



**Finding Of No Significant Impact
Approval of Facilities Plan
West Warren-Viola Utility District (Warren, Coffee and Grundy Counties), Tennessee
Loan No. DW21 2026-281**

August 28, 2026

The National Environmental Policy Act requires federally designated agencies to determine whether a proposed major agency action will significantly affect the environment. One such major action, defined by the Safe Drinking Water Act (SDWA), is the approval of a facilities plan prepared pursuant to EPA 816-R-97-005, Final Guidelines. In making this determination, the State Revolving Fund Loan Program assumes that all facilities and actions recommended by the plan will be implemented. The State's analysis concludes that implementing the plan will not significantly affect the environment; accordingly, the State Revolving Fund Loan Program is issuing this Finding of No Significant Impact (FNSI) for public review.

The West Warren-Viola Utility District has completed the facilities plan entitled "*Water System Facilities*" dated January 2026. The plan provides recommendations for upgrading the existing Water Treatment Plant (WTP), which serves the West Warren-Viola Utility District in Warren, Coffee, and Grundy Counties, Tennessee. The proposed project consists of improvements to the WTP to include the installation of approximately 150 linear feet of ductile iron raw water line, a T-screen, and an airburst system to access a deeper pool of water across from the existing intake. This project also includes the construction of a new electrical building, the installation of variable frequency drives on existing pumps; and the rehabilitation or replacement of the existing raw water pumps. The total estimated project cost is \$2,500,000. A Drinking Water State Revolving Fund (DWSRF) loan in the amount of \$2,500,000 has been requested for this project. This project will be funded with a \$1,750,000 DWSRF loan and \$750,000 in principal forgiveness that will not have to be repaid by the West Warren-Viola Utility District.

Attached is an Environmental Assessment containing detailed information supporting this action. Comments supporting or disagreeing with this proposed action received within 30 days of the date of this FNSI will be evaluated before we make a final decision to proceed.

If you wish to comment or to challenge this FNSI, email your comment(s) to:

Ms. Felicia D. Freeman, Environmental Manager at felicia.d.freeman@tn.gov
Division of Water Resources, State Revolving Fund Loan Program
Davy Crockett Tower, 9th Floor
500 James Robertson Parkway
Nashville, TN 37243

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A. Proposed Facilities And Actions; Funding Status

The West Warren-Viola Utility District has completed the facilities plan entitled *"Water System Facilities" dated January 2026*. The plan provides recommendations for upgrading the existing Water Treatment Plant (WTP), which serves the West Warren-Viola Utility District in Warren, Coffee, and Grundy Counties, Tennessee. The proposed project consists of improvements to the WTP to include the installation of approximately 150 linear feet (LF) of ductile iron raw water line, a T-screen, and an airburst system to access a deeper pool of water across from the existing intake. This project also includes the construction of a new electrical building, the installation of variable frequency drives (VFDs) on existing pumps; and the rehabilitation or replacement of the existing raw water pumps. The project location is indicated on Figure No. 1 of this Environmental Assessment.

Funding Status

The facilities described above comprise the scope of the Loan No. DW21 2026-281 scheduled for funding in fiscal year 2027. The estimated project costs are summarized in the following tabulation:

<u>PROJECT CLASSIFICATIONS</u>	<u>COSTS (\$)</u>
Engineering Design & Construction Supervision	100,000
Other Engineering Fees	25,000
Resident Inspection	78,000
Construction	2,205,000
Contingencies	92,000
TOTAL	2,500,000
DWSRF Loan	1,750,000
Amount Designated for Principal Forgiveness (Will not have to be repaid)	750,000

The West Warren-Viola Utility District has requested a \$2,500,000 Drinking Water State Revolving Fund (DWSRF) loan for this project. This project will be funded with a \$1,750,000 DWSRF loan and \$750,000 in principal forgiveness that will not have to be repaid by the West Warren-Viola Utility District.

B. Existing Environment

The West Warren-Viola Utility District's service area is located in Warren, Coffee and Gundy Counties in the middle part of Tennessee. Existing environmental features are described below:

Surface Waters

Surface waters within the proposed service area include sections of the Barren Fork River and its tributaries. Designated uses for the Barren Fork River include water supply, irrigation, and recreation. The West Warren-Viola Utility District WTP obtains its drinking water from the Barren Fork River. There are no known sewer discharges upstream of the WTP's intake.

Groundwater

The underlying geologic formation in the West Warren-Viola Utility District's service area consists of the Monteagle Limestone. This formation is generally characterized by limited groundwater

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availability and Poor-quality groundwater deposits. Wells in the area commonly contain sulfur, resulting in discolored water with a noticeable odor. Residents not served by the water distribution system obtain drinking water from private wells, which typically range from approximately 100 to 300 feet in depth, or from natural springs that emerge at the surface. The quality of spring water is generally good; however, disinfection systems and filtration are recommended for residential use. Groundwater sources that do not contain sulfur are typically of good quality but may require softening treatment due to elevated hardness caused by minerals such as calcium and magnesium.

Soils

There primary soil series in the Utility District's service area are Hartsells, Baxter, Guthrie, and Huntington silt loams.

The Hartsells Soil Series consists of fertile and moisture-retentive, well-drained soils that support agriculture, horticulture, and general vegetation.

The Baxter Soil Series consists of moderately well-drained, nutrient-rich soils found on gentle slopes that support agriculture, pasture, gardening, and general vegetation.

The Guthrie Soil Series consists of poorly drained soils underlain by a hardpan. These hydric soils support wetland habitats, conservation areas, and limited pasture use.

The Huntington Soil Series consists of soils that range from well-drained to poorly drained. These soils support agriculture, pasture, conservation areas, and a variety of vegetation depending on drainage conditions.

Topography

The West Warren-Viola Utility District's service area is located in the foothills of the Cumberland Plateau, within a region commonly referred to as the "Highland Rim." The terrain in the service area is generally rolling, with ground surface elevations ranging from approximately 800 to 1,200 feet above mean sea level.

Other Environmental Features

No wild or scenic rivers or unique agricultural, scientific, cultural, ecological, or natural areas were identified in the West Warren-Viola Utility District service area. Limited wetland impacts are anticipated and will be permitted as required. Portions of the Barren Fork River and its tributaries are protected but will not be affected, as the water line installation will follow existing roadways to minimize environmental impacts.

C. Existing Water Facilities

The West Warren-Viola Utility District was established in the 1960s to provide water service to residents of western Warren County, including the community of Viola. The West Warren-Viola Utility District currently serves over 5,600 customers, including two large industrial users that account for a significant portion of water and sewer sales. The system has expanded into portions of Coffee County to provide water service where other providers were unavailable, allowing for continued growth and system improvements.

The existing water treatment plant (WTP), originally constructed in the 1960s, has undergone multiple upgrades, including a major expansion in 2004 that increased capacity of the WTP to 4.5 million gallons per day (MGD). The treatment process includes flocculation, sedimentation, and filtration

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along with a 1.0 million-gallon clearwell and high-service pumps with VFD controls. The current effective treatment capacity is approximately 3.0 MGD, with expansion capability to 4.5 MGD. Raw water is withdrawn from the Barren Fork River through an intake structure equipped with three pumps and then conveyed to the WTP via an 18-inch diameter transmission line. The pumping capacity is approximately 3.0 MGD, with provisions for expansion.

The water distribution system consists of approximately 480 miles of water mains ranging in size from 2 inches to 18 inches in diameter. The system includes approximately 3 miles of 18-inch diameter ductile iron pipe, 25 miles of 12-inch diameter ductile iron pipe, 25 miles of 8-inch diameter poly vinyl chloride (PVC) pipe, 180 miles of 6-inch diameter PVC pipe, 180 miles of 4-inch diameter PVC pipe, 10 miles of 3-inch diameter PVC pipe, and 67 miles of 2-inch diameter PVC pipe. The system is supported by four storage tanks with a combined capacity of approximately 3.7 million gallons and one booster pumping station with a capacity of approximately 350 gallons per minute, providing adequate service and pressure throughout the distribution network. Improvements in recent years have included the installation of larger transmission mains and additional storage capacity to support continued growth, particularly in Coffee County.

D. Need For Proposed Facilities And Actions

Historical WTP flow data has indicated that the West Warren-Viola Utility District has experienced an adequate and reliable supply of drinking water. However, the existing raw water intake has experienced increasing operational challenges over the past 15 years due to mining and creek stone dredging activities in the Barren Fork River adjacent to the intake. These activities have permanently shifted the river channel away from the existing intake, resulting in low-water conditions, silt accumulation, and algal growth at the intake structure. In addition, the district relies on a single raw water source, and although emergency interconnections exist with the City of McMinnville and the Warren County Utility District, these systems cannot reliably provide sufficient water to replenish the district's storage facilities during peak demand periods or emergency conditions. The proposed project will assist the West Warren-Viola Utility to improve raw water withdrawal during low-flow conditions and the long-term operational integrity of the intake and treatment system by addressing the effects of channel migration, sediment accumulation, and algal growth at the existing intake structure. The proposed improvements will also provide customers with continuous safe and dependable drinking water to meet their basic needs.

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EXISTING AND PROJECTED FACILITY CONDITIONS

	<u>POPULATION</u>	
	<u>EXISTING (2026)</u>	<u>PROJECTED (2046)</u>
	Planning / Service Area	Planning / Service Area
Service Area (Coffee County)	62600 / 7,000	75,500 / 10,000
Percent Served	11.18 %	13.25%
Service Area (Warren County)	43,100 / 7,830	45,600 / 8,000
Percent Served	18.17 %	17.54 %
Service Area (Grundy County)	14,100 / 180	13,800 / 300
Percent Served	1.28%	2.17%
Total Service Area	15,010	18,300
Percent Served	12.53 %	13.57 %
<u>WATER NEEDS (gpd)</u>	<u>EXISTING (2026)</u>	<u>PROJECTED (2046)</u>
Residential	700,000	1,000,000
Commercial	125,000	175,000
Industrial	380,000	425,000
Loss	465,000	500,000
TOTAL	1,670,000	2,100,000

E. Alternatives Analysis

Several alternatives, including a "No-action" alternative, were evaluated for reliable water delivery, maintaining water quality, and supporting future growth needs in the January 2026 facilities plan. A summary discussion of the evaluation of each alternative for water system improvements and the selection of the recommended plan follows:

No-Action

The No-Action alternative involves no changes to the raw water intake system. However, this approach does not address the water treatment plant's increasing challenges related to reliance on a single water source, limited supplemental supply capacity, and aging infrastructure. It would likely result in continued operational challenges. Therefore, this alternative is rejected.

Alternate Location for the Intake Structure

This alternative consists of constructing a new raw water intake structure at a different location and installing a new raw water transmission main to connect the intake to the existing raw water transmission line serving the water treatment plant. However, this would require extensive

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permitting, additional water line extensions, and coordination with property owners. This alternative is not the most cost-effective and is rejected.

Purchase Water From Another Supplier

This alternative includes obtaining water from another wholesaler, specifically the City of McMinnville or the Warren County Utility District. It would require the construction of a new water transmission main to connect the selected wholesaler to the West Warren-Viola Utility District system, along with necessary upgrades and potential capacity improvements to the wholesaler's water treatment plant.

Construction of new transmission mains and treatment plant expansions could affect streams, land, and habitats. This would also require extensive permitting, crossing streams, additional water line extensions, avoiding existing utilities, and coordination with property owners. Easements would be needed across private properties, with some areas potentially classified as prime farmland. Using an existing intake helps reduce some effects, but expansion of the supplier's WTP would still be required. This alternative is not the most cost-effective and is rejected.

Upgrade Existing Raw Water Intake

This alternative consists of installing approximately 150 LF of ductile iron raw water line, a T-screen, airburst system, and variable frequency drives (VFDs) on existing pumps; and rehabilitation or replacement of the existing raw water pumps. Construction is expected to have minor environmental effects. Erosion and sedimentation will be controlled with silt barriers and vegetation stabilization; stormwater best management practices will be implemented; dust will be minimized; and clearing will be timed during winter months to protect biological resources. No new rights-of-way are required, as all property is owned by West Warren-Viola Utility District. This alternative is sustainable because it does not involve the development of a new water source or treatment facility, and implementing VFDs to improve pump efficiency further supports sustainability. This alternative is the most cost effective and was selected.

F. Environmental Consequences; Mitigative Measures

The environmental benefits of this project will be the improvement of water quality conditions in the area, and an improvement to public health. By improving the reliability of the raw water intake system and reducing the potential for service interruptions during periods of low flow, the project will help ensure a consistent supply of high-quality water for treatment and distribution.

During the construction phase, short-term environmental impacts due to noise, dust, mud, disruption of traffic, runoff of silt with rainfall, etc., are unavoidable. Minimization of these impacts will be required; however, many of these minimization measures will only be temporary. Using the following measures to prevent erosion will minimize impacts on the environment:

1. Specifications will include temporary and permanent measures to be used for controlling erosion and sediment.
2. Soil or landscaping maintenance procedures will be included in the specifications.
3. The contractor will develop an Erosion Control Plan. It should contain a construction schedule for each temporary and permanent measure controlling erosion and sediment. It should include the location, type, and purpose for each measure and the times when temporary measures will be removed or replaced.

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These measures, along with requiring the contractor to return the construction site to as-good-as or better-than its original condition, will prevent any adverse impacts due to erosion.

The West Warren-Viola Utility District shall obtain applicable Section 10/404 Permits from the United States Army Corps of Engineers (USACE) to meet the requirements of wetlands protection and stream crossing statutes.

The West Warren-Viola Utility District shall conduct an in-stream survey for the state listed and threatened Flame Chub (*Hemitemia flammea*), within the project area that includes the Barrens Fork River.

G. SOURCE CONSULTED

Sources consulted about this project for information or concurrence were:

1. Tennessee Department of Agriculture
2. Tennessee Department of Economic and Community Development (ECD)
3. Tennessee Department of Environment and Conservation (TDEC), Division of Air Pollution Control (DAPC)
4. Tennessee Department of Transportation (TDOT)
5. Tennessee Historical Commission
6. TDEC, Division of Archaeology (DA)
7. Tennessee Geological Survey
8. TDEC, Division of Solid Waste Management (DSWM)
9. TDEC, Division of Water Resources (DWR)
10. Tennessee Wildlife Resources Agency (TWRA)
11. United States Army Corps of Engineers (USACE)
12. United States Fish and Wildlife Service (USF&W)
13. West Warren-Viola Utility District
14. Warren, Coffee and Grundy Counties
15. James C. Hailey & Company

H. SPECIAL CONDITIONS

The State Revolving Fund loan agreement will have the following special conditions:

1. The West Warren-Viola Utility District shall conduct an in-stream survey for the state listed and threatened Flame Chub (*Hemitemia flammea*), within the project area that includes the Barrens Fork River. Survey results must be submitted to the SRF program via MyTDEC Portal at: [MyTDEC](#). If any of the stated species are found, the West Warren-Viola Utility District must consult with the TN Wildlife Resources Agency on the next steps to mitigate activities that would affect the threatened species. For more information, please contact Bobby Brown, TWRA, Region III Aquatic Habitat Biologist at Bobby.Brown@tn.gov.