

## ADOPTION AND FINDING OF NO SIGNIFICANT IMPACT TENNESSEE VALLEY AUTHORITY MAMMAL DAMAGE MANAGEMENT IN MISSISSIPPI

### Introduction

The U.S. Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Wildlife Services (hereafter referred to as “WS”), conducts programs to resolve or prevent damage from animals to agricultural resources, natural resources, and property, including threats to human safety. WS conducts its activities at the request of, and in cooperation with, other federal, state, tribal, and local agencies, as well as private organizations and individuals.

The Tennessee Valley Authority (TVA) contracts with WS to provide mammal damage management on TVA properties and facilities in Mississippi, including combustion turbine sites and solar facilities. TVA also owns or maintains substations and switching stations and the associated transmission lines and right-of-way easements. Further, TVA operates recreation areas, including campgrounds, day-use areas, and boat launching ramps.

TVA proposes to continue to contract with WS for mammal damage management services on TVA facilities and properties including reservoir lands and property easements. Mammal damage and threats of damage have occurred primarily to property. Woodchucks and armadillos burrowing into earthen levees and dikes used to impound water can compromise the integrity of the structures and threaten the safety of people downstream from those impoundments. Raccoons, opossums, foxes, coyotes, bobcats, feral cats, and feral dogs all reside on TVA lands. These animals frequently become overpopulated or lose their fear of humans, causing zoonotic disease transmission and aggressive behavior toward humans. Mammals commonly enter substations and generation facilities and threaten the interruption of power by chewing on various plastic components or climbing into areas of electric current and shorting out electrical circuits. Contracting with WS in Mississippi would meet TVA’s needs for managing mammal damage, and the use of WS staff would be encouraged. On occasions when it may benefit TVA to perform this work independently, contingent upon site-specific reviews, TVA staff would use the same method(s) as WS described in Appendix B of the 2025 *Mammal Damage Management in Mississippi Environmental Assessment* (WS-Mississippi EA).

The WS-Mississippi EA documents the potential environmental effects of continuing its mammal damage management activities in the state of Mississippi and a finding of no significant impact (FONSI) was issued on September 8, 2025. Prior to the completion of the final WS-Mississippi EA and FONSI herein, WS conducted its integrated mammal damage management actions pursuant to a 2015 *Mammal Damage Management in Mississippi EA* and FONSI. TVA adopted the 2015 WS-Mississippi EA and issued its own FONSI on April 23, 2015. The 2025 WS-Mississippi EA and FONSI replace the 2015 WS-Mississippi EA and FONSI.

USDA prepared the programmatic environmental impact statement (EIS) entitled “Animal Damage Control Program: Final Environmental Impact Statement (revised)” in 1997 to document the potential environmental consequences of such activities. The EA tiers from the 1997 USDA programmatic EIS and was developed in accordance with the 2023 Fiscal Responsibility Act and relevant National Environmental Policy Act (NEPA) implementing

regulations for NEPA compliance. Because of TVA's involvement with WS concerning mammal damage control and management, TVA cooperated in the preparation of the Mammal Damage Management in Mississippi EA. The WS-Mississippi EA is incorporated by reference. TVA has independently reviewed the 2025 Mammal Damage Management in Mississippi EA and found it to be adequate. TVA is therefore adopting the WS-Mississippi EA.

### **Purpose and Need for Action**

The purpose of the proposed action is to manage mammal damage to agricultural resources, property, and natural resources and reduce threats to human health and safety. Although native mammal species have beneficial effects, they can also cause damage to valued resources.

Some animal species have adapted to and thrive in human-altered habitats, and these species can cause conflicts with people. Such conflicts frequently lead to requests for help in reducing damage to property and threats to human safety. People may seek assistance from WS to address this damage. Therefore, the need for action stems from requests WS receives to prevent or reduce animal-related impacts. TVA also continues to experience damage and threats of damage associated with mammals at facilities or properties they own or manage in Mississippi. TVA may request the assistance of WS to manage damage or threats of damage at those facilities and properties.

Based on past and anticipated requests, WS has identified the following mammal species most likely to cause damage in Mississippi. Details on the need for action to manage conflicts with these species are provided in Section 1.2 of the WS-Mississippi EA.

### **Mammal Species Most Likely to Cause Damage**

| <b>Common Name</b>         | <b>Scientific Name</b>           |
|----------------------------|----------------------------------|
| American black bear        | <i>Ursus americanus</i>          |
| Big brown bat              | <i>Eptesicus fuscus</i>          |
| Bobcat                     | <i>Lynx rufus</i>                |
| Brazilian free-tailed bat  | <i>Tadarida brasiliensis</i>     |
| Coyote                     | <i>Canis latrans</i>             |
| Eastern cottontail         | <i>Sylvilagus floridanus</i>     |
| Evening bat                | <i>Nycticeius humeralis</i>      |
| Feral cat                  | <i>Felis catus</i>               |
| Feral dog                  | <i>Canis familiaris</i>          |
| Feral swine                | <i>Sus scrofa</i>                |
| Fox squirrel               | <i>Sciurus niger</i>             |
| Gray fox                   | <i>Urocyon cinereoargenteus</i>  |
| Eastern gray squirrel      | <i>Sciurus carolinensis</i>      |
| Nine-banded armadillo      | <i>Dasypus novemcinctus</i>      |
| Rafinesque's big-eared bat | <i>Corynorhinus rafinesquei</i>  |
| Raccoon                    | <i>Procyon lotor</i>             |
| Red fox                    | <i>Vulpes vulpes</i>             |
| Southern flying squirrel   | <i>Glaucomys volans</i>          |
| Southeastern myotis        | <i>Myotis austroriparius</i>     |
| Silver-haired bat          | <i>Lasionycteris noctivagans</i> |
| Striped skunk              | <i>Mephitis mephitis</i>         |
| Swamp rabbit               | <i>Sylvilagus aquaticus</i>      |
| Virginia opossum           | <i>Didelphis virginiana</i>      |
| White-tailed deer          | <i>Odocoileus virginianus</i>    |
| Woodchuck                  | <i>Marmota monax</i>             |

## **Issues Considered**

Issues are concerns regarding potential effects that might occur from a proposed activity. Federal agencies must consider such matters during the NEPA process. Section 2.2 of the final EA describes the issues considered and evaluated by WS as part of the decision-making process. Section 3.2 of the final EA describes additional issues that WS considered but did not analyze in detail within the final EA and the rationale for the decision not to analyze those issues. During the development of the EA the following issues were identified to drive environmental analysis and compare the potential impacts of the alternatives. The following issues were within the scope of the analysis of the EA.

### *Issue 1 - Effects of damage management activities on target mammal populations*

Damage management actions, especially lethal ones, may reduce local populations of the mammal species being targeted. If population declines occur, additional concerns include effects on the public's enjoyment of wildlife, potential reductions in hunting and trapping opportunities, and possible impacts on biodiversity and ecosystem stability.

### *Issue 2 - Effects of activities on the populations of non-target animals, including threatened and endangered species*

Damage management efforts can unintentionally disturb, capture, or kill animals that are not the intended target. Depending on how many individuals are affected, this could influence local populations. There is heightened concern for threatened, endangered, and other sensitive species that could be harmed by these activities.

### *Issue 3 - Effects of damage management activities on human health and safety*

Some methods used to control mammal damage may pose risks to human health and safety. At the same time, damage management is often conducted specifically to protect people, for example, reducing wildlife hazards at airports or controlling mammals that could spread disease to humans or pets.

### *Issue 4 - Humaneness and animal welfare concerns of methods*

Many damage management tools can disturb, capture, or kill target mammals, raising concerns about whether these methods are humane and consistent with good animal welfare practices

## **Alternatives**

The WS-Mississippi EA evaluated the potential environmental consequences under four alternatives. These include:

Alternative 1 - Continue the Current Integrated Methods Approach to Managing Damage Caused by Mammals in Mississippi (Proposed Action/No Action);

Alternative 2 - Manage Mammal Damage Using an Adaptive Integrated Non-lethal Method Approach;

Alternative 3 - Recommend an Integrated Methods Approach to Managing Mammal Damage in Mississippi Through Technical Assistance Only;

and Alternative 4 - WS Would Not Provide any Assistance with Managing Damage Caused by Mammals in Mississippi.

Implementation of Alternative 1 would continue the current integrated methods approach used by WS to manage damage and threats of damage caused by mammals in the state.

Alternative 1 would maintain WS-Mississippi's current integrated approach to managing mammal damage. WS would continue providing operational and technical assistance in response to requests and would use the WS Decision Model to select appropriate methods for each situation. As described in Appendix C of the WS-Mississippi EA, staff would consider a range of management techniques and prioritize non-lethal options when they are practical and effective.

Under Alternative 2, WS would continue to provide direct operational assistance and technical assistance similar to Alternative 1; however, WS personnel would only use or recommend the use of non-lethal methods to alleviate mammal damage in the state as described in Appendix C in the final EA. When evaluating management methods and formulating a management strategy using the WS Decision Model, WS personnel would only consider the use of non-lethal methods.

Under Alternative 3, WS personnel would only provide technical assistance in the form of information, demonstrations, and recommendations on available and appropriate methods available that they could use to alleviate mammal damage or threats of damage. The implementation of methods and techniques to alleviate or prevent damage would be the responsibility of the requester with no direct involvement by WS.

Under Alternative 4, WS would not provide any assistance with managing damage associated with mammal species in Mississippi. WS would refer people requesting assistance to the Mississippi Department of Wildlife, Fisheries, and Parks and/or other entities.

Alternative 1, the Proposed Action/No Action, is TVA's preferred alternative.

### **Impacts Assessment**

*Issue 1 – Effects on Target Mammal Populations.* Under Alternatives 1, 2 and 3, WS could use both nonlethal and lethal tools to address mammal damage, but all activities would occur only when authorized by the Mississippi Department of Wildlife, Fisheries, and Parks (MDWFP) or tribes. Nonlethal methods (e.g., exclusion, dispersal, live capture) would have minimal population level effects because animals are generally unharmed and use is not intensive enough to limit essential resources. Lethal methods would remove only small numbers of individuals relative to statewide population sizes, harvest rates, and natural mortality; therefore, population impacts would be low. People and private entities could still remove mammals regardless of WS involvement, meaning overall mortality would be similar under all alternatives. Effects on hunting and trapping opportunities, biodiversity, and ecosystem resilience would be negligible because take is authorized and monitored by MDWFP/tribes. Aesthetic impacts from removing or dispersing small numbers of animals would be minimal. Beaver dam removal could affect wetlands, but WS would evaluate sites for potential wetland status and advise property owners on Clean Water Act permitting when needed. Under Alternative 4, WS would not assist with mammal damage and therefore would have no direct effect on target wildlife populations.

*Issue 2 – Effects on Non-target Species, Including Threatened & Endangered Species.* Across Alternatives 1, 2 and 3, WS would apply the WS Decision Model to minimize impacts on non-target wildlife. Non-lethal tools could incidentally exclude or disturb non-target species but would not cause long-term population effects. Accidental capture or removal of non-targets could occur primarily with traps; however, monitoring would ensure that incidental take stays at levels that do not affect population viability. If untrained individuals attempt to manage damage on their own (especially under Alternatives 3 and 4), risks to non-targets could increase due to improper method use or frustration leading to illegal actions. WS consultation with the U.S. Fish

and Wildlife Service resulted in a “not likely to adversely affect” determination for listed species under Alternative 1, and WS would continue to consult as needed. No critical habitat would be adversely affected.

*Issue 3 – Effects on Human Health and Safety.* Human health and safety risks are similar across alternatives because many methods would remain available regardless of WS involvement. WS personnel are trained to use methods safely and apply the WS Decision Model to minimize risks to people. Risk assessments for traps, toxicants, aircraft, firearms, and other methods show low risks when used properly. No human health or safety incidents occurred from WS activities in Mississippi during FY 2019 to FY 2023. Improper use by untrained individuals (under Alternatives 3 or 4) could elevate risks.

*Issue 4 – Humaneness and Animal Welfare.* Concerns about humane treatment and animal welfare apply across all alternatives because the same general methods would remain available. Under Alternatives 1 and 2, WS direct involvement ensures that trained staff apply methods as humanely as possible and follow WS directives on animal welfare. Under Alternatives 3 and 4, the absence or reduction of WS involvement increases the likelihood that inexperienced people could use methods improperly, possibly resulting in less humane outcomes. WS continually evaluates methods to reduce pain and suffering and aims to employ the most humane techniques achievable.

Implementing Alternative 1 would pose minimal risks to public health and safety. Risks to the public from the methods described in the EA were determined to be low. Therefore, mammal damage management methods available would not adversely affect human safety. The effects of the proposed activities are not highly uncertain and would not impose unique or unknown risks on the human environment. Mammal damage management under Alternative 1 is effective for target species and would not adversely impact non-target species. It also offers a balanced approach to the issues of humaneness and aesthetics when all facets of those issues are considered.

The implementation of Alternative 1 would not adversely affect any species that are currently federally or state-listed as threatened and endangered in Mississippi. The U.S. Fish and Wildlife Service has concurred with this determination. No impacts to cultural resources are anticipated from the implementation of Alternative 1. Implementing the Proposed/No Action would not significantly impact soils, geology, minerals, water quality, prime farmlands, floodplains, wild and scenic areas, wetlands or ecologically critical habitat. WS standard operating procedures and adherence to applicable laws and regulations would further ensure that WS activities do not harm the environment. No significant reasonably foreseeable environmental impacts are anticipated from the implementation of Alternative 1.

### **Public Involvement**

WS made the draft EA available for public review and comment on the APHIS website and the regulations.gov website on July 30, 2025. WS also sent out direct mailings to known local stakeholders and an electronic notification to stakeholders registered through the APHIS Stakeholder Registry. The public comment period ended on September 1, 2025. The WS received no comments on the draft EA during the public comment period.

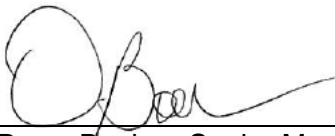
WS prepared the EA in cooperation with TVA, and in consultation with the U.S. Fish and Wildlife Service, Mississippi Department of Agriculture, and Mississippi Department of Wildlife, Fisheries, and Parks. WS also completed Endangered Species Act consultation with the U.S. Fish and Wildlife Service for activities proposed in this EA.

**Mitigation**

No specific nonroutine environmental mitigation measures were identified by TVA to reduce potential environmental effects. Implementation of the best management practices described in the WS EA and FONSI will minimize the potential for adverse environmental effects.

**Conclusion and Findings**

TVA has independently reviewed the WS EA and found it to be adequate. TVA is therefore adopting the WS-Mississippi EA. Based on the analyses in the EA and the findings documented above, TVA concludes that conducting its own mammal damage management activities or contracting with WS for mammal damage management services on TVA facilities and properties including reservoir lands and property easements in Mississippi as described under Alternative 1 above 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