

FINDING OF NO SIGNIFICANT IMPACT
TENNESSEE VALLEY AUTHORITY
WORD AND BOGGUS, LINDSEY HARBOR DEVELOPMENT

GUNTERSVILLE RESERVOIR

MARSHALL COUNTY, ALABAMA

Proposed Action and Need

In April 2003, Word and Boggus Construction Company of Guntersville, Alabama, submitted to the Tennessee Valley Authority (TVA) a request to purchase 4.43 acres of TVA property in the Lindsey Slough area of Guntersville Reservoir in Marshall County, Alabama. The land purchase, if secured from TVA, would be used in addition to 332.8 acres of private back-lying land purchased by Word and Boggus for development of the Lindsey Harbor project. The Lindsey Harbor project would be a planned 374 home residential community oriented on a new 23.5-acre man made lake with a 2,450-linear foot channel access in Lindsey Slough to connect to Guntersville Reservoir. The lake would include approximately 76 lots which would front the new lake.

Word and Boggus also submitted a joint Section 26a/Department of the Army permit application for the proposed construction of the lake and a channel dredge and for the associated private and community water use facilities. Three channel dredge options that provide access from Guntersville Reservoir to the newly created lake harbor were assessed in the Environmental Assessment (EA). The preferred dredge option is the one that provides greater boating maneuverability and therefore increased boating safety by providing dual channel access to the Lindsey Harbor development. Approximately 271,040 cubic yards of material would be excavated to construct the lake and channel.

Alternatives

TVA has prepared an EA for the proposed Lindsey Harbor development to evaluate the potential impacts associated with the land sale, lake and channel construction and development. The EA was prepared cooperatively with the U.S. Army Corps of Engineers (USACE). The EA considered the No Action Alternative and the Proposed Build (Action) Alternative with three dredge options.

Under the No Action Alternative, the sale of TVA land would not be approved. The applicant would not be able to acquire the 4.43 acres of TVA land to develop the Lindsey Harbor development in its current configuration. The Section 26a request for the 23.5-acre man made lake and the 2,450-linear foot channel dredge would be denied as well as the associated water use facilities. Under the No Action Alternative, the applicant could continue to develop the private property but without the man-made lake or channel access to Guntersville Reservoir. The environmental and socioeconomic impacts associated with development of a 374 home residential community could still occur.

Under the Build (Action) Alternative, TVA would make available for sale the 4.43 acre TVA parcel for development of the Lindsey Harbor project. TVA would approve the Section 26a request for permission to construct the 23.5-acre man-made lake and 2,450-linear channel and the associated water-use facilities planned for the development. The applicant would

be permitted to dredge approximately 271,040 cubic yards of substrate to construct a new lake and channel access. The new harbor and boat channel would facilitate the 332.8-acre residential development on the applicant's private land including a commercial town center, 20 acres for a new school, pedestrian trails, 374 new homes, and individual and community boat slips. Increased activity in the area associated with the new subdivision and increased boating traffic in the local water near Big Spring Creek embayment would be realized. Under the Action Alternative the applicant would be required to mitigate stream and wetland impacts due to lake and channel construction and has prepared a mitigation plan to address this.

The applicant has identified three dredge options for the proposed channel dredge and prefers the Dredge Option One. While this option impacts a marginally larger wetland area, this dredge option would provide dual channel access as well as the largest channel area from the man-made lake to Gunter'sville Reservoir. TVA believes this option will increase boating safety by allowing greater boating maneuverability.

Impacts Assessment

The EA identified wetland impacts associated with the proposed channel dredge and 23.5-acre lake development. Dredge Option One would result in the largest area of wetland loss while Dredge Option Three would result in the least area of wetland impacts. Approximately 10 acres of wetland impacts have been identified for mitigation purposes.

The proposed development would impact 4,107 linear feet of stream habitat of which 3,164 linear feet would be impounded due to construction of a new harbor and 943 feet would be eliminated due to culverts and fill associated with home and infrastructure construction. The applicant has developed a mitigation plan to offset impacts of the proposed development. The applicant has received a National Pollutant Discharge Elimination System (NPDES) permit to regulate storm water discharges from construction activities. Water quality and aquatic ecology impacts to Gunter'sville Reservoir from the project development will be reduced with the utilization of Best Management Practices (BMPs) for erosion and sediment control. Adherence to the Alabama Department of Environmental Management (ADEM) 401 Water Quality Certification and to requirements in TVA's Section 26a permit would ensure that water quality and aquatic resource impacts are insignificant.

TVA has determined that there is no practicable alternative to constructing the new lake and channel access except within the floodplain. TVA will require all dredged materials to be spoiled above the 100-year floodplain. Should the applicant purchase the TVA property at public auction, TVA would require the applicant to convey a permanent flowage easement (the right-to-flood) on private property up to the 600-msl elevation within 30 days of the land sale date. The flowage easement would preclude any structural development below the 600-msl contour elevation.

Terrestrial animal species known to inhabit the proposed site are all regionally abundant. Some of the forested areas would have to be removed during land clearing and development of the site. However, due to the abundance of the species typically common to the area, anticipated impacts are minor.

Because no rare or endangered animal, plant or aquatic species are located in the general vicinity of the project site, there would be no effect on threatened or endangered species. Properties eligible for the National Register of Historic Places (NRHP) will not be impacted.

Potential cultural resource sites have been avoided through project design. Avoidance of two cultural sites was proposed in lieu of additional archaeological surveys and these potential cultural resource areas will be maintained as "green space." Municipal services will provide water, wastewater, and solid waste management as the city of Guntersville is expected to annex the new subdivision. There will be no hazardous or special wastes generated from the project development.

The development would result in the generation of additional traffic, noise, and general impacts typical from a new residential development; however, these impacts were determined to be insignificant and would occur regardless of the pending approvals due to the close proximity to the city of Guntersville. The scenic attractiveness of the area would change; however, this would occur in an area of the reservoir that is already developed and has the capacity to absorb the additional visual congestion from the proposed development. The potential impacts to recreation resources would be insignificant with the implementation of project design that increases boating safety.

Mitigation

Both on-site and off-site stream mitigation has been proposed by the applicant for the proposed channel dredge and 23.5-acre man-made lake construction. The applicant has agreed to mitigate 10 acres of wetlands impact through the development of a mitigation plan that would purchase credits from the Flint Creek Wetland Mitigation Bank (at a ratio of 2:1). The mitigation plan also estimates that a total of 3,316 credit/feet of mitigation would be required to offset stream impacts. The mitigation plan has identified areas in the upper reach of the project stream where on-site mitigation could occur and at an off-site location on the Payne Farm, located approximately 2 miles upstream (Big Spring Creek) from Guntersville Lake. The developer has located proposed mitigation sites which would provide 4,861 credit/feet, an overage of 1,545 credit/feet. Of these mitigation credits, 1,068 credits would be generated from on-site restoration and 3,793 credits from off-site. The combined projects would restore and permanently protect 8,892 feet of streams. This linear footage is 2.16 times the footage being impacted. TVA will require the applicant to convey a conservation easement to protect the restored streams and will require the proposed wetland and stream mitigation as a condition of project approval.

Adherence to the ADEM 401 Water Quality Certification issued on April 22, 2004, should reduce water quality impacts to insignificant levels. The applicant has also received a NPDES storm water permit to minimize construction related water quality and aquatic ecology impact to Guntersville Reservoir. Further, TVA will require BMPs in the Section 26a permit to help reduce water quality and aquatic resource impacts. The development will utilize existing municipal services for wastewater and solid waste handling.

Public and Intergovernmental Review

TVA published public notices regarding the proposed Lindsey Harbor project during two time periods in the local newspapers. In addition, the project EA was made available for review on TVA web page listing pending TVA projects under review. No significant public opposition to the project was identified. Several city offices issued letters of support for the Lindsey Harbor development project.

The USACE published a joint TVA/USACE Public Notice 03-73 on September 9, 2003. Comments were received from the U.S. Fish and Wildlife Service (USFWS), Alabama

Department of Conservation and Natural Resources (ADCNR), ADEM, and adjoining property owners.

TVA also provided the EA for a 30-day Interagency Review on March 11, 2004. Additional comments were received to the proposal and in response to the Public Notice 03-73 from the USFWS and the ADCNR. The USFWS responded in a letter dated April 22, 2004, that based on the available information, the requirements of Section 7 of the Endangered Species Act of 1973, as amended, are fulfilled. They also concurred with the applicant's plan to mitigate all wetland impacts of the project by purchasing credits at a ratio of 2:1, at the Flint Creek Wetland Mitigation Bank. Both the USFWS and the ADCNR had questions and recommendations about the proposed stream mitigation for the on-site and off-site stream restorations. A major concern by both agencies was the use of *Draft Tennessee Stream Mitigation Guidelines* to develop the proposed mitigation in lieu of guidelines designed specifically for Alabama. Alabama currently has no approved stream mitigation guidelines. Both agencies also had concerns about off-site (Payne Farm) proposed stream flow diversion (splitting of stream flow) from the channelized reach of stream into the old, abandoned channel while maintaining some base flow into the channelized reach, resulting in possible changes to physical, biological, and chemical parameters in the aquatic environment. The agencies requested full flow into the old channel and recommended stream improvements prior to flow diversion.

The applicant provided a Mitigation Plan (Addendum 1 dated May 21, 2004) to supplement the originally proposed Conceptual Mitigation Plan dated January 2004, which addressed these concerns. The ADCNR issued a letter on April 22, 2004, which withdrew an objection to the proposed applicant Conceptual Mitigation Plan. The USFWS provided its concurrence with the plan on June 3, 2004.

An additional comment made by the USFWS was that the Lindsey Harbor development project may be a precedent setting project regarding the use of Residential Access allocated public lands on TVA managed lands and that the scope of the development may not have been adequately evaluated during the Environmental Impact Statement preparation for the *Guntersville Reservoir Land Management Plan*. TVA does not believe the action to be precedent setting since each land use request is evaluated on its own merits.

Conclusion and Findings

TVA has evaluated the environmental impacts of the proposed land use and Section 26a requests for the Lindsey Harbor development and has prepared an EA to document the review. TVA has evaluated the project for compliance with Executive Order 11988 and has determined that there is no practicable alternative for citing the new lake and channel in the floodplain. There are no threatened or endangered species present. Properties eligible for the National Register of Historic Places will not be impacted. Potential cultural resource issues have been avoided through site design. Adherence to the Section 401 Water Quality Certification and TVA Section 26a requirements should reduce water quality impacts to insignificant levels. The requirements of E.O. 11990 have been met since there is no practicable alternative to avoiding wetland impacts. Wetland and stream impacts will be mitigated with the purchase of wetland credits from the Flint Creek Wetland Mitigation Bank and stream restoration at both on-site and off-site locations. Stream protection will be maintained through the conveyance of conservation easements to the state of Alabama. Other traffic and socioeconomic environmental impacts are consistent with residential

development in an increasingly urban setting. TVA does not believe that the resources impacted by the proposed development will be cumulatively impacted.

Based on the EA, we conclude the land use and Section 26a approvals for the lake and channel construction and associated facilities would not be a major federal action significantly affecting the environment.



Jon M. Loney, Manager
NEPA Administration
Environmental Policy and Planning
Tennessee Valley Authority



Date Signed

COMMITMENTS

The following restrictions will be included in TVA's approval of the land request and/or Section 26a permit.

1. The applicant will grant TVA (within 30 days of the land sale date) a flowage easement on private property up to the 600-msl elevation.
2. As mitigation for the stream habitat lost, the applicant will enhance 3,202 feet on site and restore 5,689 feet of streams on the Payne Farm.
3. To mitigate for the loss of wetlands, the applicant will purchase mitigation bank credits for 10 acres of wetland impacts at a minimum 2:1 ratio in the Flint Creek Wetland Mitigation Bank in north Alabama.
4. Archaeological resources (1MS468 and 1MS467) that were determined potentially eligible for listing in the NRHP will be avoided. No ground disturbing activities will be permitted within the boundaries of these archaeological sites, which will be maintained as "green space."
5. The development will be served by connections to a sewage treatment plant. The use of septic systems will not be permitted.
6. All dredged material would be spoiled outside the 100-year floodplain and above the TVA Flood Risk Profile elevation 597.0 feet msl.
7. Dredging activities associated with the channel access to the proposed harbor and landward excavation of the lake harbor shall be conducted during the dry season.
8. A silt curtain or a series of silt curtains, if necessary, shall be installed near the location where the earthen berm will be breached during channel and lake filling after the newly dredged channel and harbor area are excavated.
9. The applicant shall provide documentation to TVA that they have conveyed conservation easements to the state (or another entity agreed upon by TVA and the USACE) for the protection of stream restoration on both the private property and the Payne Farm property.
10. To reduce potential impacts on public recreation and activities, the applicant will obtain a "No wake" zone approval for the proposed channel from the state of Alabama.
11. The pumps designed for use at the sanitary sewer pump stations will be submersible inside an underground valve to minimize noise impacts.