DECISION

ENVIRONMENTAL ASSESSMENT: FERAL SWINE DAMAGE AND DISEASE MANAGEMENT IN LOUISIANA

PURPOSE

An environmental assessment (EA) was prepared by the United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Wildlife Services (WS) program to evaluate alternative approaches to managing damage caused by feral swine (Sus scrofa)¹ in the State of Louisiana (USDA 2014). The EA documents the need for damage management in the State and assesses potential impacts to the human environment of three alternatives to address that need. The proposed action alternative in the EA evaluates an adaptive 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, work initiation document, 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 Louisiana were initially developed by WS, the Louisiana Department of Wildlife and Fisheries (LDWF), the Louisiana Department of Agriculture and Forestry (LDAF), and the Louisiana State University-Agriculture Center (LSUAC). Issues were defined and preliminary alternatives were identified through the scoping process. As part of the scoping

Feral swine are also known as "wild pigs", "wild boars", and "feral hogs".

process, the EA was made available to the public for review and comment by a legal notice published daily in *The Advocate* from March 20, 2014 through March 22, 2014. A notice of availability and the EA were also made available for public review and comment on the APHIS website beginning on March 12, 2012. WS also sent a notice of availability directly to agencies, organizations, and individuals with probable interest in feral swine damage management in the State. The public involvement process ended on April 25, 2014. WS received three comment letters related to the public comment period in support of activities conducted by WS to manage feral swine in the State.

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 LDWF. As the agency with authority for the management of wildlife, the LDWF 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 the APHIS' NEPA implementing regulations (7 CFR 372). All damage management activities conducted by WS, including disposal requirements, would be conducted consistent with applicable laws, regulations, and policies, in accordance with WS Directive 2.210.

DECISIONS TO BE MADE

Based on the scope of the EA, the decisions to be made would be:

- Should WS continue to conduct damage management to alleviate feral swine damage and threats
- Should WS conduct disease surveillance and monitoring in feral swine populations when requested by the LDWF and other agencies
- Should WS continue to implement an integrated methods strategy
- If not, should WS attempt to implement one of the alternatives to an integrated methods strategy
- Would continuing the proposed action alternative or the other alternatives result in significant effects to the environment requiring the preparation of an Environmental Impact Statement

AFFECTED ENVIRONMENT

Feral swine occur throughout the year in all 64 parishes of the State where suitable habitat exists for foraging and shelter. In general, feral swine prefer moist bottomlands or riparian areas along streams and rivers, along with other areas associated with aquatic habitats (West et al. 2009, Stevens 2010, Hamrick et al. 2011). However, feral swine are capable of utilizing a variety of habitats in the State. Therefore, damage or threats of damage caused by feral swine could occur statewide in Louisiana 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 Memorandum of Understanding, work initiation document, or another 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 Louisiana. 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 threatened or endangered 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 Louisiana were defined and preliminary alternatives were identified by WS in consultation with the LDWF, the LDAF, and the LSUAC. 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. 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 of Damage Management Activities on Feral Swine Populations
- Issue 2 Effects on Non-target Wildlife Species Populations, Including T&E Species
- Issue 3 Effects of Damage Management Methods on Human Health and Safety
- Issue 4 Humaneness and Animal Welfare Concerns of Methods
- Issue 5 Effectiveness of Feral Swine 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 Section 2.3 of the EA.

DESCRIPTION OF THE ALTERNATIVES

The following three alternatives were developed to respond to the issues identified in Chapter 2 of the EA. 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 Feral Swine Damage Management Conducted by WS

Under the no involvement alternative, WS would not be involved with any aspect of managing damage caused by feral swine in Louisiana. All requests for assistance received by WS would be referred to the LDWF, the LDAF, the LSUAC, 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 have limited availability to 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 appropriately licensed veterinarians or people under their supervision. 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 people experiencing damage.

Alternative 2 – Feral Swine Damage Management by WS 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 people experiencing damage. Those people 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 immobilizing drugs, euthanasia chemicals, and shooting from an aircraft would have limited availability. Immobilizing drugs and euthanasia chemicals would only be available to appropriately licensed veterinarians or people under the supervision. Similar to Alternative 1, shooting from an aircraft would be 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

Additional alternatives were also considered during the development of the EA to address the issues but were not analyzed in detail with the rationale discussed in the EA. Alternatives considered but not analyzed in detail were addressed in Section 3.3 of the EA.

STANDARD OPERATING PROCEDURES FOR FERAL SWINE DAMAGE MANAGEMENT

The WS program uses many standard operating procedures that improve the safety, selectivity, and efficacy of activities to manage damage associated with feral swine. Standard operating procedures were discussed in Chapter 3 of the EA. Those standard operating procedures would be incorporated into activities conducted by WS if the proposed action alternative (Alternative 3) were selected and when applicable, under the technical assistance alternative (Alternative 2), if selected. 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

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 LDWF, the LDAF, and the LSUAC. 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.

The following resource values in Louisiana 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 or endangered 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.

Issue 1 - Effects of Damage Management Activities on Feral Swine Populations

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 available under the alternatives could be used to exclude, harass, and disperse feral swine from areas where damage or threats were occurring, 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, nonlethal 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 animals 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 individual feral swine 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 removal addressed in the EA under the proposed action alternative was based on previous activities that were conducted to address previous requests for assistance. In addition, the estimated annual lethal removal level evaluated in the EA was based on additional efforts of WS that could occur to address requests for assistance.

Feral swine that could be removed by WS under the proposed action could be removed 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 removed throughout the year on private property during the daylight hours in the State. Feral swine could also be hunted at night in the State on private property from the end of February through the end of August with some restrictions.

Since the lack of WS' direct involvement does not preclude the lethal removal of feral swine by those people experiencing damage or threats, WS' involvement in removing those swine under the proposed action would not be additive to the number of swine that could be removed by other entities in the absence of WS' involvement. The number of feral swine 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. Those activities proposed, including the proposed removal of feral swine by WS under Alternative 3, would not be additive to the number of animals that could be removed 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 be restricted under all of the alternatives. Based on the evaluation in the EA, 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 to range from 250,000 to 400,000 feral swine. Based on previous requests for assistance and the likelihood that the statewide population of feral swine will continue to increase in Louisiana, WS anticipates that up to 10,000 feral swine could be killed annually in the State to alleviate damage associated with requests for assistance and for disease surveillance. However, the annual removal of feral swine by WS could exceed 10,000 feral swine if populations continued to increase, if additional funding was provided to manage feral swine damage, and the number of requests for assistance continued to increase. If 10,000 feral swine were lethally removed by WS and the population remains at least stable in the State, the highest level of removal by WS would represent 4.0% of a stable population. If the estimated 161,600 feral swine harvested in the State during 2014 were representative of the annual harvest of feral swine in the State that could occur, the removal of 10,000 feral swine by WS would represent 6.2% of the harvest. When combined, the removal by WS and the harvest of feral swine in 2013 would represent 68.6% of a population estimated at 250,000 swine and 42.9% of a statewide population estimated at 400,000 feral swine. Based on the findings of the South Carolina Wild Hog Task Force (2012) and Timmons et al. (2012), an annual harvest rate of 42.9% to 68.6% would likely not reach a magnitude that would cause a decline in the statewide feral swine population. In addition, current feral swine population estimates in Louisiana are based on anecdotal

information and mail-in surveys and no actual statewide population estimates are available (Wild Hog Working Group 2012).

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. The National Invasive Species Council specifically lists feral swine as an invasive species pursuant to Executive Order 13112. In addition, Lowe et al. (2000) ranked feral swine as one of the 100 worst invasive species in the world. Since the LDWF regulates wildlife populations in the State, including feral swine, any reduction in the feral swine population in Louisiana that might occur under this alternative, including complete removal of swine from the State, would occur within any management objectives established by the LDWF.

Issue 2 - Effects on Non-target Wildlife Species Populations, Including T&E Species

Another issue often raised is the potential impacts to populations of wildlife that could be removed unintentionally as non-targets during damage management activities. While efforts would be made to minimize the risks of lethally removing non-target wildlife, the potential does exist for the unintentional removal 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 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 removal 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 removal 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). The United States Fish and Wildlife Service and the LDWF have concurred with WS' determination related to the potential effects on the status of threatened or

endangered species in the State. WS would adhere to the restriction zones for the use of snares to avoid incidental capture of Louisiana black bears (*Ursus americanus luteolus*) (see Appendix D of the EA). WS would abide by all reasonable and prudent measures, including the terms and conditions that implement the reasonable and prudent measures, as outlined in the Biological Opinion issued by the United States Fish and Wildlife Service to avoid jeopardizing the status of the Louisiana black bear. Cumulative impacts would be minimal on non-targets from any of the alternatives discussed.

Issue 3 - Effects of Damage 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. 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 2008 through FY 2012. 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 and Animal Welfare Concerns of Methods

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 have limited availability 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 technical assistance alternative, methods could be used by the requester inhumanely if used inappropriately or without consideration of feral swine behavior. However, the efficacy of methods employed by other entities would be based on the skill and knowledge of the requestor in resolving the threat to safety or damage situation despite WS' demonstration or instructions. 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 Feral Swine Damage Management Methods

The methods available to those people experiencing damage would be similar across the alternatives analyzed in detail. The only methods that would limited availability to other entities 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 an increase in 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 were 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 LDWF for feral swine populations in the State. Minimal risks to public safety were identified when activities would be provided and expected by requesting individuals under Alternative 2 and Alternative 3 since only trained and experienced WS' personnel would conduct and/or recommend damage management activities. There would be 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 was 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 of the alternatives that were developed to address those issues analyzed in detail within the EA, including individual and cumulative impacts of those alternatives, I, the decision-maker, have made the following decision.

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 to 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 would successfully address feral swine damage management using a combination of the most effective methods and would not adversely affect the environment, property, human safety, and/or non-target species, including threatened or endangered species. Alternative 3 would offer the greatest chance of maximizing effectiveness and benefits to resource owners and managers while minimizing cumulative effects on the quality of the human environment that might result from the program's effect on target and non-target species' populations. In addition, Alternative 3 would present the greatest chance of maximizing net benefits while minimizing adverse effects to public health and safety. Alternative 3 would also offer a balanced approach to the issues of humaneness and aesthetics when all facets of those issues were considered. Further analysis would be triggered if changes occur that broaden the scope of damage management activities, 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. Managing damage caused by feral swine, as conducted by WS in Louisiana, would not be regional or national in scope.
- 2. 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. The proposed action/no action alternative would continue to have no significant effect on unique characteristics, such as parklands, prime farmlands, wetlands, wild and scenic areas, or ecologically critical areas. WS' standard operating procedures and adherence to laws and regulations that govern impacts on elements of the human environment would assure that significant adverse impacts were avoided.
- 4. The effects on the quality of the human environment are not highly controversial. Although there may be opposition to killing feral swine, this action is not controversial in terms of size, nature, or effect. Based on consultations with the United States Fish and Wildlife Service and the LDWF, the proposed action is not likely to cause a controversial disagreement among the appropriate resource professionals.
- 5. Based on the analysis 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. This action would not set a precedent for future actions that may be implemented or planned within the State.
- 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 Louisiana.
- 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. During the development of the EA, WS consulted with the United States Fish and Wildlife Service pursuant to Section 7 of the Endangered Species Act. The United States Fish and Wildlife Service concurred with WS' determinations for federally listed threatened or endangered species. To minimize the incidental take of Louisiana black bears, WS would abide by the reasonable and prudent measures, including the terms and conditions, outlined by the United States Fish and Wildlife Service in their Biological Opinion issued to WS.
- 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) WS would only conduct damage management at the request of landowners/managers, 2) management actions would be consistent with applicable laws, regulations, policies and orders, and 3) no cumulative effects to the environment were identified in the analysis. As a part of this Decision, the WS program in Louisiana 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

<u> 4 / 2 9 / 1 4</u>

LITERATURE CITED

Hamrick, B., M. Smith, C. Jaworowski, and B. Strickland. 2011. A landowner's guide for wild pig management: Practical methods for wild pig control. Mississippi State University Extension Service and Alabama Cooperative Extension System.

Lowe, S., M. Browne, S. Boudjelas, and M. De Poorter. 2000. 100 of the World's Worst Invasive Alien Species A selection from the Global Invasive Species Database. Published by The Invasive Species Specialist Group (ISSG) a specialist group of the Species Survival Commission (SSC) of

- the World Conservation Union (IUCN). 12 pp. First published as special lift-out in *Aliens 12*, December 2000. Updated and reprinted version: November 2004.
- 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.
- South Carolina Wild Hog Task Force. 2012. South Carolina's growing wild hog problem:

 Recommendations for management and control.

 http://www.clemson.edu/extension/natural_resources/wildlife/wildhogs/documents/wild_hog_white_paper.pdf. Accessed December 18, 2012.
- Stevens, R. L. 2010. The feral hog in Oklahoma. Second Edition. Samuel Roberts Noble Foundation, Ardmore, Oklahoma.
- Timmons, J. A., B. Higginbotham, R. Lopez, J. C. Cathey, J. Melish, J. Griffin, A. Sumrall, and K. Skow. 2012. Feral hog population growth, density and harvest in Texas. Texas A & M AgriLife Extension, Texas A & M University, College Station, Texas.
- USDA. 2014. Environmental Assessment: Feral Swine Damage and Disease Management in Louisiana. USDA/APHIS/ Wildlife Services, Port Allen, Louisiana.
- West, B. C., A. L. Cooper, and J. B. Armstrong. 2009. Managing wild pigs: A technical guide. Human-Wildlife Interactions Monograph 1:1-55.
- Wild Hog Working Group. 2012. 2012 Annual State Summary Report. Southeastern Association of Fish and Wildlife Agencies. 53 pp.