

FINDING OF NO SIGNIFICANT IMPACT
TENNESSEE VALLEY AUTHORITY
RACCOON CREEK WATERFOWL POND – UNIT 4

The Tennessee Valley Authority (TVA) proposes to authorize and provide partial funding for the construction of a fourth impoundment within the Raccoon Creek Wildlife Management Area (WMA). The unit would be filled in the fall and allowed to retain water over the winter months (generally November through March), providing foraging habitat and hunting opportunities over approximately 37.2 acres for water fowl. A mobile gas or diesel pump would be installed at the river's edge and would be utilized to fill the impoundment with an above ground hose. In the spring, the unit would be drained and managed for year-round vegetation cover. The day-to-day operation of the fourth impoundment would be incorporated into the existing Raccoon Creek WMA and would be the responsibility of the Alabama Department of Conservation and Natural Resources (ADCNR).

The Raccoon Creek WMA has a total land acreage of 2,894 acres. Within the boundary of this area is the 385-acre Raccoon dewatering project, which is drained each spring and planted with grain crops to attract ducks and geese. The Raccoon Creek WMA area consists of 3 "impoundments," which are large scale, man-made impoundments which can be flooded and dewatered independent of river operations. The impoundments also contain associated levees and drainage ditches which are used to manipulate the water levels in the units.

The proposed project is a continuation of the long-term partnership between TVA and the ADCNR to manage wildlife habitat and recreation on these public lands. The proposed project would establish new habitat for wintering waterfowl and wetland species, increase associated recreational opportunities in the area, and enable ADCNR to more easily manage new areas for those species. The proposal also supports and is consistent with TVA's mission of environmental stewardship and the objectives for wildlife habitat and recreation management in the TVA Natural Resources Plan (2011).

Alternatives

The proposed action is the subject of an environmental assessment (EA) prepared by TVA. The EA addresses two alternatives. Under the No Action Alternative, TVA would not permit nor partially fund the construction of a fourth impoundment within the Raccoon Creek WMA by ADCNR. A fourth impoundment would not be built and the location where it would have been placed would continue to be managed for commercial agricultural purposes.

Under the Proposed Action Alternative, TVA would permit and partially fund the construction of the new impoundment within the Raccoon Creek WMA. To construct this new impoundment, an existing levee would be modified and extended. Approximately 2,200 feet of new levee would be constructed to create a total length of 5,400 feet and additional fill would be added to the existing levee to increase its cross section size. The reworked levee would have a top width of 4 feet, a toe width of 25 feet, and an average height of approximately 3.3 feet. Side slopes would be approximately 30%, or 3 foot high for every 10 feet in horizontal length. The total disturbed area for the new levee construction would be approximately 3.4 acres. An estimated 4,500 cubic yards of fill material would be needed to construct the new levee. Fill material would be trucked to the site from an off-site, commercial source.

The new levee would create a 37-acre impoundment. The average water depth of the unit when filled would be approximately 1.75 feet deep, with a maximum depth of 3.3 feet. TVA proposes to utilize a portable gas or diesel powered pump to fill the unit. The pump would be placed near the river bank on the northern end of the unit and a fence would be installed around the pump to discourage vandalism. A temporary hose would be used to transfer the water from the pump to the impoundment. A water control structure, which would allow water to flow only out of the pond, would dewater the pond. The structure would be appropriately sized to dewater the pond while not causing erosion of the slough.

The proposed project would be built by the ADCNR. Operation of the fourth impoundment would be incorporated in the overarching management plan for the Raccoon Creek WMA, which details the use and operation of the WMA. Under the proposal, the unit would be filled with water during the fall (approximately November), which would provide foraging habitat for various waterfowl species. During the spring (approximately March), the unit would be drained. The current agricultural practices of no-till farming would be ceased and the field would be managed for year round vegetative cover.

Impacts Assessment

In the EA, TVA identified relevant environmental issues and reviewed the potential impacts of implementing the project. TVA analyzed potential impacts to the following environmental resource areas:

- Wildlife
- Threatened and endangered species
- Wetlands
- Historic and Archaeological Resources
- Floodplains
- Recreation
- Land Use and Prime Farmlands
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TVA determined that the proposed action would have no or negligible impacts on air quality; aquatic ecology; solid waste; navigation; noise; transportation; visual resources; surface water; and socioeconomics and environmental justice.

Generally, TVA's analysis found that most environmental resources would be minimally affected by the proposed action. After a review of the proposed action by TVA subject matter experts, the project was found to have no effect to threatened or endangered terrestrial and aquatic species and insignificant effects to non-listed wildlife species. The project would have insignificant effects to prime farmlands with converting 1.25 acres with the expansion of the levee. With specific mitigation measures, impacts to cultural resources were determined to be insignificant. Recreation opportunities are expected to increase with the completion of the dewatering unit.

The proposed action would result in the filling of 0.29 acres of wetlands with the expansion of the existing levee. However, by expanding the levee, approximately 7 acres of forested wetlands would be enhanced by increasing the duration and depth of flooding within the boundaries of the impoundment. The project was found to be consistent with Executive Order 11990 (Wetlands).

The completion of the project would result in the loss of approximately 14.1 acre-feet of flood control storage in Guntersville Reservoir. The project would meet all of the criteria in the guidelines for waterfowl subimpoundments. Based on TVA analysis, the loss of flood storage

has been minimized while still meeting project objectives, which would be consistent with the TVA Flood Control Storage Loss Guideline. Additionally, there would be no loss of Power Storage. Therefore, Flood Risk has no objection to the proposed project and there would be no significant impacts to floodplains. The proposed action was also found to be consistent with Executive Order 11988 (Floodplain Management).

Public Involvement and Intergovernmental Review

TVA posted the draft EA on its website for a 10-day period and requested the public to submit comments via mail or email. TVA did not receive any comments during the comment period.

As required under Section 106 of the National Historic Preservation Act, TVA consulted with the appropriate recognized Native American tribes and the State of Alabama Historic Preservation Office (SHPO) concerning potential impacts. In a letter dated March 29, 2017, the Alabama SHPO concurred with TVA's finding that no historic properties would be affected. The Shawnee Tribe and The Eastern Band of Cherokee Indians both concurred that with mitigation measures implemented, no cultural resources should be adversely impacted.

Prior to implementing the proposal, Section 401 and Section 404 permits would need to be secured from the Alabama Department of Environmental Management (ADEM) and the U.S. Department of the Army, Corps of Engineers (USACE) respectively, to address potential impacts to jurisdictional waters, including wetlands, under the Clean Water Act.

Mitigation Measures

TVA would implement the routine environmental protection measures listed in this EA. In addition to those routine measures, the following non-routine measures would be implemented to reduce the potential for adverse environmental effects.

- **Historic and Archaeological Resources:** The following mitigation measures were developed in consultation with the Alabama State Historic Preservation Office to avoid and minimize impacts to identified cultural resources.
 - In order to decrease the potential for erosion which could expose identified archaeological sites,, the area within the impoundment would be taken out of no till agriculture. Native vegetation would be planted and managed allowing for year round vegetation cover. The vegetative cover, along with the levee and peninsula crest, would help to dampen waves, current, and wind fetch and therefore is unlikely to cause increased erosion affecting the archaeological sites.
 - To protect identified archaeological sites, the water control structure (WCS) for draining the pool would be appropriately sized to produce a uniform, insignificant rate of fall. The design capacity of the WCS would be intentionally limited to avoid discharging excessive energy into the slough that may produce surface scouring and expose cultural resources.
 - In order to ensure that the sites historic properties would not be inadvertently adversely affected during the construction of the levee, the sites would be flagged and no heavy equipment or laydown areas would be allowed within these areas. The portable pump used to fill the dewatering pond and access to the river would be placed outside the boundaries of site 1JA1197 and 1JA145.

- To protect identified archaeological sites, construction must be conducted when the land is firm and dry, and construction activities would stay within the eastern edge of the site along the tree line.
- Threatened and Endangered Species: The following mitigation measures were developed to ensure that there would be no effect to threatened and endangered aquatic species by the operation of the portable pump used to fill the impoundment.
 - To prevent aquatic species from being harmed and inadvertently pulled into the intake of the portable pump, a floating intake and mesh screen shall be installed on a temporary pump while to fill the impoundment.

Conclusion and Findings

Based on the findings and the analyses in the EA, we conclude that the proposed action to permit and partially fund the construction of an additional impoundment within the Raccoon Creek Wildlife Management Area would not be a major federal action significantly affecting the environment. Accordingly, an environmental impact statement is not required.



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Date Signed