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Project Name: Corinth Water Supply
Project Number: 2005-52

FINDING OF NO SIGNIFICANT IMPACT

TENNESSEE VALLEY AUTHORITY

CORINTH WATER SUPPLY

YELLOW CREEK CHANNEL OF TENNESSEE-TOMBIGBEE WATERWAY
TISHOMINGO COUNTY, MISSISSIPPI

Proposed Action and Need

The city of Corinth Gas and Water Department proposes to construct a water intake along the Tennessee-Tombigbee Waterway (TTW) near Doskie, Mississippi (TTW Mile 440.8). Up to 16.5 million gallons per day (mgd) of water would be withdrawn. The water intake would be located in the Tennessee River Watershed along the former channel of Yellow Creek, and therefore would constitute an obstruction requiring approval under Section 26a of the TVA Act. Water levels in the divide section of the TTW are at the same level as TVA's Pickwick Reservoir. This water derives from the Tennessee River system rather than from the Tombigbee/Mobile Bay watershed and removals for use by the city of Corinth would constitute an inter-basin transfer into the Hatchie River watershed. The project involved impacts to wetlands, public lands, and inter-basin transfer of water. Accordingly, TVA decided to prepare an environmental assessment (EA) to better understand the impacts of the proposal.

Alternatives

The applicant screened two alternatives for water supply and two alternative pumping station and water intake sites. These alternatives either have technical feasibility problems or would result in greater environmental impacts than the final proposal submitted with the permit application. The 19.3-mile water pipeline would be sited along existing road rights of way. Alternative routes would involve siting part of the whole of the pipeline on undisturbed land, resulting in greater adverse impacts to environmental resources. Hence no further consideration was given by the applicant to alternative routes.

The EA prepared by the U.S. Army Corps of Engineers (USACE) evaluated one action alternative and the no action alternative. Under No Action, the request for a water intake and pumping station construction on TTW land would not be approved. The city would likely take other actions to secure a water supply that did not involve a water intake in the TTW. Under the Proposed Action Alternative, the water intake, pumping station, water pipeline, and treatment plant would be constructed as proposed.

Impacts Assessment

Under No Action, no impacts to the aquatic or terrestrial environment in the vicinity of the TTW would take place. However, other actions to procure a water supply would likely be proposed which may have a greater impact, such as construction of a new reservoir, groundwater pumping, or a water intake on another river or reservoir further away than the TTW. Under the Proposed Action, environmental impacts would occur from the placement of fill in 1.72 acres of forested wetlands, temporary turbidity while the intake structure was being constructed, and temporary soil erosion from pipeline construction.

In addition, minor impacts would occur from the withdrawal of 16.5 million gallons per day from the Tennessee River system. Compensation for wetland impacts would take place through the purchase of 5.16 credits from the Pearl River Wetland Mitigation Bank. There would be no impacts to endangered and threatened species or historic properties. The special conditions provided in the Section 10 permit would provide additional assurance that the impacts of land disturbance in the area would be minimized and that the potential for erosion and sedimentation is reduced.

TVA Review

TVA independently evaluated the project and prepared a Supplemental EA to assess the impact of the water withdrawal on Pickwick Reservoir operations. The supplemental analysis determined that the proposed withdrawal rate would result in no change in minimum flow and insignificant changes to reservoir elevations. The diversion would reduce hydropower generation by an insignificant fraction of TVA system generation.

The TVA evaluation affirmed the USACE determinations that impacts to floodplains would be minor and that no historic properties would be affected.

Mitigation

To compensate for the loss of 1.72 acres of forested wetlands at the pumping station site, the applicant would purchase 5.16 credits from the Pearl River Wetland Mitigation Bank. TVA would require use of its general and standard conditions for Section 26a approval and standard water withdrawal conditions, which include the following provisions:

- Maximum peak day water withdrawal from the permitted intake site would be restricted to 16.5 mgd.
- No later than March 1 of each year following issuance of this approval, the city would be required to report to TVA the amount of water withdrawn and used.
- Without written concurrence from TVA, water withdrawal from the Tennessee River system shall not be sold, distributed or otherwise transferred beyond the utility service territory.
- The Section 26a approval expires on November 1, 2026.

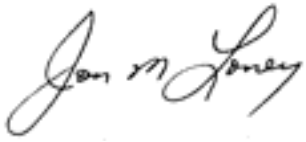
Public and Intergovernmental Review

TVA coordinated the proposed water withdrawal action with the seven Tennessee Valley states for comment in December 2004. These comments reflected different state views about the appropriateness of inter-basin transfer. The state of Tennessee requested an analysis similar to that which would occur under the Tennessee Inter-Basin Transfer Act. TVA has provided this analysis in the Supplemental EA. In addition, the proposed water intake and pipeline was announced to the public and agencies by Joint Public Notice Number MSs04-03147-S, dated January 5, 2006. Comment letters on the public notice were received from the U.S. Fish and Wildlife Service (FWS), National Marine Fisheries Service (NMFS), Mississippi Department of Archives and History (MDAH), and Alabama Office of Water Resources. NMFS stated that they had no comments on the proposed project. FWS indicated that endangered species collection records did not indicate the potential for endangered or threatened species to occur in the impact area of the project. MDAH requested a cultural resource survey of the project area. This information was provided by USACE, and by letter of March 7, 2006, MDAH concurred in a finding of no

historic properties affected. The Alabama Office of Water Resources requested clarification on the division of responsibility between TVA and USACE on the TTW, authority for water supply withdrawals, and information on other withdrawals occurring from the TTW. In addition, information on other water supply withdrawals from TTW was requested. Further, an evaluation of the impacts of this proposed withdrawal on downstream flows, water quality, and other in-stream and out-of-stream uses was also requested. TVA evaluated the impacts of the withdrawal in its Supplemental EA and other environmental impacts are addressed in the USACE EA. By letter of March 2006, the Mississippi Department of Environmental Quality issued the certification required under Section 401 of the Clean Water Act.

Conclusion and Findings

As mentioned above, TVA finds that the project would have no effect on endangered and threatened species and would not affect historic properties. TVA has independently reviewed the USACE EA and determined that the impacts have been adequately addressed. TVA is adopting the USACE EA and supplementing it to discuss the impact of the withdrawal on Pickwick Reservoir operations. Based on review of the USACE EA, TVA concludes that approval of the Section 26a permit for the city of Corinth, Mississippi, at TTW Mile 440.8 would not be a major federal action significantly affecting the environment. Therefore, an environmental impact statement is not required.



November 1, 2006

Jon M. Loney
Senior Manager, NEPA Policy
Environmental Stewardship and Policy
Tennessee Valley Authority

Date Signed