

FINDING OF NO SIGNIFICANT IMPACT TENNESSEE VALLEY AUTHORITY

SAULPAW MILL DAM REMOVAL McMINN COUNTY, TENNESSEE

The Tennessee Valley Authority (TVA) proposes to remove the Saulpaw Mill Dam, a historic run-of-river low head dam on Oostanaula Creek near the confluence of the creek and the Hiwassee River at Hiwassee River Mile 19.8 in Calhoun, McMinn County, Tennessee. The dam was constructed in 1869 to power a flour mill. TVA removed the flour mill in 1940 during the construction of Chickamauga Dam and Reservoir, which eventually impounded the adjacent Hiwassee River and part of the dam site. The dam, constructed from large limestone blocks, is approximately 60 feet wide and 16 feet tall. A CSX railroad crossing and the County Road 950 (Hiwassee Road) crossing of Oostanaula Creek are located approximately 30 feet and 80 feet upstream of the dam, respectively. The dam is eligible for listing on the National Register of Historic Places (NRHP).

The Saulpaw Mill Dam is no longer being used for its intended purpose (operation of the flour mill) and serves no other practical purpose. It presents a potential hazard to recreational users at the dam site and on the lower Oostanaula Creek and impedes the movement of fish and other aquatic organisms. TVA, as part of a multi-organization effort identifying stream barriers in the region, has identified the Saulpaw Mill Dam as a candidate for removal. The purpose of the proposed removal of the dam is to provide safer conditions for the recreating public and improve aquatic habitat and habitat connectivity for stream fishes. The project is needed because Saulpaw Mill Dam creates potentially hazardous conditions by acting as an uncontrolled spillway capable of producing dangerous recirculating currents, large hydraulic forces, and other hazardous conditions sufficient to trap and drown victims immediately downstream from the continuously flowing water over the crest of the dam. Additionally, the project is needed because Saulpaw Mill Dam is presently acting as a barrier to aquatic life passage upstream.

The potential effects of the proposed removal of the dam are described in an environmental assessment (EA) incorporated herein by reference.

Alternatives

The subject EA evaluates two alternatives: Alternative A, the No Action Alternative and Alternative B, the removal of the Saulpaw Mill Dam.

Alternative A – No Action Alternative

Under the No Action Alternative, TVA would not perform any modification of the Saulpaw Mill Dam and would continue to maintain the dam as needed. This alternative would not eliminate potentially unsafe conditions created by the Saulpaw Mill Dam or remove barriers to aquatic life movement.

Alternative B – Removal of the Saulpaw Mill Dam

Under this alternative, TVA would remove the Saulpaw Mill Dam by using a crane or excavator on a work barge to remove the large limestone blocks comprising the dam. The blocks comprising the right and left dam abutments, as well as dam blocks extending below the creek

bed would be left in place. Prior to removing the dam blocks, TVA would stabilize the streambanks at the railroad bridge abutments with riprap. TVA would also install riprap and concrete blocks around the railroad bridge pier to prevent potential head cutting and scour due to the altered stream flow following the dam removal. If determined necessary, TVA would either install a temporary cofferdam to dewater a 1,500 square foot area or use an airlift dredge to remove sediment to facilitate this in-water work. Following their removal, a sample of the dam blocks would be provided to the City of Calhoun for use in future educational displays. Any blocks too large or damaged would be disposed of at a commercial facility. All of the dam removal activities would occur within an approximately 0.7-acre area which would be graded and cleared of vegetation as necessary prior to other activities. Following the completion of dam removal activities, the site would be revegetated. The sediment accumulated behind the dam would be allowed to naturally disperse. The dam removal would require approximately seven days, subject to weather, to complete.

Preferred Alternative

TVA's preferred alternative is Alternative B – Removal of the Saulpaw Dam.

Environmental Assessment

In the EA, TVA analyzed potential impacts to the following environmental and socioeconomic resource areas:

- Land Use
- Soils and Prime Farmland
- Geology and Groundwater
- Surface Water and Water Quality
- Floodplains
- Wetlands
- Vegetation
- Wildlife
- Aquatic Ecology
- Threatened and Endangered Species
- Safety
- Natural Areas, Parks, and Recreation
- Air Quality
- Greenhouse Gases and Climate Change
- Noise and Vibration
- Transportation
- Cultural Resources
- Visual Resources
- Solid and Hazardous Waste
- Socioeconomics and Environmental Justice

The proposed removal of the Saulpaw Mill Dam would have no or negligible effects to land use, soils and prime farmland, geology, groundwater, air quality and greenhouse gas emissions and climate change. It would result in minor, short-term adverse effects to water quality and aquatic life, during dam removal actions, primarily from mobilization of accumulated sediment immediately upstream of the dam. Analyses of this sediment for a range of contaminants showed that their concentrations were either below detection limits, at levels below those likely to cause effects, or within naturally occurring levels in regional soils. Over the long term, the dam removal would have beneficial effects to local water quality and aquatic life.

The removal of the dam would not adversely affect floodplains or floodplain functions. Floods on the Hiwassee River would control flood elevations on Oostanaula Creek up to at least mile 0.9; therefore, the removal of the dam would likely result in no changes in the 100-year or 500-year floodplains or flood elevations along lower Oostanaula Creek, and would therefore be consistent with Executive Order 11988, Floodplain Management. Wetlands would not be directly affected. The proposed action is consistent with Executive Order 11990 on wetlands. Effects on vegetation and wildlife would be minor and short-term and threatened and endangered species would not be adversely affected.

The proposed dam removal would not result in the generation of hazardous waste and would have minor effects from the disposal of solid waste, primarily consisting of the components of the dam. The effects of the very small increase in traffic on local roads during dam removal activities would be negligible. Similarly, the off-site effects of noise from dam removal activities would be negligible. Public safety would not be adversely affected during dam removal activities and there would be long-term beneficial effects from the removal of the potential hazards presented by the dam.

Saulpaw Mill Dam is known in the local area for its scenic, waterfall-like appearance. This would be eliminated by the removal of the dam, resulting in a moderate visual impact. Once dam removal activities are completed, the area would have a somewhat more natural appearance. The dam removal would also alter the recreational use of the site, a popular area for fishing, swimming, picnicking and launching small boats. Effects on nearby parks would be negligible. The dam removal would result in minor, local beneficial effects. Effects on communities with environmental justice concerns would be negligible and short-term.

Saulpaw Mill Dam is eligible for listing on the National Register of Historic Places and its removal would adversely affect a historic property. TVA developed mitigation measures in consultation with the Tennessee State Historic Preservation Office and the Charleston-Calhoun-Hiwassee Historical Society (Historical Society) through a Memorandum of Agreement (MOA). The associated federally recognized Tribes declined to participate in the MOA process. Mitigation will include providing the Historical Society a traveling interpretive display detailing the history and significance of the site that can be used for educational purposes. Additionally, TVA will provide the City of Calhoun, via the Historical Society, a sample of the dam blocks to be used for educational purposes alongside the traveling display. Any blocks too large or too damaged will be disposed at a TVA approved commercial disposal facility.

Public Involvement and Intergovernmental Review

A draft of the EA was issued for a 30-day public review and comment period in November 2023. TVA subsequently held a second 30-day public comment period in February 2024. During this second comment period, TVA hosted an open house in Calhoun to discuss the proposed dam removal. The availability of the draft EA, both comment periods, and the open house were announced on the TVA website and in local newspapers. The draft EA was also transmitted to state, federal, and local agencies.

TVA received 55 written comments, including a petition with 105 signatures, during the two comment periods. TVA also received an online petition with over 600 signatures. The majority of the comments, as well as the two petitions, opposed the removal of the dam. The most frequently mentioned reason for this was the historical significance of the dam. Other reasons included recreational use of the dam site and the scenic attractiveness of the dam. About a quarter of the comments supported removal of the dam, primarily because of the predicted improvement in the size and diversity of the aquatic community in Oostanaula Creek. TVA carefully reviewed all comments and responded to them in the EA.

Best Management Practices and Routine Measures

TVA would implement the following best management practices and routine environmental protection measures identified in the EA. In addition, all applicable permits would be acquired and permit-related mitigation measures and best management practices would be implemented to further minimize impacts and restore areas disturbed during construction.

Soils

- TVA would install BMPs for sediment and erosion control prior to implementation of any land disturbance activities. These controls would remain in place until the site is permanently stabilized. Erosion and sediment controls would be installed or implemented in accordance with the provisions of the Tennessee Erosion & Sediment Control Handbook (TDEC 2012).
- TVA would develop a Stormwater Pollution Prevention Plan that identifies mitigation measures and BMPs that would be implemented during construction to reduce stormwater runoff if greater than one acre of ground disturbance is expected.
- Fugitive air and dust emission from construction activities would be reduced and controlled through the implementation of construction BMPs, including the following:
 - wetting demolition areas, covering waste or debris piles, using covered containers to haul waste and debris as appropriate; and
 - maintaining engines and equipment in good working order to improve fuel efficiency and reduce potential carbon monoxide (CO) emissions from poorly operating engines and equipment.

Water Resources

- TVA would comply with the terms of the TDEC General National Pollutant and Discharge Elimination System Permit, TDEC Aquatic Resource Alteration Permit, and USCOE Clean Water Act Section 404 permit.

Waste Management

- TVA would comply with TDEC regulations regarding the proper management of hazardous materials (not expected to be encountered) and disposal of waste materials.
- Any reportable spills and subsequent cleanup related to the Project would be addressed in accordance with the requirements outlined in the Project Spill Prevention, Control, and Countermeasures Plan and Waste Management Plan. Fill materials would be clean and free of contaminants.

Transportation/Navigation

- Construction activities would primarily occur during daylight hours. A traffic plan would be established if needed including measures such as posting a flag person during heavy commute periods to manage traffic flow and prioritizing access for local residents to minimize potential adverse impacts to traffic and transportation.
- All work on, over, or adjacent to the CSX right-of-way would be done in accordance with the CSX special provisions found within the CSX public projects manual.
- Barges/equipment would be lit or have reflective tape for nighttime visibility.
- Flagging protection would be required whenever construction personnel or equipment are within or likely to be within 50 feet of the live track or other track clearances specified by CSX or over tracks.

Biological Resources

- TVA would return areas of temporary disturbance within the Project Site to pre-construction conditions and would stabilize these areas with native or non-invasive plant species vegetation upon construction completion.

- Only the minimum quantity of riprap and jacks would be used that would still meet project objectives.

Floodplains

- An evacuation plan would be developed for removal of flood-damageable equipment and materials from the floodplain in the event of a flood or high-flow event.
- Only the minimum amount of grading would be done, and excavated material would be spoiled on land outside the 500-year floodplain and above the 500-year flood elevation of the Hiwassee River.

Mitigation

TVA would implement the following mitigation measures to avoid, minimize, or mitigate adverse impacts on the environment resulting from the removal of the dam.

- Tree removal would occur in winter (November 15 to March 30) when listed bat species are not expected to be on the landscape.
- Adjacent recreational areas would be notified of construction commencement and duration.
- CSX would be notified a minimum of 30 days prior to construction to allow for scheduling of the railroad flagman.
- Oil booms would be deployed around the work barge and anchored to the abutments for spill protection and restriction of recreational boat access.
- TVA would notify the USACE and USCG so that a Notice to Navigation and a Broadcast Notice to Mariners can be issued to the commercial navigation industry.
- Pursuant to the MOA between TVA the Tennessee State Historic Preservation Office and the Charleston-Calhoun-Hiwassee Historical Society (Historical Society), TVA will provide the Historical Society a traveling interpretive display detailing the history and significance of the site that can be used for educational purposes. Additionally, TVA will provide the City of Calhoun, via the Historical Society, a sample of the dam blocks to be used for educational purposes alongside the traveling display. Any blocks too large or too damaged will be disposed at a TVA approved commercial disposal facility.

Conclusions and Findings

Based on the findings listed above and the analyses in the EA, we conclude that the proposed removal of the Saulpaw Mill Dam would not be a major federal action significantly affecting the environment. Accordingly, an environmental impact statement is not required. This finding of no significant impact is contingent upon adherence to the permit conditions and mitigation measures described above.

Dawn Booker, Manager
Senior Manager, NEPA Compliance
Environment & Sustainability
Tennessee Valley Authority

Date Signed

