

DECISION AND FINDING OF NO SIGNIFICANT IMPACT

ENVIRONMENTAL ASSESSMENT: MAMMAL DAMAGE MANAGEMENT IN MISSISSIPPI

I. INTRODUCTION

Animals provide many economic, recreational, emotional, and esthetic benefits to people. However, in some situations, the behavior of animals can cause damage to resources that people value, and they can pose threats to the health and safety of people. Wildlife damage management is the alleviation of damage or other problems caused by or related to the behavior of animals and can be an integral component of wildlife management. When animals cause damage or pose threats of damage, people may seek assistance from other entities. The mission of the United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Wildlife Services (WS) program is to provide federal leadership with managing damage and threats of damage caused by animals so that people and wildlife can coexist. In Mississippi, 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.

APHIS-WS in Mississippi (WS-Mississippi) prepared an Environmental Assessment (EA) evaluating the potential impacts of alternatives to WS-Mississippi's involvement in integrated mammal damage management (MDM) activities in the state. We prepared the EA in cooperation with the Tennessee Valley Authority (TVA), and in consultation with the United States Fish and Wildlife Service (USFWS), Mississippi Department of Agriculture (MDA), and Mississippi Department of Wildlife, Fisheries, and Parks (MDWFP). We have also completed an Endangered Species Act consultation with the USFWS for activities proposed in this EA. This Decision document provides notification of WS-Mississippi's choice of a damage management alternative and the agency's determination regarding the environmental impacts of the chosen alternative for the Final September 2025 EA on MDM in Mississippi.

II. PURPOSE AND NEED

Although native mammal species can have many beneficial effects, they can cause damage to many resources valued by people. The purpose of the proposed actions is to manage mammal damage to agricultural resources, property, and natural resources along with reducing threats to human health and safety.

The mammal species in Mississippi included in the analysis and resources affected by those species are listed in Table 1 below. Details on the need for action to manage conflicts with these species are provided in Section 1.2 of the Final EA.

Table 1 – Mammal species that WS could address in Mississippi and the resources those species are likely to damage in Mississippi

Species	Resource				Species	Resource			
	A	N	P	H		A	N	P	H
Bat (All species)			X	X	Nine-banded Armadillo	X	X	X	X
Black Bear	X		X	X	Raccoon	X	X	X	X
Bobcat	X	X	X	X	Red Fox	X	X	X	X
Coyote	X	X	X	X	River Otter	X		X	
Eastern Cottontail	X		X		Southern Flying Squirrel			X	
Feral Cat	X	X	X	X	Striped Skunk	X	X	X	X
Feral Dog	X	X	X	X	Swamp Rabbit	X		X	
Feral Swine	X	X	X	X	Virginia Opossum	X	X	X	X
Fox Squirrel			X		White-tailed Deer	X	X	X	X
Gray Fox	X	X	X	X	Woodchuck	X		X	
Eastern Gray Squirrel			X						

A=Agriculture, N =Natural Resources, P=Property, H=Human Safety

III. NATIONAL ENVIRONMENTAL POLICY ACT AND WS' DECISION-MAKING

Pursuant to the National Environmental Policy Act (NEPA), WS prepared the Environmental Assessment (EA) to document alternative approaches to meet the need for action and to document the potential environmental effects associated with implementing those alternative approaches. The EA provides evidence and analysis to determine whether the potential environmental effects to the human environment might be significant, requiring the preparation of an Environmental Impact Statement. Therefore, the analyses in the final EA helped inform agency decision-makers, including making an informed decision on whether the alternative approaches would require the preparation of an Environmental Impact Statement, or the EA process concludes with a Finding of No Significant Impact. This Decision document provides notification of WS' choice of an alternative approach to implement and determination regarding the environmental effects of the chosen alternative. This EA was developed in accordance with the 2023, Fiscal Responsibility Act and the Council on Environmental Quality's 2020 revisions to the National Environmental Policy Act (NEPA) implementing regulations (40 CFR Parts 1500-1508) for NEPA compliance. The final EA, along with this Decision, documents WS' compliance with the NEPA.

Public Involvement

Another major purpose of the NEPA is to include the public during the planning process to support informed decision-making. WS made the Pre-decisional Draft EA available to the public for review and comment on the APHIS website and on the regulations.gov website on July 30, 2025. WS also sent out direct mailings to local known stakeholders and an electronic notification to stakeholders registered through the APHIS Stakeholder Registry. The public involvement process ended on September 1, 2025. We received no public comments on the Pre-decisional Draft EA. WS will make this Decision document and the final EA available to the public using the same methods that WS used to notify the public that the Pre-decisional Draft EA was available for public comment.

IV. SCOPE OF ANALYSIS

The geographic scope of the actions and analyses in the Final EA covers the entire state of Mississippi because many of the mammal species discussed in Section 1.2 of the final EA occur throughout the state and damage and threats of damage can occur wherever those species occur.

The EA analyzes the potential impacts of WS-Mississippi's MDM activities, conducted at the request of, and in cooperation with TVA, MDWFP, MMDA, tribes, other land management agencies or agencies, and private individuals on all public, private, and tribal lands in Mississippi under established Memoranda of Understanding, Cooperative Service Agreements, or Work Initiation Documents. WS would only conduct damage management activities when requested by the appropriate resource owner or manager. The standard WS Decision Model would be the site-specific procedure for individual actions conducted by WS Mississippi (see Section 2.3.2 in the final EA and WS Directive 2.201, and 1.101)¹.

V. AGENCIES ROLES AND REGULATIONS THAT COULD APPLY TO WS' ACTIVITIES

Section 1.4 in the final EA provides brief discussions of the roles and authorities of other governmental agencies as those roles and authorities relate to conducting wildlife damage management. Appendix B in the final EA discusses several Laws and executive orders that would be relevant to WS' MDM activities. All management actions conducted and/or recommended by WS would comply with applicable laws and regulations in accordance with WS Directive 2.210.

VI. RELATED ANALYSIS

Prior to the completion of the Final 2025 EA on MDM in Mississippi and the Decision and FONSI herein, WS-Mississippi conducted its MDM actions pursuant to a 2015 MDM EA Decision and FONSI. This Decision and FONSI, and the Final 2025 EA on MDM in Mississippi, will replace the 2015 PDM EA Decision and FONSI.

VII. ISSUES CONSIDERED

Issues are concerns regarding potential effects that might occur from a proposed activity. Federal agencies, including WS, must consider such issues during the NEPA decision-making 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. We identified the following issues during the development of the EA and used them to drive the environmental analysis and compare the potential impacts of the alternatives.

Issue 1 - Effects of Damage Management Activities on Target Mammal Populations

A common concern when conducting MDM activities is the potential effects on the populations of target mammal species. Concern primarily occurs when using lethal methods because the removal of an individual mammal or mammals could result in local population reductions. If impacts occurred to mammal populations, additional concerns would include the potential impacts on the esthetic value of

¹At the time of preparation, WS' Directives occurred at the following web address:
https://www.aphis.usda.gov/aphis/ourfocus/wildlifedamage/SA_WS_Program_Directives.

mammals, the ability of people to harvest mammals during annual hunting and trapping seasons, and potential impacts of the proposed activities on biodiversity and ecosystem resilience.

Issue 2 - Effects of Activities on the Populations of Non-target Animals, Including T&E Species

There is potential for MDM activities to inadvertently exclude, disperse, capture, or kill non-target animals, which could impact their populations depending on the magnitude of the number of animals impacted. In addition, impacts to threatened and endangered species, and species of conservation concern, from proposed activities are a concern.

Issue 3 - Effects of Damage Management Activities on Human Health and Safety

The methods available to manage mammal damage have the potential to pose a risk to human health and safety. In addition, WS could conduct activities to reduce risks to human health and safety associated with mammals, such as MDM activities at airports to protect aviation safety or managing mammals posing a direct disease threat to humans or pets.

Issue 4 - Humaneness and Animal Welfare Concerns of Methods

The methods available to manage damage and threats of damage caused by mammals can disperse, exclude, capture, or kill target mammal species, which raises concerns regarding the humaneness of the methods and concerns for animal welfare.

VIII. ALTERNATIVE APPROACHES CONSIDERED

The final EA evaluated four alternative approaches to respond to the need for action discussed in Section 1.2 of the final EA and the issues identified in Section 2.2 of the final EA. Section 2.5 of the final EA provides a description of the alternative approaches evaluated in detail. WS also considered additional alternative approaches; however, WS did not consider those alternative approaches in detail for the reasons provided in Section 2.6 of the final EA. WS analyzed the environmental consequences associated with implementing the following four alternative approaches.

Alternative 1 – WS would continue the current integrated methods approach to managing damage caused by mammals in Mississippi (Proposed Action/No Action)

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. WS would continue to provide direct operational assistance and technical assistance after receiving a request to manage damage or threats of damage associated with mammals. When responding to a request for assistance, WS' personnel would use the WS Decision Model to formulate a management strategy to address each request for assistance. Appendix C in the final EA discusses those methods that WS' employees would consider when evaluating management methods to alleviate damage or threats of damage associated with mammals. When evaluating management methods and formulating a management strategy, WS' personnel would give preference to non-lethal methods when they determine those methods to be practical and effective.

Alternative 2 – WS would Manage Mammal Damage Using an Adaptive Integrated Non-lethal Method Approach

If WS implements 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. Appendix C in the final EA discusses those non-lethal methods that WS' employees would consider when evaluating management methods to alleviate damage or threats of damage associated with mammals. 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.

Alternative 3 – WS would Recommend an Integrated Methods Approach to Managing Mammal Damage in Mississippi Through Technical Assistance Only

If WS implements Alternative 3, WS' personnel would only provide technical assistance when responding to requests for assistance. Technical assistance would provide people with 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.

Alternative 4 – WS would Not Provide any Assistance with Managing Damage Caused by Mammals in Mississippi

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

IX. MONITORING

Under Alternative 1, WS-Mississippi will monitor MDM activities to determine whether the analyses and determinations in the EA adequately address current and anticipated future activities, and to determine whether new information warrants supplementing or replacing the EA. Under Alternative 1, WS-Mississippi will provide data to all applicable natural resource management agencies including the MDWFP and the USFWS, on the take of target and non-target animals. This data will help monitor the impact on wildlife populations in Mississippi.

X. CLARIFICATIONS AND ADDITIONS TO THE PRE-DECISIONAL DRAFT EA

Based on further review of the Pre-decisional Draft EA, WS incorporated minor editorial changes into the final EA. The edits and clarifications made in the final EA are consistent with the analyses, conclusions, and material presented in the Pre-Decisional Draft EA and enhanced the understanding of the EA, but did not change the analysis provided in the Pre-decisional Draft EA.

XI. USE OF THE BEST AVAILABLE SCIENCE

WS used the best available data and information from wildlife agencies having jurisdiction by law, as well as scientific literature, especially peer-reviewed scientific literature, to inform its decision-making.

The final EA uses the best available information from those sources to provide estimates of mammal population size and status, assess risks to non-target animals, assess risks to human health and safety, concerns of method humaneness and animal welfare, and discuss ecological impacts.

XII. ENVIRONMENTAL CONSEQUENCES

Section 3.1 of the final EA analyzes the environmental consequences of the four alternative approaches in comparison to determine the extent of actual or potential effects on the issues. Section 3.1 of the final EA provides information needed to make informed decisions. Alternative 1 serves as the baseline for the analysis and the comparison of expected impacts among the alternative approaches. The discussion below provides a summary of the environmental consequences of the four alternative approaches for each of the issues analyzed in detail.

Issue 1 - Effects of WS' Activities on Target Mammal Populations

Maintaining viable populations of species is a concern of the public and of biologists within governmental agencies, including WS. Therefore, a common concern is whether activities to manage damage caused by wildlife would adversely affect the population of a species. If WS implemented Alternative 1, Alternative 2, or Alternative 3, WS could provide direct operational assistance and/or technical assistance to entities requesting assistance; therefore, the activities WS could conduct and/or that WS could recommend could have effects on the population of a mammal species. If WS implemented Alternative 4, WS would have no effect on the population of a mammal species because WS would not provide any assistance when the request for assistance involved mammal species addressed in the final EA.

As discussed in Section 1.4 of the final EA, the MDWFP is responsible for the management of mammal populations in the state. Therefore, WS' activities would only occur when authorized by MDWFP and/or a tribe, when required, and take would not exceed the levels authorized. WS would submit activity reports to the MDWFP and/or a tribe, when required, so the MDWFP and/or a tribe could evaluate WS' activities and the cumulative take occurring for mammal species.

If WS implemented Alternative 1, WS would incorporate non-lethal and lethal methods into an integrated methods approach in which WS' personnel could employ all or a combination of methods to resolve a request for assistance. Appendix C of the final EA describes the MDM methods that would be available for WS' personnel to use. When addressing damage or the threat of damage associated with those mammal species addressed in the final EA, the use of non-lethal methods could capture, disperse, or exclude mammals. The use of non-lethal methods would have minimal effects on the population of a mammal species because mammals would generally be unharmed. Non-lethal methods that disperse and/or exclude mammals would not be employed over large geographical areas or applied at such intensity that essential resources (*e.g.*, habitat, sources of food) would be unavailable for extended durations or over such a wide geographical scope that long-term adverse effects would occur to the population of a mammal species. WS does not anticipate any adverse effects would occur to mammal populations from the use of live-capture methods because WS could release captured mammals unharmed. Therefore, if WS implemented Alternative 1, Alternative 2, or Alternative 3, the use of non-lethal methods would not have significant direct, indirect, and/or cumulative effects on the population of a mammal species.

Lethal methods can remove specific mammals that WS' personnel have identified as causing damage or that are posing a threat to human health and safety. The number of mammals removed from by WS using lethal methods would be dependent on the number of requests for assistance received. In addition, the number of mammals removed would be dependent on the number of mammals involved with the

associated damage or threat, the efficacy of methods employed, and the number of individual mammals the MDWFP and/or a tribe authorizes WS to remove, when required. The analyses in Section 3.1.1 of the final EA include the anticipated annual take level for each species by WS, which WS based on previous requests for assistance associated with the species and in anticipation of future requests for assistance. WS' anticipated annual take level for each species is not a prescribed take level but is a take level that WS anticipates could occur annually to alleviate damage. Based on those quantitative and qualitative parameters addressed in the final EA, the anticipated number of mammals that WS could lethally remove annually to address requests for assistance under Alternative 1 would be of low magnitude when compared to population trend data, population estimates, and/or harvest data (see Section 3.1.1 in the final EA).

The lack of direct involvement by WS does not preclude the lethal removal of mammals by those persons experiencing damage or seeking assistance from other entities. Those people experiencing damage or threats could remove mammals themselves or seek assistance with removal from other entities under any of the alternative approaches when the MDWFP and/or a tribe authorize the removal, when authorization is required. In addition, a resource owner could seek assistance from private businesses or persons to remove mammals causing damage or they could remove many of the mammal species during the regulated hunting and trapping seasons in the state. Therefore, involvement in the lethal removal of mammals under Alternative 1 by WS would not be additive to the number of mammals that could be removed by other entities in the absence of involvement by WS. The number of mammals lethally removed annually would likely be similar across the alternative approaches because the removal of mammals could occur by other entities even if WS implemented Alternative 2, Alternative 3, or Alternative 4 (see Section 3.1.1 in the final EA). WS does not have the authority to regulate the number of mammals lethally removed annually by other entities.

An indirect effect of using lethal methods when targeting mammals that people can harvest in the state is the potential effect on the ability of people to harvest those species. The magnitude of lethal removal of mammals addressed under Alternative 1 would be low when compared to the mortality of those mammals from all known sources. Based on the limited removal proposed by WS and the oversight by the MDWFP and/or a tribe, annual removal by WS would have no effect on the ability of people to harvest mammals during the regulated harvest season. Similarly, WS would have no impact on the ability to harvest those species during the annual hunting and trapping seasons under Alternative 2, Alternative 3, or Alternative 4 because WS would have limited or no involvement with managing damage associated with those species. The MDWFP and/or a tribe could continue to regulate mammal populations through adjustments in allowed removal during the regulated harvest season and through permits or authorizations to manage damage or threats of damage. Therefore, activities conducted by WS would not have adverse impacts on biodiversity or the resilience of ecosystems in Mississippi because WS' activities would only occur when authorized by the MDWFP and/or a tribe and only at levels authorized.

Mammals may provide esthetic enjoyment to some people, such as through observations, photographing, and knowing they exist as part of the natural environment. Methods available that could be employed under each of the alternative approaches would result in the dispersal, exclusion, or removal of individuals or small groups of mammals to resolve damage and threats. Therefore, the use of methods often results in the removal of mammals from the area where damage was occurring or the dispersal of mammals from an area. Because methods available would be similar across the alternatives, the use of those methods would have similar potential impacts on the esthetics of mammals. However, even under the proposed action alternative, the dispersal and/or lethal removal of mammals under the alternative approaches would not reach a magnitude that would prevent the ability to view those species outside of the area where damage was occurring. The effects on the esthetic values of mammals would therefore be similar across alternative approaches and would be minimal.

An additional indirect effect that could occur from activities targeting beaver is the potential impacts on the status of wetlands in the state, especially if WS breached or removed a beaver dam after removing beaver from an impoundment. If water remains impounded behind a beaver dam, hydric soils and hydrophytic vegetation may eventually form, which can lead to the establishment wetlands. This process can take anywhere from several months to years depending on pre-existing conditions. Hydric soils are those soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions. In general, hydric soils form much easier where wetlands have preexisted. Hydrophytic vegetation includes those plants that grow in water or on a substrate that is at least periodically deficient in oxygen because of excessive water content. If those conditions occur, then a wetland has developed that would have different wildlife habitat values than an area more recently impounded by beaver dam activity.

Requests from public and private individuals and entities to remove or breach a beaver dam involve returning an area back to its pre-existing condition and often within months after beaver created the dam. If the area does not have hydric soils, it usually takes many years for them to develop and a wetland to become established. Upon receiving a request to remove/breach beaver dams, WS' personnel would visually inspect the dam and the associated water impoundment to determine if characteristics exist at the site that would meet the definition of a wetland under Section 404 of the Clean Water Act. If wetland conditions were present at the site, WS' employees would notify the entities requesting assistance from WS that a permit might be required to remove/breach the dam. WS' employees would recommend the property owner or manager seek guidance from the United States Army Corps of Engineers pursuant to the Clean Water Act. Entities experiencing threats or damage due to flooding could manipulate water levels associated with beaver dams in the absence of WS' assistance. Those methods addressed in the EA that would be available to breach or remove a beaver dam would be available to other entities to use; however, the use of multi-component explosives to breach beaver dams would be limited to professionals authorized to use explosives.

Issue 2 - Effects of Activities on the Populations of Non-target Animals, Including T&E Species

WS' personnel have experience with managing animal damage and receive training in the use of methods. If WS implemented Alternative 1, Alternative 2, or Alternative 3, WS' employees would use the WS Decision Model (EA Section 2.3.2) to select the most appropriate methods to address damage caused by mammals and to reduce the risks to non-target animals. Despite efforts by WS to minimize risks to non-target animals, the potential for WS to live-capture, exclude, disperse, or lethally remove non-target animals exists when applying both non-lethal and lethal methods to manage damage or reduce threats to human health and safety. Although the use of non-lethal methods could exclude, disperse, or capture non-target animals, long-term adverse effects would not occur to a species' population because WS would not employ non-lethal methods over large geographical areas or at such intensity levels that resources (*e.g.*, food sources, habitat) would be unavailable for extended durations or over a wide geographical scope. Similarly, the use of low-flying aircraft or unmanned aerial vehicles by WS would not occur at such magnitude, frequency, or over a wide geographical extent that significant adverse effects would occur. The use of non-lethal methods would have minimal impacts on overall populations of animals because those methods would not cause mortality.

Most of the methods discussed in Appendix C of the final EA would be available under all the alternative approaches analyzed. Impacts to non-target animals from the use of those methods would be similar to the use of those methods under any of the alternative approaches. If people or other entities use those methods available as intended, risks to non-target animals would be similar to those risks described for Alternative 1. If other entities apply methods available incorrectly or apply those methods without knowledge of animal behavior, risks to non-target animals could be higher under any of the alternative

approaches. If frustration from the lack of available assistance causes those persons experiencing mammal damage to take illegal actions, risks to non-target animals could be higher.

The unintentional removal or capture of animals during damage management activities conducted under Alternative 1 would primarily be associated with the use of body-grip traps and in some situations, with live-capture methods, such as foothold traps, cage traps, and cable devices. WS would continue to monitor activities, including non-target animal removal, to ensure the annual removal of non-target animals would not result in adverse effects to a species' population.

The ability of people to reduce damage and threats caused by mammals would be variable under Alternative 2, Alternative 3, and Alternative 4 because the skills and abilities of the person implementing damage management actions or the availability of other entities capable of providing assistance could determine the level of success in resolving damage or the threat of damage. If people or other entities apply those methods available as intended, risks to non-target animals would be similar to Alternative 1. If other entities apply methods available incorrectly or apply those methods without knowledge of animal behavior, risks to non-target animals would be higher under any of the alternative approaches. If frustration from the lack of available assistance under Alternative 2, Alternative 3, and Alternative 4 caused those people experiencing mammal damage to use methods that were not legally available for use, risks to non-target animals could be higher under those alternative approaches.

During the development of the Pre-decisional Draft EA, WS reviewed the current list of species designated as threatened or endangered in Mississippi as determined by the United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service. Based on the use pattern of the methods and the locations where WS could implement damage management activities, the implementation of Alternative 1 would have no effect on those threatened or endangered species in Mississippi under the jurisdiction of the National Marine Fisheries Service, including any designated critical habitat. In addition, based on the use patterns of methods currently available and based on current life history information for those species under the jurisdiction of the USFWS, WS determined that the proposed activities “*may affect*” those species but those effects would be solely beneficial, insignificant, or discountable, which would warrant a “*not likely to adversely affect*” determination. Based on those determinations, WS initiated informal consultation with the USFWS for those species that a “*may affect, not likely to adversely affect*” determination was made. The USFWS concurred with WS’ determination that activities conducted pursuant to the proposed action would not likely adversely affect those species (J. Austin, USFWS, pers. comm. 2024) (EA Appendix D). WS has determined implementation of Alternative 1 would not destroy or adversely modify any critical habitat designated in Mississippi. WS would continue to review the species listed as threatened or endangered by the USFWS and the National Marine Fisheries Service and would continue to consult with the USFWS and/or the National Marine Fisheries Service as appropriate.

Issue 3 - Effects of Damage Management Activities on Human Health and Safety

The threats to human health and safety from methods would be similar across the alternative approaches because most of the methods would be available for use. If people used methods incorrectly or without regard for human safety, risks to human safety would increase under any of the alternative approaches that people employed those methods. The expertise of WS’ employees in using the methods available would likely reduce threats to human health and safety because WS’ employees would receive training and would be knowledgeable in the use of methods.

In addition, WS’ personnel would use the WS Decision Model when assessing a request for assistance (see WS Directive 2.201). As part of the WS Decision Model, WS’ personnel would consider risks to human health and safety when evaluating the methods available to manage the damage or threat of

damage associated with a request for assistance. WS' personnel must also adhere to WS' directives when conducting activities (see WS Directive 1.101) and many of the directives address safety or relate to the safe use of methods (e.g., see WS Directive 2.401, WS Directive 2.430, WS Directive 2.435, WS Directive 2.450, WS Directive 2.605, WS Directive 2.615, WS Directive 2.620, WS Directive 2.625, WS Directive 2.627, WS Directive 2.630, WS Directive 2.635, WS Directive 2.640). WS has also completed programmatic human safety and ecological risk assessments for some of the methods that WS could use to manage mammal damage. In human health and ecological risk assessments of WS' use of cage traps, foothold traps, nets, zinc phosphide, firearms, cable devices, and aircraft the risks to human health and safety were low².

Although risks do occur from the use of those methods available, when people use those methods in consideration of human health and safety, the use of those methods would pose minimal risks. No adverse effects to human health and safety occurred from WS' use of methods to alleviate mammal damage in the state from FY 2019 through FY 2023.

Issue 4 - Humaneness and Animal Welfare Concerns of Methods

WS analyzed the humaneness of available methods and animal welfare as an issue. Because most methods addressed in Appendix C of the final EA would be available under all of the alternative approaches, the issue of method humaneness and animal welfare would be similar for those methods across all the alternative approaches. The ability of WS to provide direct operational assistance under Alternative 1 and Alternative 2 would ensure WS' personnel employed methods as humanely as possible (see WS Directive 1.301, WS Directive 2.505). Under the other alternative approaches, other entities could use methods inhumanely if used inappropriately or without consideration of animal welfare. However, the skill and knowledge of the person implementing methods to resolve damage would determine the efficacy and humaneness of methods.

A lack of understanding of the behavior of mammals or improperly identifying the damage caused by mammals along with inadequate knowledge and skill in using methodologies to resolve the damage or threat could lead to incidents with a greater probability of other people perceiving the action as inhumane under Alternative 3 and Alternative 4. Despite the lack of involvement by WS under Alternative 4 and WS' limited involvement under Alternative 3, many of those methods perceived as inhumane by certain individuals and groups would still be available for others to use to resolve damage and threats caused by mammals. WS would continue to evaluate methods and activities to minimize the pain and suffering of methods when attempting to resolve requests for assistance with the goal of using methods as humanely as possible to resolve requests for assistance (see Section 3.1.4 in the final EA).

XIII. DECISION

I have carefully reviewed the final EA prepared to meet the need for action and input resulting from the public involvement process. I find the proposed action/no action alternative (Alternative 1) to be environmentally acceptable, addressing the issues and needs while balancing the environmental concerns of management agencies, property owners, advocacy groups, and the public. The analyses in the final EA adequately address the identified issues, which reasonably confirm that no significant impact to animal populations or the quality of the human environment are likely to occur from implementing Alternative 1, nor does implementing Alternative 1 constitute a major federal action. Therefore, the analysis in the final EA is sufficient and does not warrant the need for WS to prepare an Environmental Impact Statement.

²The available human health and ecological risk assessments for some of the methods that WS could use are located at https://www.aphis.usda.gov/aphis/ourfocus/wildlifedamage/programs/nepa/ct-ws-risk_assessments.

Based on the analyses in the final EA, implementation of Alternative 1 would best address the issues identified in Section 2.2 of the final EA. Alternative 1 successfully addresses managing damage using a combination of the most effective methods and does not adversely impact the environment, property, human health and safety, target species, and/or non-target species, including threatened or endangered species. Alternative 1 offers the greatest chance of maximizing effectiveness and benefits to resource owners and managers and implementation of Alternative 1 presents the greatest chance of maximizing net benefits while minimizing adverse impacts to public health and safety. Implementing Alternative 1 would offer a balanced approach to the issues of humaneness, animal welfare, and esthetics when considering all facets of those issues. Changes that broaden the scope of damage management activities in the state, changes that affect the natural or human environment, or changes from the issuance of new environmental regulations would trigger further analysis. Therefore, it is my decision to implement Alternative 1 as described in the final EA.

XIV. FINDING OF NO SIGNIFICANT IMPACT

Based on the analyses provided in the final EA, there are no indications that implementing Alternative 1 would have a significant impact, individually or cumulatively, on the quality of the human environment. Therefore, I find that an Environmental Impact Statement should not be prepared. I base this determination on the following factors:

1. WS' activities to manage mammal damage in the state under Alternative 1 would not be regional or national in scope (see Section 1.3 of the final EA). WS' activities would only occur in areas where a property owner or manager requests WS' assistance and only on properties where WS and the property owner or manager sign a work initiation document or a similar document that allows WS to conduct activities on the property they own or manage (see Section 1.3.2 in the final EA).
2. Based on the analysis in the final EA, the methods available under Alternative 1 would not adversely affect human health and safety (see Section 3.1.3 in the final EA). In some cases, WS may conduct activities to reduce risks to human health and safety caused by mammal species. WS is not aware of members of the public harmed by WS' activities to reduce damage and threats of damage caused by mammals in Mississippi.
3. Alternative 1 would not significantly affect unique characteristics, such as parklands, prime farmlands, wetlands, wild and scenic areas, or ecologically critical areas. The use of MDM methods does not significantly affect the physical environment. WS' adherence to applicable laws and regulations would further ensure that activities conducted under Alternative 1 would not harm the environment (see Section 3.1.1, Section 3.1.2, and Section 3.1.3 in the final EA). The final EA evaluated potential impacts to the status of wetlands in the state and WS would comply with the Section 401 and Section 404 of the Clean Water Act (see Section 3.2.1 and Appendix E in the final EA).
4. The effects on the quality of the human environment under Alternative 1 are not highly controversial. Although some people are opposed to aspects of managing mammal damage, the failure of a particular special interest group or person to agree with every act of a federal agency does not establish a controversy. WS' activities would only occur when authorized by the MDWFP and/or a tribe (when on tribal property), when required, and take would not exceed the levels authorized (see Section 2.3.3 and 2.4.1 in the final EA).

5. Based on the analysis documented in the final EA, the effects of implementing Alternative 1 on the quality of the human environment are not highly uncertain and do not involve unique or unknown risks (see Section 3.1 in the final EA). Although exact population estimates are not available for mammal species, the final EA uses the best information available. Consultation and coordination with the MDWFP and/or a tribe who have management responsibility for preserving sustainable populations of target and non-target species and ecosystems and project monitoring helps to ensure that program activities would not have significant unintended adverse impacts. The proposed activities are routinely employed to alleviate mammal damage by WS. Methods/strategies proposed for use are not new or untested and WS' employees receive training and have experience in their application.
6. Alternative 1 would not establish a precedent for any future action with significant effects or represent a decision in principle about future considerations. WS would make management decisions in Mississippi based on the analyses in the final EA. The final EA does not set a precedent for making decisions in other states. Decisions on activities to manage mammal damage in other states are made independently and are based on state-specific information on wildlife populations and ecosystems; state-specific land use patterns; state, local, and tribal regulations and policies; state specific wildlife management plans and objectives; and, other state and local factors, including the types of activities requested and authorized by federal, tribal, state, and local (e.g., county) management entities.
7. The final EA did not identify significant cumulative effects associated with implementing Alternative 1. The final EA analyzed effects and concluded that such impacts were not significant for this or other anticipated actions to be implemented or planned within the State of Mississippi (see Section 3.1 and Section 3.3 in the final EA). Analyses of impacts on target and non-target species indicates that the impacts associated with WS implementing Alternative 1 are not of significant duration, scope, or magnitude to result in sustained reductions in target mammal populations and the populations of non-target animals (see Section 3.1.1, Section 3.1.2, and Section 3.3 in the final EA). Risks to human health and safety from implementation of Alternative 1 would be low (see Section 3.1.3 and Section 3.3 in the final EA). WS would continue to evaluate methods and activities to minimize the pain and suffering of methods when attempting to resolve requests for assistance with the goal of using methods as humanely as possible to resolve requests for assistance (see Section 3.1.4 and Section 3.3 in the final EA).
8. Alternative 1 would not affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places, nor would Alternative 1 likely cause any loss or destruction of significant scientific, cultural, or historical resources (see Section 3.2.3 in the final EA). In general, the activities that WS could conduct when implementing Alternative 1 would not have the potential to affect historic resources. If WS anticipates that responding to a request would affect historic resources, WS would engage in the appropriate consultation.
9. WS has consulted with the USFWS pursuant to Section 7 of the Endangered Species Act and the USFWS has concurred with WS' effects determination (see Section 3.1.2 in the final EA). Based on the use pattern of the methods and the locations where WS could implement damage management activities, the implementation of Alternative 1 would have no effect on those threatened or endangered species under the jurisdiction of the National Marine Fisheries Service, including any designated critical habitat (See Appendix D in the Final EA).
10. WS' activities conducted under Alternative 1 would comply with all applicable laws and regulations (see Appendix B in the final EA and WS Directive 2.210).

This decision considers public interests, social/political and economic concerns, public health and safety, and the best available science. As a part of this Decision, WS would continue to provide effective and MDM assistance to manage damage and threats of damage caused by mammals in Mississippi.

Keith Wehner, Director-Eastern Region
USDA/APHIS/WS