

## DECISION AND FINDING OF NO SIGNIFICANT IMPACT

### ENVIRONMENTAL ASSESSMENT: FERAL SWINE DAMAGE MANAGEMENT IN SOUTH CAROLINA

#### PURPOSE AND NEED FOR ACTION

The United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Wildlife Services (WS) program has prepared an Environmental Assessment (EA) to analyze the potential impacts to the quality of the human environment from resolving damage and threats of damage associated with feral swine (*Sus scrofa*)<sup>1</sup> in South Carolina (USDA 2015a). The EA and this Decision ensure WS complies with the National Environmental Policy Act (NEPA), with the Council on Environmental Quality guidelines (see 40 CFR 1500), and with the APHIS' NEPA implementing regulations (see 7 CFR 372). WS has previously developed an EA that analyzed the need for action to manage damage associated with feral swine in the State (USDA 2013). Since the new EA re-evaluated activities associated with feral swine to address a new need for action and the associated affected environment, the outcome of this Decision for the new EA will supersede the previous EA that addressed damage management activities associated with feral swine.

The need for action identified in Section 1.2 of the new EA arises from requests for assistance that WS receives. The EA evaluates the need for action to manage damage associated with feral swine, the potential issues associated with managing damage, and the environmental consequences of conducting different alternatives to meet the need for action while addressing the identified issues. WS defined the issues associated with meeting the need for action and identified preliminary alternatives through consultation with the South Carolina Department of Natural Resources (SCDNR). The EA analyzes three alternatives in detail to meet the need for action and to address the issues analyzed in detail. Section 1.7 of the EA identified several decisions to be made based on the scope of the EA.

#### AFFECTED ENVIRONMENT AND ISSUES

Feral swine are present in all 46 counties of the State, with populations occurring primarily along major river drainages. Therefore, feral swine damage or threats of damage could occur statewide in South Carolina wherever feral swine occur.

Issues are concerns regarding potential effects that might occur from a proposed activity. Federal agencies must consider such issues during the NEPA decision-making process. Section 2.2 of the EA describes the issues considered and evaluated in detail by WS as part of the decision-making process. In addition to those issues analyzed in detail, the WS program identified several additional issues during the development of the EA but WS did not consider those issues in detail. Section 2.3 of the EA discusses the rationale for the decision not to analyze those issues in detail. To identify additional issues and alternatives, WS made the EA available to the public for review and comment through notices published in local media and through direct notification of interested parties. WS made the EA available to the public for review and comment by a legal notice published in *The State Newspaper* from October 28, 2015 through October 30, 2015. WS also made the EA available to the public for review and comment on the APHIS website and on the regulations.gov website beginning on October 8, 2015. WS also sent a notice of availability directly to agencies, organizations, and individuals with probable interest in managing feral swine damage in the State. The public involvement process ended on November 27, 2015. During the public comment period, WS received six comments and comment letters. Appendix A of this decision summarizes the comments received and provides response to the comments.

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<sup>1</sup>Feral swine are also known as "wild pigs", "wild boars", and "feral hogs".



## **ALTERNATIVES**

The EA evaluated three alternatives in detail to respond to the need for action discussed in Chapter 1 and the issues identified in Chapter 2 of the EA. Section 3.1 of the EA provides a description of the alternatives evaluated in detail. A detailed discussion of the effects of the alternatives on the issues occurs in Chapter 4 of the EA. WS considered additional alternatives but did not evaluate those alternatives in detail with the rationale provided in Section 3.2 of the EA. WS would incorporate those standard operating procedures discussed in Section 3.3 and Section 3.4 of the EA into activities if the decision-maker selected the proposed action alternative (Alternative 3) and when applicable, the technical assistance alternative (Alternative 2), if selected. If the decision-maker selected the no involvement by WS alternative (Alternative 1), the lack of assistance by WS would preclude the employment or recommendation of those standard operating procedures addressed in the EA.

## **ENVIRONMENTAL CONSEQUENCES**

Section 4.1 of the EA analyzes the environmental consequences of each alternative as those alternatives relate to the issues by analyzing the environmental consequences of each alternative in comparison to determine the extent of actual or potential impacts on the issues. Section 4.1 of the EA provides information needed to make informed decisions when selecting the appropriate alternative to address the need for action. The proposed action/no action alternative (Alternative 3) served as the baseline for the analysis and the comparison of expected impacts among the alternatives.

The following resource values in South Carolina are not expected to be significantly impacted by any of the alternatives analyzed in the EA: soils, geology, minerals, water quality/quantity, flood plains, wetlands, critical habitats (areas listed in threatened and endangered (T&E) species recovery plans), visual resources, air quality, prime and unique farmlands, aquatic resources, timber, and range. The activities proposed in the alternatives would have a negligible effect on atmospheric conditions including the global climate. Meaningful direct or indirect emissions of greenhouse gases would not occur because of any of the alternatives. Those alternatives would meet the requirements of applicable laws, regulations, and Executive Orders, including the Clean Air Act and Executive Order 13514.

The APHIS and cooperating agencies prepared a programmatic EIS to address feral swine damage management in the United States, American Samoa, Mariana Islands, United States Virgin Islands, Guam, and Puerto Rico (USDA 2015b). The Record of Decision selected the preferred alternative in the EIS to implement a nationally coordinated program that integrates methods to address feral swine damage. In accordance with the Record of Decision, WS developed the EA to be consistent with the EIS and the Record of Decision. The discussion below is a summary of the environmental consequences of the alternatives for each of the issues analyzed in detail.

### **Issue 1 - Effects on Feral Swine Populations in South Carolina**

Under the proposed action (Alternative 3), WS would incorporate non-lethal and lethal methods described in Appendix B of the EA into an integrated methods approach in which WS' personnel could employ all or a combination of methods to resolve a request for assistance. WS could recommend and operationally employ both non-lethal and lethal methods, as governed by federal, state, and local laws and regulations under the proposed action alternative (Alternative 3). Similarly, WS could recommend the use of non-lethal and/or lethal methods under Alternative 2; however, WS would not provide direct operational assistance.

Non-lethal methods can disperse, exclude, or otherwise make an area unattractive to feral swine that are causing damage; thereby, potentially reducing the presence of those animals at the site and potentially the



immediate area around the site. Non-lethal methods generally have minimal impacts on overall populations of animals since those species are unharmed. In addition, WS' personnel and other entities could use non-lethal methods to live-capture feral swine.

A common issue is whether damage management actions would adversely affect the populations of animals when WS' employees employ lethal methods. Lethal methods can remove specific feral swine that personnel of WS have identified as causing damage or posing a threat to human safety. The number of feral swine removed from a population by WS using lethal methods would be dependent on the number of requests for assistance received. In addition, the number of feral swine removed would be dependent on the number of swine involved with the associated damage or threat and the efficacy of methods employed. Based on those quantitative and qualitative parameters addressed in the EA, the anticipated number of feral swine that WS' employees could lethally remove annually to address requests for assistance under the proposed action alternative (Alternative 3) would be of low magnitude when compared to population trend data, population estimates, and/or harvest data.

The lack of WS' direct involvement does not preclude the lethal removal of feral swine by those persons experiencing damage or seeking assistance from other entities. If the WS program only provided technical assistance under Alternative 2 or provided no assistance under Alternative 1, those people experiencing damage or threats could remove feral swine themselves under any of the alternatives. There is currently no closed season for feral swine in South Carolina and no weapons restrictions on private property; therefore, people can lethally remove feral swine throughout the year on private property during the daylight hours in the State. People can also hunt feral swine at night in the State; however, there currently are weapons restrictions during night hunting and the SCDNR prohibits night hunting on Wildlife Management Areas. In addition, people can hunt feral swine at night from the last day of February through July 1 with no weapons restrictions when people properly notify the SCDNR.

Therefore, WS' involvement in the lethal removal of feral swine under the proposed action would not be additive to the number of feral swine that could be removed by other entities in the absence of WS' involvement. The number of feral swine lethally removed annually would likely be similar across the alternatives, since the removal of feral swine could occur even if WS was not directly involved with providing assistance under Alternative 1 and Alternative 2. WS does not have the authority to regulate the number of feral swine lethally removed annually by other entities.

The South Carolina Wild Hog Task Force estimated that entities would have to remove 50 to 75% of the statewide population annually to stabilize or reduce the population. The goal of the South Carolina Wild Hog Task Force is to reduce current populations of feral swine in the State. Therefore, any reduction in the current or future population of feral swine in the State would occur pursuant to the goals of the SCDNR and the South Carolina Wild Hog Task Force. Any removal of feral swine by WS would also occur pursuant to Executive Order 13112, which requires federal agencies, to the extent practical and permitted by law, reduce invasion of exotic species and the associated damages. Since the SCDNR regulates wildlife populations in the State, including feral swine, any reduction in the feral swine population in South Carolina that might occur under the alternatives would occur within the management objectives established by the SCDNR and the South Carolina Wild Hog Task Force.

## **Issue 2 - Effects on Non-target Species, including Threatened and Endangered Species**

WS' personnel have experience with managing animal damage and receive training in the employment of methods. WS' employees would use the WS Decision Model to select the most appropriate methods to address damage caused by targeted feral swine and to exclude non-target species. To reduce the likelihood of capturing non-target animals, WS would employ selective methods for feral swine and determine placement of methods to avoid exposure to non-targets. Section 3.3 and Section 3.4 in the EA



discuss the standard operating procedures that WS' personnel would follow to prevent and reduce any potential adverse effects on non-target animals. Despite the best efforts to minimize non-target exposure to methods during program activities, the potential for WS' personnel to disperse, live-capture, or lethally remove a non-target animal exists when applying both non-lethal and lethal methods to manage damage or reduce threats to safety.

The unintentional removal or capture of animals during damage management activities conducted under the proposed action alternative would primarily be associated with the use of cage traps and cable restraints. The non-targets lethally removed unintentionally by WS during previous activities are representative of non-targets that WS' personnel could lethally remove under the proposed action alternative (Alternative 3) (see Section 4.1 of the EA). WS could also lethally remove additional species of non-targets unintentionally under the proposed action alternative (Alternative 3).

Although WS' employees could lethally remove non-target animals, removal of individuals from any species is not likely to increase substantially. 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. WS' personnel have not captured or adversely affected any threatened or endangered species during previous activities conducted in South Carolina.

The ability of people to reduce damage and threats caused by feral swine would be variable under Alternative 1 and Alternative 2, since 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-targets would be similar to Alternative 3. If people or 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 alternatives. If frustration from the lack of available assistance under Alternative 1 and Alternative 2 caused those people experiencing feral swine damage to use methods that were not legally available for use, risks to non-targets would be higher under those alternatives. People have resorted to the use of illegal methods to resolve wildlife damage that have resulted in the lethal removal of non-target animals.

WS has determined that the proposed activities "*may affect*" several species listed as threatened or endangered within the State by the United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service but those effects would be solely beneficial, insignificant, or discountable. Therefore, those effects would warrant a "*not likely to adversely affect*" determination for those species (see Table 4.1 in Section 4.1 of the EA). In addition, WS has made a "*no effect*" determination for several species currently listed as threatened or endangered in the State based on those methods currently available and based on current life history information for those species.

Pursuant to Section 7 of the ESA, WS consulted with the USFWS on those effects analysis and determinations. The USFWS concurred with those effects determination made by WS (T. McCoy, USFWS pers. comm. 2015). In addition, WS has reviewed those species considered threatened or endangered by the SCDNR (see Appendix C of the EA) and determined the proposed action would not adversely affect any of those species listed within the State. The SCDNR has concurred with WS' determination for State listed species (E. Cope, SCDNR pers. comm. 2015).

### **Issue 3 - Effects of Management Methods on Human Health and Safety**

The threats to human safety from methods available would be similar across the alternatives since those same methods would be available under all the alternatives. However, the expertise of WS' employees in using those methods available likely would reduce threats to human safety since WS' employees would



be trained and knowledgeable in the use of those methods. If other entities used methods incorrectly or without regard for human safety, risks to human safety would increase under any of the alternatives. The EA determined that the availability of immobilizing drugs, euthanasia chemicals, and the use of aircraft under the proposed action alternative (Alternative 3) would not increase risks to human safety from the use of those methods. Although risks do occur from the use of immobilizing drugs, euthanasia chemicals, and the use of aircraft, when people use those methods in consideration of human safety, the use of those methods would not pose additional risks beyond those associated with the use of other methods. No adverse effects to human safety occurred from WS' use of methods to alleviate feral swine damage in the State from FY 2009 through FY 2014.

#### **Issue 4 - Humaneness of Methods Available for Damage Management**

WS also identified method humaneness as an issue. Since many methods addressed in Appendix B of the EA would be available under all the alternatives, the issue of method humaneness would be similar for those methods across all the alternatives. As stated previously, immobilizing drugs, euthanasia chemicals, and the use of aircraft would be the only methods that would have limited availability to all entities under the alternatives. The ability of WS to provide direct operational assistance under the proposed action alternative (Alternative 3) would ensure WS' personnel employed methods as humanely as possible. Under the other alternatives, other entities could use methods inhumanely if used inappropriately or without consideration of feral swine behavior. 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 feral swine or improperly identifying the damage caused by feral swine 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 1 and Alternative 2. Despite the lack of involvement by WS under Alternative 1 and WS' limited involvement under Alternative 2, those methods perceived as inhumane by certain individuals and groups would still be available for use by other entities to resolve damage and threats caused by feral swine.

#### **CUMULATIVE IMPACTS OF THE PROPOSED ACTION**

No significant cumulative environmental impacts were identified from any of the three alternatives, including the proposed action alternative (Alternative 3). Under Alternative 3, the lethal removal of feral swine by WS would occur within any management objectives established by the SCDNR and the South Carolina Wild Hog Task Force for feral swine populations in the State. No risk to public safety is expected when activities are provided under Alternative 2 and Alternative 3 since only trained and experienced personnel would conduct and/or recommend damage management activities. There is a slight increased risk to public safety when persons who reject assistance and recommendations and conduct their own activities under Alternative 2, and when no assistance is provided under Alternative 1. However, under all of the alternatives, those risks would not be to the point that the impacts would be significant. The analysis in the EA indicates that an integrated methods approach to managing damage and threats caused by feral swine would not result in significant cumulative adverse effects on the quality of the human environment.

#### **DECISION AND RATIONALE**

I have carefully reviewed the EA prepared to meet the need for action. I find the proposed action/no action alternative (Alternative 3) to be environmentally acceptable, addressing the issues and needs while balancing the environmental concerns of management agencies, landowners, advocacy groups, and the public. The analyses in the EA adequately address the identified issues, which reasonably confirm that no significant impact, individually or cumulatively, to animal populations or the quality of the human



environment are likely to occur from the proposed action alternative (Alternative 3), nor does the proposed action (Alternative 3) constitute a major federal action. Therefore, the analysis in the EA does not warrant the completion of an Environmental Impact Statement.

Based on the analyses in the EA, the issues identified are best addressed by selecting Alternative 3 (proposed action/no action) and applying the associated standard operating procedures discussed in Chapter 3 of the EA. Alternative 3 successfully addresses (1) 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; (2) it offers the greatest chance of maximizing effectiveness and benefits to resource owners and managers; (3) it presents the greatest chance of maximizing net benefits while minimizing adverse effects to public health and safety; and (4) it offers a balanced approach to the issues of humaneness and aesthetics when all facets of those issues are considered. Further analysis would be triggered if changes occur that broaden the scope of damage management activities in the State, that affect the natural or human environment, or from the issuance of new environmental regulations. Therefore, it is my decision to implement the proposed action/no action alternative (Alternative 3) as described in the EA.

### **Finding of No Significant Impact**

Based on the analyses provided in the EA, there are no indications that the proposed action/no action alternative (Alternative 3) would have a significant impact, individually or cumulatively, on the quality of the human environment. I agree with this conclusion and therefore, find that an Environmental Impact Statement should not be prepared. This determination is based on the following factors:

1. WS' activities to manage damage in the State would not be regional or national in scope.
2. The proposed action would pose minimal risk to public health and safety. Based on the analyses in the EA, the methods available would not adversely affect human safety based on their use patterns and standard operating procedures.
3. There were no unique characteristics such as parklands, prime farmlands, wetlands, wild and scenic areas, or ecologically critical areas that would be significantly affected. WS' standard operating procedures and adherence to applicable laws and regulations would further ensure that WS' activities would not harm the environment.
4. The effects on the quality of the human environment are not highly controversial. Although there is some opposition to damage management and the methods, this action is not highly controversial in terms of size, nature, or effect.
5. Based on the analysis documented in the EA and the accompanying administrative file, the effects of the proposed damage management program on the human environment would not be significant. The effects of the proposed activities are not highly uncertain and do not involve unique or unknown risks.
6. The proposed action would not establish a precedent for any future action with significant effects.
7. No significant cumulative effects were identified through the assessment. The EA analyzed cumulative effects and concluded that such impacts were not significant for this or other anticipated actions to be implemented or planned within the State of South Carolina.

8. The proposed activities would not affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places, nor would they likely cause any loss or destruction of significant scientific, cultural, or historical resources.
9. WS has determined that the proposed program would have no effect on some threatened or endangered species and would not adversely affect the other federally listed T&E species currently listed in the State and the USFWS has concurred with WS' determination. In addition, WS has determined that the proposed activities would not adversely affect State-listed species.
10. The proposed action would comply with all applicable federal, State, and local laws.

### **Rationale**

The rationale for this decision is based on several considerations. This decision takes into account public comments, social/political and economic concerns, public health and safety, and the best available science. The foremost considerations are that: 1) damage management would only be conducted by WS at the request of landowners/managers, 2) management actions would be consistent with applicable laws, regulations, policies and orders, and 3) no adverse effects to the environment were identified in the analysis. As a part of this Decision, the WS program in South Carolina would continue to provide effective and practical technical assistance and direct management techniques that reduce damage and threats of damage.



Charles S. Brown, Director-Eastern Region  
USDA/APHIS/WS  
Raleigh, North Carolina

12/11/15

Date

### **LITERATURE CITED**

- Slate, D.A., R. Owens, G. Connolly, and G. Simmons. 1992. Decision making for wildlife damage management. Trans. N. A. Wildl. Nat. Res. Conf 57:51-62.
- USDA. 2013. Environmental Assessment: Feral Swine Damage and Disease Management in South Carolina. USDA/APHIS/ Wildlife Services, Columbia, South Carolina.
- USDA. 2015a. Environmental Assessment: Feral Swine Damage Management in South Carolina. USDA/APHIS/ Wildlife Services, Columbia, South Carolina.
- USDA. 2015b. Final Environmental Impact Statement: Feral swine damage management: A national approach. USDA/APHIS/WS, Riverdale, Maryland.



## APPENDIX A

### RESPONSES TO COMMENTS ON THE ENVIRONMENTAL ASSESSMENT: FERAL SWINE DAMAGE MANAGEMENT IN SOUTH CAROLINA

During the public involvement process for the EA, WS received six comments or comment letters. WS has reviewed the comments and letters to identify additional issues, alternatives, and/or concerns that were not addressed in the EA. Those comments received during the public involvement process are summarized below along with WS' response to those comments.

#### **Comment 1 – Support for an extended hunting season with few restrictions and large harvest limits**

The WS program does not have the authority to establish or regulate hunting seasons in the State. The SCDNR is responsible for managing wildlife in the State of South Carolina, including the establishment and regulation of hunting seasons. The actions of the SCDNR are outside the scope of the EA. The WS program prepared the EA to evaluate cumulatively the individual damage management projects that WS could conduct to manage damage and threats caused by feral swine and to assist in determining if the proposed cumulative management of feral swine damage by the WS program could have a significant impact on the human environment.

As discussed in the EA, there is currently no closed season for feral swine and no weapons restrictions on private property during the daylight hours; therefore, people can harvest feral swine throughout the year on private property (SCDNR 2015). At night, people can also harvest feral swine throughout the year on private property using certain weapons<sup>2</sup>. People could use other weapons at night if they seek and receive authorization from the SCDNR. However, the SCDNR does not currently allow hunting of feral swine at night on Wildlife Management Areas (SCDNR 2015). In addition, feral swine could be hunted at night from the last day of February through July 1 with no weapons restrictions when the SCDNR has been properly notified (SCDNR 2015). On Wildlife Management Areas within South Carolina, people can harvest feral swine only during open harvest seasons for other harvestable wildlife and only during daylight, unless otherwise restricted (SCDNR 2015). In addition, the SCDNR places no limit on the number of feral swine that people can harvest during the year in the State. Therefore, the current regulations for harvesting feral swine are very similar to the hunting opportunities supported by the commenter.

#### **Comment 2 – Depredation permits should be issued to landowners to remove feral swine based on those swine causing damage instead of allowing people to harvest feral swine for pleasure**

As stated in the EA, the SCDNR is responsible for managing wildlife in the State, including the regulation of the feral swine population. Therefore, the SCDNR is responsible for establishing and regulating hunting seasons for wildlife and establishing requirements to address wildlife when they cause damage, include damage associated with feral swine. The mission of the WS program is to provide leadership in managing conflicts between people and wildlife and to assist people when they experience damage associated with animals. The WS program does not have the authority to establish or regulate hunting seasons within South Carolina or to establish or regulate the issuance of depredation permits to manage damage. The actions of the SCDNR are outside the scope of the EA.

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<sup>2</sup> At the time this EA was developed, people could hunt feral swine "...at night with or without the aid of bait, electronic calls, artificial lights, or night vision devices using a bow and arrow other than a crossbow, or a pistol of any caliber having iron sights, a barrel length not exceeding nine inches, and which is not equipped with a butt-stock, scope, or laser sight (50-11-710)" (SCDNR 2015).



**Comment 3 - Support for having a hunting season to remove swine causing damage to bring money into the State while reducing damage and benefiting other wildlife**

As stated in the EA, the SCDNR is responsible for managing wildlife in the State, including the regulation of the feral swine population. Therefore, the SCDNR is responsible for establishing and regulating hunting seasons for wildlife and establishing requirements to address wildlife when they cause damage, including damage associated with feral swine. The mission of the WS program is to provide leadership in managing conflicts between people and wildlife. The WS program does not have the authority to establish or regulate hunting seasons within South Carolina. Therefore, the actions of the SCDNR are outside the scope of the EA.

**Comment 4 – Ensure domestic swine are dead before processing for slaughter**

As stated in the EA, the mission of the WS program is to provide leadership in managing conflicts between people and wildlife. The WS program does not have the authority to regulate processing facilities for domestic swine. Therefore, the actions associated with regulating the processing of domestic swine are outside the scope of the EA.

**Comment 5 - Support for the proposed action alternative**

WS developed alternatives to meet the need for action and to address the identified issues associated with managing damage caused by feral swine in South Carolina. The EA analyzed continuing the current program using an integrated methods approach to managing feral swine damage. Section 4.1 of the EA analyzes the environmental consequences of each of the alternatives in comparison to determine the extent of actual or potential impacts on the issues, including continuing the current program. Based on the analyses of the alternatives that were developed to address those issues analyzed in detail within the EA, including individual and cumulative impacts of those alternatives, the WS program will issue a decision for the final EA.