

**DECISION  
AND  
FINDING OF NO SIGNIFICANT IMPACT**

**CANADA GOOSE DAMAGE MANAGEMENT IN  
THE STATE OF SOUTH CAROLINA**

The U.S. Department of Agriculture, Animal and Plant Health Inspection Service (USDA APHIS), Wildlife Services (WS) program responds to requests for assistance from individuals, organizations and agencies experiencing damage caused by wildlife. Ordinarily, according to APHIS procedures implementing the National Environmental Policy Act (NEPA), individual wildlife damage management actions may be categorically excluded (7 CFR 372.5(c), 60 Fed. Reg. 6000-6003, 1995). To evaluate and determine if any potentially significant impacts to the human environment from WS' planned and proposed program would occur, an environmental assessment (EA) was prepared. The EA documents the need for Canada goose damage management in South Carolina and assessed potential impacts of various alternatives for responding to damage problems. The EA analyzes the potential environmental and social effects for resolving Canada goose damage related to the protection of resources, and health and safety on private and public lands in South Carolina. WS' proposed action is to implement an Integrated Wildlife Damage Management (IWDM) program on public and private lands in South Carolina. Comments from the public involvement process were reviewed for substantive issues and alternatives which were considered in developing this decision.

Wildlife Services is the Federal program authorized by law to reduce damage caused by wildlife (Act of March 2, 1931 (46 Stat. 1468; 7 U.S.C. 426-426b) as amended, and the Act of December 22, 1987 (101 Stat. 1329-331, 7 U.S.C. 426c)). Wildlife damage management is the alleviation of damage or other problems caused by or related to the presence of wildlife, and is recognized as an integral part of wildlife management (The Wildlife Society 1992). WS uses an IWDM approach, commonly known as Integrated Pest Management (WS Directive 2.105) in which a combination of methods may be used or recommended to reduce damage. WS wildlife damage management is not based on punishing offending animals but as one means of reducing damage and is used as part of the WS Decision Model (Slate et al. 1992, USDA 1997, WS Directive 2.201). Resource management agencies, organizations, associations, groups, and individuals have requested WS to conduct Canada goose damage management to protect resources and human health and safety in South Carolina. All WS wildlife damage management activities are in compliance with relevant laws, regulations, policies, orders and procedures, including the Endangered Species Act of 1973.

**Consistency**

The analyses in the EA demonstrate that Alternative 1: 1) best addresses the issues identified in the EA, 2) provides safeguards for public health and safety, 3) provides WS the best opportunity to reduce damage while providing low impacts on non-target species, 4) balances the economic effects to agricultural and natural resources, and property, and 5) allows WS to meet its obligations to government agencies or other entities.

**Monitoring**

The South Carolina WS program will annually provide to the U.S. Fish and Wildlife Service (USFWS) and the South Carolina Department of Natural Resources (SCDNR) WS lethal take of target and non-target animals to help ensure the total statewide take (WS and other take) does not impact the viability of target and non-target wildlife species. In addition, the EA will be reviewed each year to ensure that it and the analysis are sufficient.

### **Public Involvement**

The pre-decisional EA was prepared and released to the public for a 30-day comment period by a legal notice in *The State* newspaper on May 8, 2006. A letter of availability and copies of the pre-decisional EA were also mailed directly to agencies, organizations, and individuals with probable interest in the proposed program. One comment document was received from the public after review of the pre-decisional EA. All comments were analyzed to identify substantial new issues, alternatives, or to re-direct the program. Responses to specific comments are included in Appendix A. All letters are maintained in the administrative file located at the Wildlife Services State Office, 400 Northeast Drive; Suite L, Columbia, SC 29203-5182.

### **Major Issues**

The EA describes the alternatives considered and evaluated using the identified issues. The following issues were identified as important to the scope of the analysis (40 CFR 1508.25).

- Effects on Target Canada Goose Populations
- Effectiveness of Canada Goose Damage Management
- Effects on Aesthetic Values
- Humaneness and Animal Welfare Concerns of Methods Used by WS
- Effects on Non-target Wildlife Species Populations, Including T&E Species

### **Affected Environment**

The proposed action may affect private and public lands in South Carolina including, but not necessarily limited to property on or adjacent to airports, golf courses, athletic fields, recreational areas, swimming beaches, parks, corporate complexes, subdivisions, businesses, industrial parks, schools, agricultural areas, wetlands, restoration sites, and cemeteries.

### **Alternatives That Were Fully Evaluated**

The following four alternatives were developed to respond to the issues. One additional alternative was considered but not analyzed in detail. A detailed discussion of the effects of the alternatives on the issues is described in the EA; below is a summary of the alternatives.

#### **Alternative 1: Integrated Wildlife Damage Management (Proposed Action/No Action)**

The proposed action is for WS to continue to implement an Integrated Canada Goose Damage Management Program that responds to requests for the protection of property, agricultural resources, natural resources, human health, and human safety in South Carolina. Requests for assistance may occur anywhere and anytime throughout the state. The program would include the use of legal techniques and methods, used singly or in combination, to meet requestor needs for reducing conflicts with Canada geese. Cooperators requesting assistance would be provided with information regarding the use of effective nonlethal and lethal techniques. Nonlethal methods recommended and used by WS may include resource management, physical exclusion,

relocation, and deterrents. Lethal methods recommended and used by WS may include nest/egg destruction, live capture and transportation to a licensed poultry processing facility, live capture and euthanasia, and/or shooting. In many situations, the implementation of nonlethal methods such as manipulation of habitat, application of repellents, and installation of fencing, flagging, and exclusion devices would be conducted by the requestor. Wildlife damage management assistance regarding Canada geese would be conducted by WS in South Carolina, when requested, on private and public property and facilities where a need exists and pursuant to an Agreement for Control.

The proposed program would be conducted pursuant to applicable laws and regulations authorizing take of Canada geese and their nest and eggs, developed through partnerships among WS, the USFWS, and the SCDNR, and as requested by and through coordination with requestors of assistance. All management actions would comply with applicable federal, state, and local laws.

**Alternative 2: Technical Assistance Only by WS**

This alternative would not allow for WS operational Canada goose damage management in South Carolina. WS would only provide technical assistance and make recommendations when requested. Producers, property owners, agency personnel, or others could conduct Canada goose damage management using any legal lethal or nonlethal method. Currently, alpha-chloralose is only available for use by WS employees. Therefore, use of this chemical by private individuals would be illegal and unavailable for use.

**Alternative 3: Non-lethal Only by WS**

This alternative would require WS to use or recommend nonlethal methods only to resolve Canada goose damage problems. Persons receiving technical assistance could still employ lethal methods that were available to them. Currently, alpha-chloralose is only available for use by WS employees. Therefore, use of this chemical by private individuals would be illegal.

**Alternative 4: No Federal WS Canada Goose Damage Management**

This alternative would eliminate WS involvement in Canada goose damage management in South Carolina. WS would not provide direct operational or technical assistance and requesters of WS services would conduct damage management activities without WS input. Information on Canada goose damage management methods may be available to producers and property owners through other sources such as the SCDNR, USDA Agricultural Extension Service offices, universities, or pest control organizations. Alpha-chloralose is only available for use by WS employees. Therefore, use of this chemical by private individuals would be illegal and unavailable for use.

**Alternative Considered but not Analyzed in Detail:**

**Non-lethal Methods Implemented Before Lethal Methods**

This alternative is similar to Alternative 1 except that WS personnel would be required to always recommend or use nonlethal methods prior to recommending or using lethal methods to reduce Canada goose damage. Both technical assistance and direct damage management would be provided in the context of a modified IWDM approach. Alternative 1, the Proposed Action,

recognizes nonlethal methods as an important dimension of IWDM, gives them first consideration in the formulation of each management strategy, and recommends or uses them when practical before recommending or using lethal methods. However, the important distinction between the Nonlethal Methods First Alternative and the Proposed Alternative is that the former alternative would require that all nonlethal methods be used before any lethal methods are recommended or used.

While the humaneness of the nonlethal management methods under this alternative would be comparable to the Proposed Program Alternative 1, the extra harassment caused by the required use of methods that may be ineffective could be considered less humane. As local Canada goose population increase, the number of areas negatively affected by geese would increase, and greater numbers of geese would be expected to congregate at sites where nonlethal management efforts were not effective. This may ultimately result in a greater numbers of geese being killed to achieve the local WAC than if lethal management were immediately implemented at problem locations (Manuwal 1989). Once lethal measures were implemented, Canada goose damage would be expected to drop relative to the reduction in localized population of Canada geese causing damage.

Since in many situations this alternative would result in greater numbers of geese being killed to achieve the local WAC, at a greater cost to the requester, and result in a delay in reaching the local WAC in comparison to the Proposed Alternative, the Nonlethal Methods Implemented Before Lethal Methods Alternative is removed from further discussion in this document.

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

The analysis in the EA indicates that there will not be a significant impact, individually or cumulatively, on the quality of the human environment as a result of this proposed action. I agree with this conclusion and therefore find that an EIS need not be prepared. This determination is based on the following factors:

1. Canada goose damage management as conducted by WS in South Carolina is not regional or national in scope.
2. The proposed action would pose minimal risk to public health and safety. Risks to the public from WS methods were determined to be low in a formal risk assessment (USDA 1997, Appendix P).
3. There are no unique characteristics such as park lands, prime farm lands, wetlands, wild and scenic areas, or ecologically critical areas that would be significantly affected. Built-in mitigation measures that are part of WS's standard operating procedures and adherence to laws and regulations will further ensure that WS activities do not harm the environment.
4. The effects on the quality of the human environment are not highly controversial. Although there is some opposition to wildlife 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 this assessment. The number of Canada geese killed by WS, when added to the total known other take of these species, would fall within population management objectives supported by the SCDNR and the USFWS. The EA discussed cumulative effects of WS on target and non-target species populations and concluded that such impacts were not significant for this or other anticipated actions to be implemented or planned within the State.
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 likely adversely affect any Federal or South Carolina State listed T&E species or critical habitat. This determination is based upon concurrence from the USFWS and the SCDNR that the program will not likely adversely affect any threatened or endangered species in South Carolina.
10. The proposed action would be in compliance with all federal, state, and local laws.

### **Decision and Rationale**

I have carefully reviewed the EA prepared for this proposal and the input from the public involvement process. I believe that the issues identified in the EA are best addressed by selecting Alternative 1 - Integrated Wildlife Damage Management Program (Proposed Action/No Action) and applying the associated Standard Operating Procedures discussed in Chapter 3 of the EA. Alternative 1 is selected because (1) it offers the greatest chance at maximizing effectiveness and benefits to resource owners and managers while minimizing cumulative impacts on the quality of the human environment that might result from the program's effect on target and non-target species populations; (2) it presents the greatest chance of maximizing net benefits while minimizing adverse impacts to public health and safety; and, (3) it offers a balanced approach to the issues of humaneness and aesthetics when all facets of these issues are considered. Therefore, it is my decision to implement the proposed action as described in the EA.

Copies of the EA are available upon request from the Wildlife Services State Office, 400 Northeast Drive; Suite L, Columbia, SC 29203-5182.

*Debra S. Lisk*

*6/12/06*

for Charles S. Brown, Regional Director  
APHIS-WS Eastern Region

Date

**Literature Cited:**

Manuwal, D. 1989. Nuisance waterfowl at public waterfront parks in Seattle metropolitan area. Final Rpt. To Interlocal Waterfowl Manage. Comm. College of Forest Resour., Univ. WA Seattle, WA. 48 pp.

Slate, D. A., R. Owens, Connolly, G., and G. Simmons. 1992. Decision making for wildlife damage management. Trans. North Am. Wildl. Nat. Res. Conf. 57:51-62.

The Wildlife Society. 1992. Conservation policies of The Wildlife Society: A stand on issues important to wildlife conservation. The Wildlife Society, Bethesda, Md. 24pp.

USDA, Animal and Plant Health Inspection Service, Animal Damage Control. 1997 (revised). Animal Damage Control Program. Final Environmental Impact Statement. USDA, APHIS, ADC Operational Support Staff, 4700 River Road, Unit 87, Riverdale, MD 20737.

## APPENDIX A

### RESPONSE TO PUBLIC COMMENTS RECEIVED ON PRE-DECISIONAL ENVIRONMENTAL ASSESSMENT

**Issue 1:** *The proposed methods of control are cruel, inhumane, and will cause undue pain and suffering.*

**Program Response 1:** As described in sections 2.3.3 and 2.3.4 of the EA, WS recognizes that people have wide and varying opinions and beliefs regarding WS use of control methods. South Carolina WS personnel are experienced and professional in their use of management methods so that they are as humane as possible under the constraints of current technology and funding. Standard Operating Procedures used to maximize humaneness are listed in Chapter 3 of the EA.

**Issue 2:** *Non-lethal control measures should be used to reduce Canada goose damage and conflicts.*

**Program Response 2:** As described in the proposed action, WS will consider the use of non-lethal methods as part of an overall management scheme when determined practical and effective for a given situation. Non-lethal methods may be used or recommend as the only method or may be used in combination with lethal control measures to obtain the desired results for a specific project. At times, non-lethal methods may be ineffective at reducing damage and conflicts to acceptable levels. The decision on what types of methods to use or recommend will be based upon the Decision Model (Slate et al. 1992) described in section 3.2.2 of the EA. As appropriate, non-lethal control measures will continue to be used and recommend by WS to reduce Canada goose damage in South Carolina.

**Issue 3:** *Lethal control measures are ineffective at reducing Canada goose damage and are only a short-term solution.*

**Program Response 3:** As described in the proposed action, lethal control is only part of an integrated wildlife damage management approach that WS will use to manage Canada goose damage and conflicts in South Carolina. When practical and effective, WS will consider the use of non-lethal methods as part of an overall management scheme. WS recognizes that a reduction of a local Canada goose population or flock is frequently temporary because immigration from adjacent areas or reproduction replaces the animals removed. While lethal control may only have a temporary short-term effect in many circumstances, this may be the only effective management approach available at a site specific location. At times lethal control may be the only option available to effectively and efficiently reduce damage to acceptable levels. The decision on when and how a lethal management approach may be implemented will be based upon the Decision Model (Slate et al. 1992) described in section 3.2.2 of the EA. A discussion of the effectiveness of the proposed management program, including lethal methods, is provided in section 4.1.2 of the EA. Therefore, as appropriate, lethal control measures will continue to be used and recommend by WS to reduce Canada goose damage in South Carolina.

**Issue 4:** *Wildlife Services should use and recommend the most up to date and effective methods available for preventing and resolving conflicts between humans and Canada geese.*

**Program Response 4:** WS uses and recommends the most up to date and effective methods available for preventing and resolving conflicts between humans and Canada geese. WS personnel receive information and training on a periodic basis to keep them aware new methods and techniques that become available for use in the wildlife damage management arena. Furthermore, the National Wildlife Research Center (NWRC) functions as the research arm of WS by providing scientific information and development of methods for wildlife damage management that are effective and environmentally responsible. NWRC scientists work closely with wildlife managers, researchers, field specialists and others to develop and evaluate wildlife damage management techniques. NWRC scientists have authored hundreds of scientific publications and reports, and are respected world-wide for their expertise in wildlife damage management. As new effective methods become available, the South Carolina WS program will consider them for potential use in managing Canada goose damage and conflicts throughout the state.

**Issue 5:** *There is no evidence that the proposed Canada goose damage management program is effective at reducing damage and conflicts.*

**Program Response 5:** A discussion of the effectiveness of the proposed management program is provided in section 4.1.2 of the EA.

**Issue 6:** *Everyone affected by a WS management action should be involved in the decision making process.*

**Program Response 6:** The WS program in South Carolina only conducts Canada goose damage management at the request of the affected property owner or resource manager. As described in section 3.2.4, WS uses a community based decision making process when deciding what course of action is appropriate to resolve a specific conflict. Resource owners and others directly affected by Canada goose damage or conflicts in South Carolina have direct input into the resolution of such problems. If WS received requests from an individual or official for Canada goose damage management, WS would address the issues/concerns and consideration would be made to explain the reasons why the individual damage management actions would be necessary. Management actions would be carried out in a caring, humane, and professional manner.

**Issue 7:** *Need for action exceeds Agency's legal authority. WS does not have the legal direction to protect a person's "quality of life."*

**Program Response 7:** The USDA is authorized to protect American agriculture and other resources from wildlife damage and provide a safeguard on health related risk associated with wildlife. The primary statutory authority for the Wildlife Service program is the Act of March 2, 1931 (46 Stat. 1468; 7 U.S.C. 426-426b) as amended, and the Act of December 22, 1987 (101 Stat. 1329-331, 7 U.S.C. 426c). As clearly stated in section 1.3.3 of the EA, WS is not legislatively mandated to protect quality of life, but it is accomplished, indirectly, as a secondary result of Canada goose damage management practices. The management of goose damage to

protect human health, human safety, property, agriculture and natural resources invariably leads to a better quality of life for affected parties.

**Issue 8:** *The EA overstates the potential risks of disease transmission from Canada geese to humans, and the potential harm and damage that geese may cause.*

**Program Response 8:** As summarized in section 1.3.3 of the EA, Canada geese have the potential to spread and transmit diseases to humans, pose safety threats, and cause damage to resources. Even though some of these diseases and conflicts are not a wide spread occurrence in South Carolina, the potential risks are real. Since WS may be requested to assist in managing Canada goose populations to reduce the spread of diseases, reduce safety concerns, and protect resources from damage, WS believes that a discussion of these types of conflicts are appropriate and well within the scope of this document. WS discussion of potential disease risks, safety threats, and damage to resources is not overstated and is presented to inform the decision maker of the types of damage and conflicts for which WS assistance may be requested.

**Issue 9:** *The EA fails to fully explain what procedures WS will use to evaluate damage.*

**Program Response 9:** As described in section 3.2.2 of the EA, WS uses a Decision Model (Slate et al. 1992) to evaluate damage at the site specific level. In assessing the damage, immediate attention is given to confirming the type of damage and that damage was caused by Canada geese. Commonly this requires an inspection, depending on the type and complexity of the problem. Then severity of the problem is considered in deciding which management options are potentially applicable. Once the problem assessment is completed, all available methods are evaluated for their practicality.

**Issue 10:** *The scope of the EA is too broad in terms of geographic region affected by the proposed action.*

**Program Response 10:** Some individuals question whether preparing an EA for an area as large as the State of South Carolina would meet the NEPA requirements for site specificity. Site specificity is discussed in section 1.7.4 of the EA. As described in section 2.4.1 of the EA, in terms of considering cumulative impacts, one EA analyzing impacts for the entire State may provide a better analysis than multiple EA's covering smaller zones. In addition, South Carolina WS only conducts Canada goose damage management in small areas of the State where damage is occurring or likely to occur.

**Issue 11:** *The EA fails to sufficiently describe how WS will respond to requests for assistance; How does WS decide which management approach to use. What incentives or disincentives does WS consider when deciding on a management approach.*

**Program Response 11:** As described in section 3.2.2 of the EA, WS uses a Decision Model (Slate et al. 1992) to determine the appropriate course of action to reduce Canada goose damage and conflicts at the site specific level. WS personnel assess the problem and evaluate the appropriateness and availability (legal and administrative) of strategies and methods based on biological, economic and social considerations. Following this evaluation, the methods deemed

to be practical for the situation are developed into a management strategy. After the management strategy has been implemented, monitoring is conducted and evaluation continues to assess the effectiveness of the strategy.

**Issue 12:** *The EA fails to evaluate an alternative that would require all feasible and practical non-lethal methods to be exhausted before turning to lethal control.*

**Program Response 12:** This alternative is similar to the proposed action alternative. Under the proposed alternative, an IWDM 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 humans, Canada geese, other species, and the environment. Under this action, WS would provide technical assistance and operational damage management, including non-lethal and lethal management methods by applying the WS Decision Model (Slate et al. 1992). When appropriate, resource management, physical exclusion, relocation, and deterrents may be recommended and utilized to reduce damage. In other situations, nest and egg treatment/destruction, live capture and transportation to an approved poultry processing facility, live capture and euthanasia, and/or shooting may be used or recommended. In determining the damage management strategy, preference would be given to practical and effective non-lethal methods. However, non-lethal methods may 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.