

FINDING OF NO SIGNIFICANT IMPACT

TENNESSEE VALLEY AUTHORITY

FRANKLIN COUNTY WATER SERVICE AUTHORITY – ENVIRONMENTAL ASSESSMENT (EA) AND FINDING OF NO SIGNIFICANT IMPACT (FONSI)--SECTION 26A APPROVAL FOR MUNICIPAL RAW WATER INTAKE AND PERMANENT EASEMENTS OVER 3.25 ACRES OF TVA LAND FOR A RAW WATER INTAKE AND 2.6 ACRES FOR A WATER PIPELINE, APPROVAL FOR USE OF 17.83 ACRES OF BEAR CREEK DEVELOPMENT PROPERTY FOR WATER TREATMENT PLANT, BEAR CREEK RESERVOIR, FRANKLIN COUNTY, ALABAMA

Proposed Action and Need

The Franklin County Water Service Authority (FCWSA) proposes to construct a water intake, water treatment plant, and distribution line on Tennessee Valley Authority's (TVA's) Bear Creek Reservoir. This project is needed to meet the long-range objectives of the FCWSA, which are to create a regional potable water supply system and to provide a safe, adequate, and dependable source of water. Currently, potable water service within Franklin County is provided by ten separate water works systems. Raw water sources within the county consist of both groundwater and surface water sources. In recent years, a severe shortage of water has occurred in the county, and conservation has been mandated.

Alternatives

Under the No Action Alternative, the FCWSA would not secure an additional source of water supply, and transmission mains to connect the various systems within the county, and additional storage tanks would not be constructed. FCWSA would continue to utilize its current system and water sources to meet water demands. The towns of Hodges and Vina would continue to rely on springs as their only water supply source.

Under the Action Alternative, FCWSA proposes to construct a 2.5-mgd water treatment plant on Bear Creek Reservoir with an intake structure. For future needs, the plant would be designed to be easily upgraded to 5.0 mgd by increasing filter rate. Water would be pumped from an intake structure on Bear Creek at mile 77.0 to the proposed treatment plant. The pump station would require three 30-inch casings encased in concrete in an excavated channel to the bottom of the creek channel and would include submersible well pumps. The excavation would be approximately 1,300 cubic yards of material. The proposed water treatment plant would be located on top of the ridge that overlooks the Horseshoe Bend area on Bear Creek Reservoir. This area is located west of County Road 27 and within approximately 1,300 feet of the intake structure. The pipeline from the intake/pumping station would also be constructed to the proposed water treatment plant. From the treatment plant, the main distribution water line would cross Bear Creek at Mile 79.8. FCWSA also proposes to construct a transmission system to deliver the treated water to the Hodges, Vina, Belgreen, and Gravel Hill areas. The most cost-effective transmission system includes 30-inch, 16-inch, 12-inch and 8-inch water lines and two elevation tanks. This alternative would interconnect the FCWSA's system to the distribution systems of Hodges, Vina, Red Bay, Russellville, and Phil Campbell in Franklin County.

To further minimize construction impacts, FCWSA has requested TVA to lower the reservoir elevation to 550 msl so that excavation and placement of concrete could be done in the dry.

Impacts Assessment

Potential impacts to terrestrial resources would be temporarily insignificant. There would be no adverse effects to threatened and endangered species with implementation of the project. With the commitments identified, no impacts are anticipated to rare plant species except for the Carolina gentian. Only a small portion of the population of this species would be impacted by construction. A loss of a portion of a population of a species that is known from 13 other sites in the state is considered insignificant at the state level. The construction has the potential for creating environmental impacts to water quality and aquatic resources. However, with the mitigation measures and TVA General and Standard Conditions identified in the EA, there would be a temporary but insignificant potential for impacts to these resources. No wetlands are present within the project area. For consistency with Executive Order 11988, the proposed activities are considered to be repetitive actions in the floodplain that should result in minor floodplain impacts if the dredged material is spoiled outside of the floodplain. Since the applicant proposes to use submersible pumps in the casings and return the pipeline area to preconstruction conditions after completing the project, there would be no adverse effects to the floodplain.

The proposed treatment plant, water intake, water distribution lines, and water tank locations would have no effect on historic properties. The proposed waterlines are all within existing ROWs. A Phase I cultural resources survey was conducted for two tank sites and TVA has determined that installation of the two tanks would have no effect on any historic property either on or eligible for the National Register. However, the Alabama SHPO stipulated that should artifacts or archeological features be encountered during project activities, work shall cease and the SHPO's office shall be consulted immediately.

The potential recreational impacts for the proposed action are insignificant provided all disturbed areas are repaired and revegetated. In order to reduce potential impacts to the recreational activities at the Bear Creek Educational Center, all construction activities will be coordinated with the BCDA Administrator. Potential impacts to visual resources would be negligible because of the design. The visual impacts would be further reduced by ensuring that the plant would blend in with the surrounding landscape with the use of muted colors, non-reflective materials, and direct lighting. There would be no adverse effect on the environment caused by noise from the operation of the plant and the impact of construction noise would be insignificant. The proposed water treatment plant should help eliminate existing constraints, posed by existing water shortages, on economic development throughout Franklin County. There are no environmental justice concerns for the proposed action.

Commitments

TVA's General and Standard Conditions that would apply to this project are included as Appendix B. The commitments listed here are those that are not considered routine commitments.

1. To reduce potential operational effects to the Bear Creek Environmental Education Center, it will be stated in the permit conditions that the applicant will coordinate all construction activities with the Bear Creek Environmental Education Center to minimize impacts to the operation of this facility. Contact is Shannon McKinney, Administrator for BCDA, (256) 332-4392.
2. The applicant will ensure that concrete structures that will be in the waters of the reservoir will either be formed and poured on the bank and lifted into place or that the

area where the structures will be located will be dewatered before concrete is poured and maintained dry until the concrete is cured. The applicant will notify TVA 24 hours prior to pouring any concrete below elevation 609 at mean sea level.

3. The applicant will submit to TVA final plans applicable to colors, non reflective materials, and lighting in order to ensure the following requirements will be met:

Colors of the building facade and surrounding construction will blend with the surrounding landscape rather than contrast with it (i.e., muted natural colors, such as brown, gray, or gray-green). Non-reflective materials will be used on the building and surrounding construction in order to minimize glare from available viewpoints. Direct, full-cutoff lighting will be used to minimize night light trespass at the nearby education center.

4. The applicant will hold a preconstruction meeting and invite TVA and USACE, so that agency representatives can determine that all contracts and construction plans issued for this project will include the following stipulations:

- As stipulated by the USFWS, that if during any phase of this project, listed or proposed listed species are found, construction activities shall cease and the USFWS will be notified.
- As stipulated by the Alabama SHPO, that should artifacts or archeological features be encountered during project activities, work shall cease and the SHPO's office shall be consulted immediately.

5. To avoid impacts to terrestrial plant resources within the four sites identified in section 3.3:

- For Site A: To avoid potential impacts to a federally listed plant at Site A, the applicant will either;
 - Install the proposed line on the south side of the new Highway 24 in this area,
 - Bore under the site with sufficient vertical and horizontal clearance of the plants (If the applicant chooses to bore under the site, TVA staff will mark the minimum distances for the entrance and exit of the drilling), or
 - Verify the identity of the species in mid-July through August. If it is determined that the species is not the federally listed plant, the line could be installed as planned on the north side of the road with no impacts to threatened and endangered species in this area. If this option is chosen, FCWSA will provide written documentation to TVA for verification prior to soil disturbance in the area. Under this scenario, the decision will be coordinated with U.S. Fish and Wildlife Service. If the listed species is determined to be present, FCWSA will avoid the areas as indicated above.
- For Site B, the applicant will move the pipeline to the west side of Highway 187.
- For Site C, prior to construction, sensitive habitats for state-listed species will be marked by TVA staff. The applicant will limit vehicular, construction equipment, and pedestrian access to these areas by using appropriate signage and barriers.

6. To prevent opportunistic looting of exposed archaeological sites, TVA Police will patrol the reservoir periodically during the 14-day drawdown, provided the national security level does not limit TVA Police's resources in the area.

Public and Intergovernmental Review

On January 8, 2002, the USACE issued Public Notice 02-01 for the proposed action. Responses from the public notice were received from the U.S. Fish and Wildlife Service (USFWS) and the Alabama Historical Commission (AHC). The FCWSA published a public notice in the *Franklin County Times* on March 24 and 31, April 7 and 14, 2002, announcing the proposed action and specifics for two public meetings. The public meetings were held at Hodges Community Center on April 11, 2002, and at Belgreen School on April 25, 2002. TVA distributed the Draft Environmental Assessment for public and interagency review on January 14, 2003. Comments were received from USACE, the Alabama State Historic Preservation Officer (SHPO), U.S. Fish and Wildlife Service (USFWS), and EPA. Their comments are addressed in the Final EA.

Conclusion and Findings

TVA has determined that with the implementation of regular patrol measures, there is no potential to affect historic properties. The project would not likely adversely affect endangered or threatened species. Based on the analyses in the EA, we conclude that the proposed action of withdrawing 2.5 mgd and constructing a water treatment plant and distribution lines would not be a major Federal action significantly affecting the environment. Accordingly, an environmental impact statement is not required.



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



Date Signed