

Under section 401 of the Clean Water Act a State Water Quality Certification for the fill would be required. Under The Tennessee Water Quality Control Act, the project would need an Aquatic Resource Alteration Permit (ARAP) in conjunction with the Water Quality Certification. On July 27, 2005, the TDEC published in the Morgan County News a public notice of the application for the ARAP, requesting comments until August 27, 2005. At the same time, the Industrial Board posted information about the project and comment period on a large sign on the site. No public comments were received. In its September 21, 2005, letter issuing the Water Quality Certification, the TDEC stated that applicable water quality standards would not be violated and that streams would not be further degraded, provided the mitigation plan and the other special conditions noted above are followed. The letter is Appendix C of the attached USACE EA.

Cumulative Impacts

Other current actions in the area and an expected future action have the potential to contribute to cumulative impacts.

The Tennessee Department of Correction is expanding its Morgan County Regional Correctional Facility (MCRCF) on Flat Fork Road less than a mile north of the industrial park. Approximately 4,800 feet of Winchester Branch, which flows into Flat Fork, will be moved to a new location. The relocated stream will be approximately 3,900 feet in length and will partially flow into a channel formerly occupied by Flat Fork. There will also be a culvert for the new Flat Fork Road crossing and three culverts for access to the west side of the expanded MCRCF.

Because the expansion project is being financed, in part, by federal funds being provided to the state, the Tennessee Department of Correction, on behalf of the U.S. Department of Justice (DOJ), commissioned the preparation of an EA to review alternatives and impacts for expansion of prison capacity. TVA was a cooperating agency in the DOJ environmental review and adopted the DOJ EA as support for its decision to issue a Section 26a permit for the stream fill and relocation.

As mitigation for the wetland and stream impacts of the new prison, mitigation at a site downstream from the prison along Flat Fork Creek is being required. A combination of wetland restoration, creation, and enhancement will occur on a 36-acre site owned by the state of Tennessee and located 0.7 miles south of the prison. The replacement stream is designed with proper channel pattern, profile and dimensions, and livestock will be excluded. In addition, an unnamed tributary to Jones Branch, which flows into Flat Fork from the east at the industrial park, will be restored by rebuilding the channel pattern, profile, and dimensions; stabilizing the streambank; excluding livestock; and planting a riparian zone. Finally, several unnamed tributaries to Flat Fork on the north side of Flat Fork Road will be restored by creation of a 50-foot riparian buffer on both sides of the streams and livestock exclusion.

The DOJ EA identified two connected actions in conjunction with the prison expansion. In order to expand the prison, additional water supply and sewer facilities will be needed. An on-site wastewater treatment plant will be closed and sewage would be delivered to the Wartburg Wastewater Treatment plant across Tennessee State Route 62 from the prison. Water supply upgrades by the local water utility, Plateau Utility District, will also occur. New water lines are planned along SR 62 to serve both the prison and other future development in the Wartburg area. The impacts of these expansions were considered in the EA.

An expected future action is the four-laning of about 15 miles of SR 62 between Wartburg and Oliver Springs. Because this project would receive funding from the Federal Highway Administration (FHWA) provided to the Tennessee Department of Transportation, the two agencies prepared an EA, and FHWA issued a FONSI on July 29, 1997. TVA cooperated in preparation of the EA because it is likely that stream crossings will require 26a approvals. No jurisdictional wetlands will be affected, and stream crossings will use best management practices to minimize impacts of erosion and sedimentation.

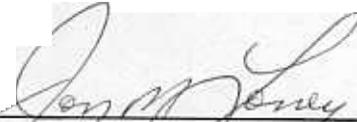
Frozen Head State Park and Natural Area is about 2.7 miles from the proposed industrial park expansion, about 1.5 miles from the prison expansion, and less than half a mile from portions of SR 62 proposed to be widened. None of these activities would directly impact park facilities. All of these activities would generate additional noise and traffic which would be perceptible to some park visitors. The change from existing background noise and background levels, however, would be minor and cumulative impacts on park visitors' experiences would be insignificant.

The USACE EA on the industrial park development addressed the possibility for cumulative impacts to streams and wetlands from the prison expansion and concluded that the compensatory mitigation for that project would be adequate. Based on the measures adopted to mitigate the impacts of the prison expansion and the limited impacts expected from the widening of SR 62, TVA has also determined that there would be minimal and insignificant cumulative impacts from these actions.

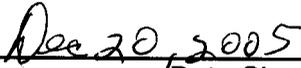
Conclusion and Findings

TVA has independently reviewed the USACE EA and confirmed its findings. By letter of June 30, 2005, the USFWS agreed that the project would not adversely affect endangered or threatened species. By letter of August 3, 2005, the State Historic Preservation Officer agreed that no historic properties eligible for listing on the National Register of Historic Places would be affected. By letter of September 21, 2005 issuing the Water Quality Certification, the TDEC stated that applicable water quality standards would not be violated and that streams would not be further degraded, provided the mitigation plan and the other special conditions noted above are followed. Given the terrain and limited options for industrial site expansion, there is no practicable alternative to sewer line construction and fills in the floodplain and wetlands along Flat Fork. Based upon review of the USACE EA and staff site visits, TVA concludes that Section 26a approval for the placement of drop log structures in Flat Fork and its actions in administration of the ARC grant would not be major federal

actions significantly affecting the quality of the environment. Accordingly, an environmental impact statement is not required.



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Date Signed