# DECISION

# ENVIRONMENTAL ASSESSMENT: FERAL SWINE DAMAGE MANAGEMENT IN SOUTH CAROLINA

## PURPOSE

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 environmental and social impacts to the quality of the human environment from resolving damage, including conflicts and threats, to agricultural resources, property, natural resources, and human safety associated with feral swine (*Sus scrofa*)[1] (USDA 2012). The EA documents the need for damage management in the State and assesses potential impacts on the human environment of three alternatives to address that need. The proposed action in the EA would continue an integrated methods approach to address the need to manage damage and threats associated with feral swine.

The EA evaluated the issues and alternatives associated with WS' potential participation in managing damage and threats caused by feral swine in the State. The EA was prepared by WS to determine if the alternatives could have a significant impact on the quality of the human environment. Specifically, the EA was prepared to: 1) facilitate planning, 2) facilitate interagency coordination, 3) streamline program management, 4) evaluate the potential environmental consequences of the alternatives related to the issues associated with managing damage caused by feral swine, and 5) clearly communicate to the public the analysis of individual and cumulative impacts.

## NEED FOR ACTION

The need for action arises from requests for assistance received by WS to reduce and prevent damage occurring to agricultural resources, natural resources, property, and threats to human safety associated with feral swine. WS would only conduct damage management activities after receiving a request for assistance. Before initiating activities, a Memorandum of Understanding, cooperative service agreement, or other comparable document would be signed between WS and the entity requesting assistance, which would list all the methods the property owner or manager would allow to be used on property they own and/or manage. WS may also be requested to participate in disease surveillance and monitoring.

## SCOPE OF ANALYSES IN THE EA

The EA evaluates the need for action to manage damage associated with feral swine, the potential issues associated with managing damage caused by feral swine, and the environmental consequences of conducting different alternatives to meet the need for action while addressing the identified issues. The EA evaluates meeting the need for action under three alternatives. The methods available for use or recommendation under each of the alternatives evaluated were provided in Appendix B of the EA. The actions evaluated were the use of those methods available under the alternatives and the employment of those methods by WS to manage or prevent damage associated with feral swine. The standard WS Decision Model (Slate et al. 1992) would be the site-specific procedure for individual actions conducted by WS (see WS Directive 2.201).

Issues related to managing damage caused by feral swine in South Carolina were initially developed by WS and the South Carolina Department of Natural Resources (SCDNR). Issues were defined and preliminary alternatives were identified through the scoping process. As part of the scoping process, the

[1]Feral swine are also known as "*wild pigs*", "*wild boars*", and "*feral hogs*".

EA was made available to the public for review and comment by a legal notice published daily in *The State Newspaper* from January 2, 2013 through January 4, 2013. A notice of availability and the EA were also made available for public review and comment on the APHIS website at http://www.aphis.usda.gov/wildlife_damage/nepa.shtml beginning on December 20, 2012. A letter of availability was also mailed directly to agencies, organizations, and individuals with probable interest in feral swine damage management in the State. The public involvement process ended on February 7, 2013.

WS received two comment letters related to the public comment period. The comment letters received during the public involvement process were reviewed for substantive issues and alternatives, which were considered in developing this Decision for the EA. Based upon those comments, minor editorial changes were incorporated into the EA. Those minor changes enhanced the understanding of the EA, but did not change the analysis provided in the EA. A summary of the comments received and responses to the comments are provided in Appendix A of this Decision.

## AUTHORITY AND COMPLIANCE

WS is authorized by law to reduce damage caused by animals through the Act of March 2, 1931 (46 Stat. 1468; 7 USC 426-426b), as amended and the Act of December 22, 1987 (101 Stat. 1329-331, 7 USC 426c). Management of wildlife in the State is the responsibility of the SCDNR. As the agency with authority for the management of wildlife, the SCDNR was consulted during the development of the EA and provided input to ensure an interdisciplinary approach according to the National Environmental Policy Act (NEPA) and agency mandates, policies, and regulations.

The EA and this Decision ensures WS' actions comply with the NEPA, with the Council on Environmental Quality guidelines (40 CFR 1500), and with APHIS' NEPA implementing regulations (7 CFR 372). All activities, including disposal requirements, would be conducted consistent with: 1) the Endangered Species Act of 1973, 2) the Federal Insecticide, Fungicide, and Rodenticide Act, 3) the Airborne Hunting Act, 4) applicable Federal, State, and local laws, regulations, and policies, including WS' Directives, and 5) applicable Executive Orders.

## DECISIONS TO BE MADE

Based on the scope of the EA, the decisions to be made are: 1) should WS conduct feral swine damage management to alleviate damage to agriculture, property, natural resources, and threats to human safety, 2) should WS conduct disease surveillance and monitoring in feral swine populations when requested by the SCDNR and other agencies, 3) should WS implement an integrated wildlife damage management strategy, including technical assistance and direct operational assistance, to meet the need for feral swine damage management in South Carolina, 4) if not, should WS attempt to implement one of the alternatives to an integrated damage management strategy as described in the EA, and 5) would the proposed action or the other alternatives result in effects to the environment requiring the preparation of an Environmental Impact Statement.

## AFFECTED ENVIRONMENT

Feral swine are present in all 46 counties of the State, with populations occurring primarily along major river drainages. Feral swine damage or threats of damage can occur statewide in South Carolina wherever feral swine occur. However, damage management would only be conducted by WS when requested by a landowner or manager and only on properties where a cooperative service agreement or other comparable document was signed between WS and a cooperating entity. Upon receiving a request for assistance, activities to reduce feral swine damage or threats could be conducted on federal, state,

tribal, municipal, and private properties in South Carolina. Areas where damage or threats of damage could occur include, but would not be limited to agricultural fields, orchards, farmyards, ranches, livestock operations, aquaculture facilities, industrial sites, natural areas, government properties and facilities, private properties, corporate properties, schools, parks, woodlots, recreation areas, communally-owned homeowner/property owner association properties, wildlife refuges, levees, dikes, and wildlife management areas. The area would also include airports and military airbases where feral swine were a threat to human safety and to property; areas where feral swine were negatively affecting wildlife, including T&E species; and public property where feral swine were negatively affecting historic structures, cultural landscapes, and natural resources.

## ISSUES ASSOCIATED WITH FERAL SWINE DAMAGE MANAGEMENT ACTIVITIES

Issues related to managing damage associated with feral swine in South Carolina were defined and preliminary alternatives were identified by WS in consultation with the SCDNR. The EA was also made available to the public for review and comment through notices published in local media and through direct notification of potentially interested parties.

Chapter 2 of the EA describes in detail the issues considered and evaluated in the EA (USDA 2012). The following issues were identified as important to the scope of the analysis (40 CFR 1508.25) with each alternative evaluated in the EA relative to the impacts on those major issues:

- Issue 1 - Effects on Feral Swine Populations in South Carolina
- Issue 2 - Effects on Non-target Species, including Threatened and Endangered Species
- Issue 3 - Effects of Management Methods on Human Health and Safety
- Issue 4 - Humaneness of Methods Available for Damage Management
- Issue 5 - Effectiveness of Damage Management Methods

## ISSUES CONSIDERED BUT NOT ANALYZED IN DETAIL WITH RATIONALE

In addition to those issues analyzed in detail, several issues were identified during the development of the EA but were not considered in detail. The rationale for the decision not to analyze those issues in detail is discussed in the EA.

## DESCRIPTION OF THE ALTERNATIVES

The following three alternatives were developed to respond to the issues identified in Chapter 2 of the EA (USDA 2012). A detailed discussion of the effects of the alternatives on the issues was described in the EA under Chapter 4; below is a summary of the alternatives.

### Alternative 1 - No Involvement by WS in Swine Damage Management

Under the no involvement alternative, WS would not be involved with any aspect of managing damage caused by feral swine in South Carolina. All requests for assistance received by WS would be referred to the SCDNR, the South Carolina Department of Agriculture, and/or other entities. Most of the methods described in Appendix B of the EA would be available under this alternative. The only methods that would not be available for use by all entities to manage damage caused by feral swine under this alternative would be immobilizing drugs, euthanasia chemicals, and shooting from an aircraft. Immobilizing drugs and euthanasia chemicals could only be used by WS, the SCDNR, or appropriately licensed veterinarians. As was discussed in Section 1.6 of the EA, shooting from aircraft is prohibited

unless authorized pursuant to the Airborne Hunting Act (16 USC 742j-1(b)(1)). All other methods described in Appendix B of the EA would be available to those persons experiencing damage.

**Alternative 2 – Addressing Requests for Assistance through Technical Assistance Only**

Under the technical assistance only alternative, WS would address every request for assistance with technical assistance only. Technical assistance would provide those people seeking assistance with information and recommendations on methods and techniques that those cooperators could implement without WS' direct involvement in the action. Technical assistance could be provided through personal or telephone consultations and through site visits. Under this alternative, the immediate burden of resolving threats or damage associated with feral swine would be placed on those persons experiencing damage. Those persons could employ methods recommended by WS, could employ other methods, could seek further assistance from other entities, or could take no further action.

Similar to Alternative 1, methods described in Appendix B would be available to those people experiencing damage or threats associated with feral swine in the State except for immobilizing drugs, euthanasia chemicals, and shooting from an aircraft. Immobilizing drugs and euthanasia chemicals would only be available to WS, the SCDNR, or appropriately licensed veterinarians. Similar to Alternative 1, shooting from an aircraft is prohibited unless authorized. All other methods described in Appendix B of the EA would be available to those persons experiencing damage.

**Alternative 3 - Continuing the Current Integrated Approach to Managing Feral Swine Damage (Proposed Action/No Action)**

The proposed action would continue the current program of employing an integrated damage management approach using available methods, as appropriate, to reduce damage associated with feral swine in the State. An integrated methods strategy would be recommended and used, encompassing the use of practical and effective methods of preventing or reducing damage while minimizing harmful effects of damage management measures on people, other species, and the environment. Non-lethal methods would be given preference in the formulation of each damage management strategy, and would be recommended or implemented when practical and effective before recommending or implementing lethal methods. However, non-lethal methods would not always be applied as a first response to each damage problem. The most appropriate response could often be a combination of non-lethal and lethal methods, or there could be instances where application of lethal methods alone would be the most appropriate strategy. Technical assistance provided under this alternative would be similar to technical assistance provided under Alternative 2.

All of the methods addressed in Appendix B of the EA would be available to WS for use to resolve requests for assistance to manage damage associated with feral swine in the State. Using the WS Decision model discussed in the EA, WS could employ methods singularly or in combination in an integrated approach to alleviate damage caused by feral swine.

## ALTERNATIVES CONSIDERED BUT NOT ANALYZED IN DETAIL WITH RATIONALE

Additional alternatives were also evaluated but were not considered in detail with rationale provided in the EA. Alternatives considered but not analyzed in detail were addressed in Section 3.2 of the EA.

## STANDARD OPERATING PROCEDURES FOR FERAL SWINE DAMAGE MANAGEMENT

The current WS program uses many standard operating procedures. Standard operating procedures were discussed in Chapter 3 of the EA (USDA 2012). Those standard operating procedures would be

incorporated into activities conducted by WS under the proposed action alternative (Alternative 3) and when applicable, under the technical assistance alternative (Alternative 2). If the no involvement by WS alternative (Alternative 1) were selected, the lack of assistance by WS would preclude the employment or recommendation of those standard operating procedures addressed in the EA.

## ENVIRONMENTAL CONSEQUENCES FOR ISSUES ANALYZED IN DETAIL

The EA analyzed the environmental consequences of each alternative as the alternatives related to the issues identified to provide information needed for making informed decisions in selecting the appropriate alternative to address the need for action. 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.

Chapter 4 of the EA analyzed the environmental consequences of each alternative in comparison to determine the extent of actual or potential impacts on the major issues identified in the EA. The proposed action/no action alternative served as the baseline for the analysis and the comparison of expected impacts among the alternatives. The analyses also take into consideration mandates, directives, and the procedures of WS and the SCDNR. The analyses in Chapter 4 of the EA indicated the potential impacts to the quality of the human environment would be similar across the alternatives.

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

Under the proposed action, WS could incorporate non-lethal and lethal methods described in Appendix B of the EA in an integrated approach in which all or a combination of methods could be employed 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. 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 could be used to exclude, harass, and disperse target wildlife from areas where damage or threats were occurring. Non-lethal methods available under the alternatives could disperse or otherwise make an area unattractive to feral swine that were causing damage, which could reduce the presence of feral swine at the site and potentially the immediate area around the site where non-lethal methods were employed. In addition, non-lethal methods could be used to capture feral swine. Non-lethal methods would be given preference when addressing requests for assistance under Alternative 2 and Alternative 3. However, non-lethal methods would not necessarily be employed to resolve every request for assistance if deemed inappropriate by WS' personnel using the WS Decision Model, especially in situations where the requesting entity had already attempted to resolve the damage or threats of damage using non-lethal methods. When effective, non-lethal methods would disperse feral swine from the area resulting in a reduction in the presence of those swine at the site where those methods were employed. Non-lethal methods used to exclude or disperse target animals are generally regarded as having minimal effects on overall populations of wildlife since those species would be unharmed. Non-lethal methods would not be employed over large geographical areas or applied at such intensity that essential resources (*e.g.*, food sources, habitat) would be unavailable for extended durations or over a wide geographical scope that long-term adverse effects would occur to a species' population. The

continued use of non-lethal methods often leads to the habituation of wildlife to those methods, which can decrease the effectiveness of those methods.

When employed under the alternatives, lethal methods would often be used to remove those animals that have been identified as causing damage or posing a threat to human safety. The use of lethal methods could result in local reductions of feral swine in the area where damage or threats were occurring. Under the proposed action alternative, WS could be requested to provide direct operational assistance where WS employs lethal methods to remove feral swine. The number of individuals removed from the population annually by WS using lethal methods would be dependent on the number of requests for assistance received, the number of feral swine involved with the associated damage or threat, and the efficacy of methods employed. The level of estimated annual lethal take addressed in the EA under the proposed action alternative was based on activities that were conducted to address previous requests for assistance. In addition, the estimated annual lethal take level was based on additional efforts of WS to address requests for assistance.

Feral swine that could be removed by WS under the proposed action could be taken by those persons experiencing damage or threats in the absence of WS' direct involvement under the other alternatives. There is currently no closed season for feral swine and no weapons restrictions on private property; therefore, feral swine could be lethally taken throughout the year on private property during the daylight hours in the State. Feral swine could also be hunted at night in the State; however, there currently are weapons restrictions during night hunting and night hunting is prohibited on Wildlife Management Areas. 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. On Wildlife Management Areas within South Carolina, feral swine could be harvested only during open harvest seasons for other harvestable wildlife and only during daylight, unless otherwise restricted.

Since the lack of WS' direct involvement does not preclude the lethal take of feral swine by those people experiencing damage or threats, WS' involvement in the taking of those swine under the proposed action would not be additive to the number of swine that could be taken by other entities in the absence of WS' involvement. The number of feral swine taken annually would likely be similar across the alternatives, since the take of feral swine could occur even if WS was not directly involved with providing assistance under Alternative 1 and Alternative 2. Those activities proposed, including the proposed take of feral swine by WS under Alternative 3, would not be additive to the number of animals that could be taken by other entities under the other alternatives despite the lack of WS' involvement.

In addition, most non-lethal and lethal methods available for resolving damage or threats associated with feral swine would be available under any of the alternatives. Immobilizing drugs, euthanasia chemicals, and aerial shooting would be the only methods that would not be available or would be restricted under all of the alternatives. Based on the evaluation in the EA (USDA 2012), the availability of those methods under the proposed action alternative would not pose significant environmental risks when used by trained WS personnel and in accordance with their use guidelines.

The statewide population of feral swine was estimated at 150,000 swine in 2010. If 1,000 feral swine were lethally removed by WS and the population remains at least stable in the State, the highest level of take by WS would represent 0.7% of a stable population. If WS' highest estimated annual take were combined with the number of swine harvested by deer hunters during 2010, the cumulative take would represent 24.9% of the estimated statewide population. The South Carolina Wild Hog Task Force estimated that 50 to 75% of the statewide population would have to be removed 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 this alternative would occur within any 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**

Another issue often raised is the potential impacts to populations of wildlife that could be taken as non-targets during damage management activities. While efforts would be made to minimize the risks of lethally taking non-target wildlife, the potential does exist for the unintentional take of non-targets during damage management activities.

Under the no involvement by WS alternative, WS would not be directly involved with any aspect of managing damage associated with feral swine; therefore, no direct impacts to non-targets would occur from WS. Under the technical assistance only alternative, WS could provide information on the proper use of methods and provide demonstration on the use of methods but would not be directly involved with using methods to alleviate feral swine damage or threats. Similar to the no WS involvement alternative, under the technical assistance alternative, if methods were applied as intended and with regard for non-target hazards by other entities, those methods would not result in the decline of non-target species' populations. If requestors were provided technical assistance but did not implement any of the recommended actions and took no further action, the potential impacts to non-targets would be lower compared to the proposed action. If those persons requesting assistance implemented recommended methods appropriately and as instructed or demonstrated, the potential impacts to non-targets would be similar to the proposed action. Methods or techniques not implemented as recommended or used inappropriately would likely increase risks to non-targets. When employing direct operational assistance under the proposed action alternative, WS could employ methods and use techniques that would avoid non-target take as described in Chapter 3 of the EA under the standard operating procedures.

The ability to reduce damage and threats caused by feral swine would be variable and would be based upon the skills and abilities of the person implementing damage management actions under Alternative 1 and Alternative 2. If those methods available were applied as intended, risks to non-targets would be minimal to non-existent. If methods available were applied incorrectly or applied without knowledge of wildlife behavior, risks to non-target wildlife would be higher under any of the alternatives. If frustration from the lack of available assistance under Alternative 1 and Alternative 2 caused those persons 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 take of non-target wildlife. Under the proposed action alternative, those persons could request direct operational assistance from WS to reduce damage and threats occurring, which would increase the likelihood that non-target species would be unaffected by damage management activities.

WS reviewed those threatened and endangered species listed in the State during the development of the EA (see Appendix C in the EA). WS determined that activities conducted pursuant to the proposed action would not likely adversely affect those species listed in the State by the United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Services nor their critical habitats. In addition, WS has determined that the proposed damage management program would not adversely affect any of the

species listed by the SCDNR in the State. The USFWS and the SCDNR have concurred with WS' determination.

**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 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 methods were used incorrectly or without regard for human safety, risks to human safety would increase under any of the alternatives that those methods could be employed. The EA determined that the availability of immobilizing drugs, euthanasia chemicals, and aerial shooting under the proposed action alternative would not increase risks to human safety from the use of those methods under the proposed action alternative. Although risks do occur from the use of immobilizing drugs, euthanasia chemicals, and aerial shooting, when those methods were used in consideration of human safety, the use of those methods would not pose additional risks to human safety 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 2007 through FY 2011. The risks to human safety from the use of non-lethal and lethal methods, when used appropriately and by trained personnel, would be considered low.

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

The issue of humaneness was also analyzed in relationship to methods available under each of the alternatives. 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 aerial shooting would be the only methods that would not be available to all entities under the alternatives. The ability of WS to provide direct operational assistance under the proposed action alternative would ensure methods were employed by WS as humanely as possible. Under the other alternatives, methods could be used by other entities inhumanely if used inappropriately or without consideration of feral swine behavior. However, the efficacy of methods employed by a cooperator would be based on the skill and knowledge of the requestor in resolving the threat to safety or damage situation despite WS' demonstration. 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 being perceived 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 to the public to use to resolve damage and threats caused by feral swine.

**Issue 5 - Effectiveness of Damage Management Methods**

The methods available to those persons experiencing damage would be similar across the alternatives analyzed in detail. The only methods that would not be available under all the alternatives analyzed in detail would be the use of immobilizing drugs, euthanasia chemicals, and aerial shooting. Since most methods available for resolving feral swine damage would be available to those people experiencing damage or threats under all the alternatives, the effectiveness of those methods when used as intended would be similar amongst the alternatives. A common issue raised is that the use of lethal methods would be ineffective because additional feral swine would likely return to the area, either after removal occurs or through reproduction, which gives the impression of creating a financial incentive to continue the use of only lethal methods. This assumes feral swine only return to an area where damage was occurring if lethal methods were used. However, the use of non-lethal methods is also often temporary, which could

result in feral swine returning to an area where damage was occurring once those methods were no longer used or feral swine become habituated to those methods. The common factor when employing any method is that feral swine could return if suitable conditions continue to exist at the location where damage was occurring and feral swine densities are sufficient to occupy all available habitats.

Dispersing feral swine using non-lethal methods often requires repeated application to discourage them from an area, which increases costs, moves feral swine to other areas where they could cause damage, and would often be temporary if conditions attracting those feral swine to an area remain unchanged. Dispersing and the translocating of feral swine could be viewed as moving a problem from one area to another, which would require addressing damage caused by those swine at another location. WS' objective would be to respond to a request for assistance with the most effective methods and to provide for the long-term solution to the problem using WS' Decision Model to adapt methods in an integrated approach to managing feral swine damage that is agreed upon by the cooperator.

As part of an integrated approach to managing feral swine damage, WS would have the ability to adapt methods to damage situations to effectively reduce or prevent damage from occurring. Under the proposed integrated approach, all methods, individually or in combination, could be employed as deemed appropriate through WS' Decision Model to address requests for assistance. WS' objective when receiving a request for assistance under the proposed action would be to reduce damage and threats to human health and safety or to prevent damage from occurring using an integrated approach to managing feral swine damage. Therefore, under the proposed action, WS would employ methods adaptively to achieve that objective.

## CUMULATIVE IMPACTS OF THE PROPOSED ACTION

No significant cumulative environmental impacts were identified from any of the three alternatives, including the proposed action. Under the proposed action, 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 was identified when activities are provided and expected by requesting individuals 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 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 effects would be significant. The analysis in the EA indicates that an integrated approach to managing damage and threats caused by feral swine would not result in significant cumulative effects on the quality of the human environment.

## DECISION AND RATIONALE

Based on the analyses in the EA of the alternatives developed to address the issues associated with meeting the need for action, including individual and cumulative impacts of those alternatives, the following decision has been reached:

### *Decision*

I have carefully reviewed the EA prepared to meet the need for action. I find the proposed 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 addresses the identified issues, which reasonably confirm that no significant impact, individually or cumulatively, to wildlife populations or the quality of the human

environment are likely to occur from the proposed action, nor does the proposed action 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) damage management 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 T&E 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 (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. Damage management, as conducted by WS 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, 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 not adversely affect any 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.

11. No significant cumulative effects were identified by this assessment or other actions implemented or planned within the area.

***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

2/22/13
Date

**LITERATURE CITED**

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## APPENDIX A

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

During the public involvement process for the EA, WS received two comment letters. WS has reviewed the comment 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 – Although complete eradication of feral swine from the State is not likely achievable with methods currently available, WS should state that attempts would be made to eliminate feral swine from the State if tools were available to eradicate feral swine**

As the EA states, one of the goals expressed by the South Carolina Wild Hog Task Force is to reduce the feral swine population in the State. However, the goal of WS would be to respond to requests for assistance to manage damage or threats of damage. Therefore, WS would continue to work within the context of responding to requests for assistance while conducting activities pursuant to the objectives established by the SCDNR and the South Carolina Wild Hog Task Force.

As discussed in Section 1.5 of the EA, the SCDNR has management authority over wildlife in South Carolina, including free-ranging feral swine. As was also stated in Section 1.5 of the EA, the authority of WS is restricted to managing damage or threats of damage caused by animals. Therefore, WS does not have the authority to manage statewide populations of wildlife, including feral swine.

Under the appropriate alternatives, WS would conduct a coordinated program to alleviate damage in accordance with plans, goals, and objectives developed by the SCDNR and the South Carolina Wild Hog Task Force. Therefore, the cumulative take of feral swine annually or over time by WS would occur as part of management objectives for feral swine in the State. Under the relevant alternative, WS' activities associated with feral swine would target single animals or local populations at sites where their presence was causing unacceptable damage or posing threats to agriculture, human health and safety, natural resources, or property. In addition, WS would only target those feral swine in areas where requests for assistance were received and only on properties where a cooperative service agreement or other comparable document had been signed between the property owner or manager and WS.

Any damage management activities involving lethal methods by WS would be restricted to isolated individual sites. Some local populations may be temporarily reduced because of damage management activities aimed at reducing damage at a local site. 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. All activities to manage feral swine in the State would be conducted pursuant to Executive Order 13112 and from the direction of the SCDNR.

**Comment 2 – Commenter suggested making minor editorial changes to the EA, primarily regarding the information provided on the life history and biology of feral swine**

WS appreciates those comments. Based upon those comments, minor editorial changes were incorporated into the EA. Those minor changes enhanced the understanding of the EA, but did not change the analysis provided in the EA.