

**DECISION  
AND  
FINDING OF NO SIGNIFICANT IMPACT**

**ENVIRONMENTAL ASSESSMENT – REDUCING PIGEON, STARLING, AND  
SPARROW DAMAGE THROUGH AN INTEGRATED WILDLIFE DAMAGE MANAGEMENT  
PROGRAM IN THE STATE OF GEORGIA**

**United States Department of Agriculture  
Animal and Plant Health Inspection Service  
Wildlife Services**

**January 2009**

**I. INTRODUCTION**

The United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Wildlife Services (WS) program prepared an Environmental Assessment (EA) to analyze the potential environmental and social effects of resolving damage to property, agricultural commodities, natural resources, and threats to human safety associated with Rock Pigeons (feral pigeons) (*Columba livia*), European Starlings (*Sturnus vulgaris*), and House Sparrows (*Passer domesticus*) in Georgia (USDA 2004)<sup>1</sup>. The EA documents the need for bird damage management in the State and assesses potential impacts on the human environment of five alternatives to address that need. WS' proposed action in the EA implements an integrated bird damage management program in Georgia to fully address the need for pigeon, starling, and sparrow damage management while minimizing impacts to the human environment.

**II. PUBLIC INVOLVEMENT**

The pre-decisional EA<sup>2</sup> was made available to the public for review and comment by a legal notice published in the *Atlanta Journal and Constitution* on December 23, 2003. A copy of the pre-decisional EA was also mailed directly to agencies, organizations, and individuals with probable interest in the proposed program. WS received one comment letter during the 32-day comment period that ended on January 23, 2004. Comments were reviewed for substantive issues and alternatives which were considered in developing the Decision for the EA. After consideration of the analysis contained in the EA and review of public comments, a Decision and Finding of No Significant Impact (FONSI) for the EA was issued on February 13, 2004. The Decision and FONSI selected Alternative 2 (proposed action) to implement an integrated bird damage management program in Georgia using multiple methods to adequately address the need for Rock Pigeon, European Starling, and House Sparrow damage management.

To facilitate public participation in the development of this new Decision and summary report, this document along with the EA and the 2004 Decision/FONSI will be made available for public review and comment through a legal notice published in the *Atlanta Journal and Constitution* announcing a minimum of a 30-day comment period. In addition, a notice of availability will also be posted on the APHIS website at [http://www.aphis.usda.gov/wildlife\\_damage/nepa.shtml](http://www.aphis.usda.gov/wildlife_damage/nepa.shtml) and notice letters will be directly mailed to

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<sup>1</sup>Copies of the EA and the Decision/FONSI are available for review from the State Director, USDA-APHIS-WS, School of Forestry and Natural Resources, Athens, GA 30602 or from the APHIS website at [http://www.aphis.usda.gov/wildlife\\_damage/nepa.shtml](http://www.aphis.usda.gov/wildlife_damage/nepa.shtml).

<sup>2</sup>Before a Decision for the EA is issued, the EA is considered pre-decisional. After the development of the EA by WS and consulting agencies and after public involvement in identifying new issues and alternatives, WS issues a Decision. Based on the analysis in the EA after public involvement, a decision is made to either publish a Notice of Intent to prepare an Environmental Impact Statement or a Finding of No Significant Impact will be noticed to the public in accordance to the NEPA, the Council of Environmental Quality regulations, and APHIS' NEPA implementation regulations.

agencies, organizations, and individuals with probable interest in the proposed program announcing the availability and requesting comment on this new Decision. Comments received during the public involvement process will be fully considered for new substantive issues and alternatives. Unless new substantial issues and/or alternatives are brought to WS' attention, this new Decision will take effect upon the close of the comment period.

### III. PURPOSE

This summary report and new Decision/FONSI are being prepared to: 1) facilitate planning and interagency coordination, 2) streamline program management, 3) ensure WS' activities remain within the scope of analyses contained in the EA, and 4) clearly communicate to the public the analysis of individual and cumulative impacts of the current program since 2004. This summary report and new Decision/FONSI ensures WS' actions comply with the National Environmental Policy Act (NEPA), with the Council on Environmental Quality (40 CFR 1500), and with APHIS' NEPA implementing regulations (7 CFR 372). All bird damage management activities, including disposal requirements, are conducted consistent with: 1) the Endangered Species Act of 1973, 2) Migratory Bird Treaty Reform Act of 2004, 3) Executive Order (EO) 12898<sup>3</sup>, EO 13045<sup>4</sup>, EO 13112<sup>5</sup>, and EO 13186<sup>6</sup>, 4) the Federal Insecticide, Fungicide, and Rodenticide Act, and 5) federal, state, and local laws, regulations, and policies.

### IV. MONITORING

The WS program in Georgia annually reviews program activities to determine impacts on issues identified and to ensure that program activities are within the scope of analysis contained in the EA. The annual monitoring reports document WS' activities while discussing any new information that becomes available since the completion of the EA and the last monitoring report. If WS' activities, as identified in the annual monitoring reports, are outside the scope of the analyses in the EA or if new issues are identified from available information, further analysis would occur and the EA would be supplemented to the degree as identified by those processes pursuant to NEPA or a notice of intent to prepare an Environmental Impact Statement (EIS) would occur.

This summary report and new Decision will evaluate WS' activities to resolve and prevent damage caused by starlings, pigeons, and sparrows in Georgia under the proposed action described in the EA since the 2004 Decision and FONSI were signed. WS will continue to coordinate activities to alleviate or prevent damage with the Georgia Department of Natural Resources (GDNR) to ensure WS' activities are considered as part of the management objectives for those species.

### V. RELATIONSHIP OF THIS DOCUMENT TO OTHER ENVIRONMENTAL DOCUMENTS

***WS' Programmatic Final Environmental Impact Statement:*** WS has developed a programmatic Final

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<sup>3</sup> Executive Order 12898 promotes the fair treatment of people of all races, income levels and cultures with respect to the development, implementation and enforcement of environmental laws, regulations and policies.

<sup>4</sup> Executive Order 13045 ensures the protection of children from environmental health and safety risks since children may suffer disproportionately from those risks.

<sup>5</sup> Executive Order 13112 states that each Federal agency whose actions may affect the status of invasive species shall, to the extent practicable and permitted by law; 1) reduce invasion of exotic species and the associated damages, 2) monitor invasive species populations, provide for restoration of native species and habitats, 3) conduct research on invasive species and develop technologies to prevent introduction, and 4) provide for environmentally sound control, promote public education on invasive species.

<sup>6</sup> Executive Order 13186 directs federal agencies to protect migratory birds and strengthen migratory bird conservation by identifying and implementing strategies that promote conservation and minimize the take of migratory birds through enhanced collaboration between WS and the USFWS, in coordination with state, tribal, and local governments. A National-level MOU between the USFWS and WS is being developed to facilitate the implementation of Executive Order 13186.

Environmental Impact Statement (FEIS)<sup>7</sup> that addresses the need for wildlife damage management in the United States (USDA 1997). The FEIS contains detailed discussions of potential impacts to the human environment from wildlife damage management methods used by WS. Pertinent information available in the FEIS has been incorporated by reference into the EA and this Decision/FONSI.

## **VI. AFFECTED ENVIRONMENT**

The proposed action could be conducted on private, federal, state, tribal, and municipal lands in Georgia to resolve damage to agricultural commodities, natural resources, property, and to reduce threats to public health and safety. The affected environment includes, but is not necessarily limited to, areas in and around buildings and parks, bridges, industrial sites, urban/suburban woodlots, and airport hangars, where pigeons, starlings, and sparrows may roost, loaf, or nest. Damage management activities may also be conducted at agricultural fields, vineyards, orchards, farmyards, grain mills, and grain handling areas (e.g., railroad yards) where pigeons, starlings, or sparrows destroy crops, feed on spilled grains, or contaminate food products for human or livestock consumption. Additionally, the area of the proposed action would include airports and surrounding property where pigeons, starlings, and sparrows represent a threat to aviation safety.

WS has reviewed the affected environment during evaluations of programs activities under the proposed action through annual monitoring reports and this summary report. The affected environment has not changed since the implementation of the proposed action and continues to be as addressed in the EA.

## **VII. MAJOR ISSUES**

Issues are concerns of the public and/or professional community raised regarding potential environmental problems that might occur from a proposed action. Such issues must be considered in the NEPA decision process. Issues relating to the reduction of wildlife damage were raised during the scoping process for WS' programmatic FEIS (USDA 1997) and were considered in the preparation of the EA (USDA 2004). Issues related to managing damage associated with Rock Pigeon, European Starling, and House Sparrow damage management were developed by WS in consultation with the United States Fish and Wildlife Service (USFWS), the GDNR, and the Georgia Department of Agriculture. The pre-decisional EA and Decision were also made available to the public for review and comment to identify additional issues.

The EA fully describes the issues identified during the scoping process for WS' programmatic FEIS and during the development of the EA. The following issues were identified as important to the scope of the analysis (40 CFR 1508.25):

### **Issue 1 – Effects on target bird species**

A common issue when addressing damage caused by wildlife are the potential impacts of management actions on the population of target species. Methods used to resolve damage can involve altering the behavior of target species and may require the use of lethal methods when appropriate. Under the proposed action, WS provided technical and direct damage assistance using methods described in Appendix B of the EA in an integrated approach in which all or a combination of methods may be employed to resolve a request for assistance (USDA 2004).

WS continued to provide both technical assistance and direct damage management as part of an integrated

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<sup>7</sup>Copies of WS' programmatic FEIS are available from USDA/APHIS/WS-Operational Support Staff, 4700 River Road, Unit 87, Riverdale, MD 20737-1234.

damage management approach to preventing and resolving damage caused by pigeons, starlings, and sparrows in Georgia from federal fiscal year (FY)<sup>5</sup> 2004 through FY 2008. Technical assistance was provided to cooperators through the dissemination of information regarding damage management techniques to prevent damage, through methods demonstrations, and through site visits. Through technical assistance, WS made recommendations on the appropriate methods available for use that a requestor could employ to resolve damage or reduce threats without WS' direct involvement.

Operational assistance occurs when WS is directly involved with employing methods to resolve, alleviate, or reduce threats associated with pigeons, starlings and sparrows. As directed by the selected alternative, WS applies multiple methods as part of an integrated damage management program to resolve requests for assistance. WS' technical assistance and direct operational programs are discussed in detail in the EA (USDA 2004) and are also discussed in WS' programmatic FEIS (USDA 1997).

The integrated approach of managing damage associated with pigeons, starlings, and sparrows uses both non-lethal and lethal methods to resolve requests for assistance. Although non-lethal methods can disperse birds from areas where application occurs, those birds are generally unharmed. Therefore, no adverse affects are often associated with the use of non-lethal methods. However, methods used to lethally take pigeons, starlings, and sparrows can result in local reductions in those species' populations in the area where damage or threats of damage were occurring. Rock Pigeons, European Starlings, and House Sparrows are non-native species to North America and are afforded no protection under the Migratory Bird Treaty Act nor are those species protected by State law and regulations.

WS' activities to address damage caused by pigeons, starlings, and sparrows using an integrated approach to resolve requests for assistance from FY 2004 through FY 2008 are summarized by FY below:

#### **WS' Pigeon, Starling, and Sparrow Damage Management Activities in Georgia during FY 2004**

WS continued to provide both technical and operational assistance in FY 2004 to those requesting assistance with managing damage and threats associated with pigeons, starlings, and sparrows in Georgia. Damages reported and verified by WS in FY 2004 occurred from pigeons where excessive fecal material accumulated under roosting areas that required constant cleaning, caused economic damage, was aesthetically displeasing, and when accumulations occurred in areas of human activity, posed a threat to human safety from disease transmission.

Technical assistance was provided to those interested through the dissemination of handouts and information regarding damage management techniques, species identification, methods demonstrations, and site visits. Through technical assistance, WS made recommendations on the appropriate methods available for use that a requestor can employ to resolve damage or reduce threats without WS' direct involvement. During FY 2004, four technical assistance projects were conducted involving starlings, seven were conducted for pigeons, and five projects were conducted for House Sparrows.

Operational assistance occurs when WS is directly involved with employing methods to resolve, alleviate, or reduce threats associated with pigeons, starlings, or sparrows. As directed by the selected alternative, WS continued to apply multiple methods as part of an integrated damage management program to resolve requests for assistance in FY 2004. As part of an integrated management program, 1,045 pigeons were lethally removed by shooting and trapping to resolve requests for assistance in FY 2004. No starlings or House Sparrows were lethally taken by WS in FY 2004.

### **WS' Pigeon, Starling, and Sparrow Damage Management Activities in Georgia during FY 2005**

WS continued to provide both technical and operational assistance in FY 2005 to those requesting assistance with managing damage and threats associated with pigeons, starlings, and sparrows in Georgia. Damages reported and verified by WS in FY 2005 occurred primarily from pigeons and starlings where excessive fecal material accumulated under roosting areas that required constant cleaning, caused economic damage, was aesthetically displeasing, and when accumulations occurred in areas of human activity, posed a threat to human safety from disease transmission.

During FY 2005, no technical assistance projects were conducted involving starlings, pigeon and sparrows. As directed by the selected alternative, WS continued to apply multiple methods as part of an integrated damage management program to resolve requests for assistance in FY 2005. As part of an integrated management program, 1,448 pigeons were lethally removed by shooting and trapping to resolve requests for assistance in FY 2005. WS also employed lethal methods to take 47 house sparrows in FY 2005 that were taken by shooting or were live-captured in cage traps and euthanized. To resolve damage to property and to reduce threats to human safety, 199 European starlings were lethally removed using firearms in FY 2005. In addition, WS also used harassment techniques to disperse 30 starlings to alleviate damage and threats.

### **WS' Pigeon, Starling, and Sparrow Damage Management Activities in Georgia during FY 2006**

WS continued to provide both technical and operational assistance in FY 2006 to those requesting assistance with managing damage and threats associated with pigeons, starlings, and sparrows in Georgia. Similar to previous years, requests for WS' assistance occurred primarily from those cooperators experiencing damage and threats associated with excessive fecal material accumulating under roosting areas. Accumulations of fecal matter under roosting areas required constant cleaning, caused economic damage, were aesthetically displeasing, and when accumulations occurred in areas of human activity, posed a threat to human safety from disease transmission.

Through technical assistance, WS made recommendations on the appropriate methods available for use that a requestor could employ to resolve damage or reduce threats without WS' direct involvement. During FY 2006, WS conducted 12 technical assistance projects addressing damage caused by pigeons involving 16 participants. WS also conducted one technical assistance project involving damage caused by starlings in FY 2006.

WS continued to apply multiple methods as part of an integrated damage management program to resolve requests for direct assistance in FY 2006. As part of an integrated management program, 2,201 pigeons were lethally removed to resolve requests for assistance in FY 2006. Most pigeons were live-captured using cage traps and cannon nets and euthanized by cervical dislocation. WS also used shooting to take 83 House Sparrows to resolve damage associated with accumulation of droppings. To resolve damage to property and to reduce threats to human safety, 36 European Starlings were lethally removed using firearms in FY 2006.

### **WS' Pigeon, Starling, and Sparrow Damage Management Activities in Georgia during FY 2007**

WS continued to provide both technical and operational assistance in FY 2007 to those requesting assistance with managing damage and threats associated with pigeons, starlings, and sparrows in Georgia. Damages associated with pigeons, starlings, and sparrows reported and verified by WS in FY 2007 were similar to damages occurring from excessive fecal material accumulating under roosting areas in previous years.

Through technical assistance, WS made recommendations on the appropriate methods available for use that a requestor could employ to resolve damage or reduce threats without WS' direct involvement. During FY 2007, WS provided information on resolving pigeon damage during nine technical assistance projects involving nine participants that were provided ten handouts. WS also conducted four technical assistance projects in FY 2007 involving starlings involving four participants.

WS continued to apply multiple methods as part of an integrated damage management program to resolve requests for assistance in FY 2007. As part of an integrated management program, 2,636 pigeons were lethally removed by shooting and were euthanized after being live-captured in cage traps and cannon nets to resolve requests for assistance in FY 2007. WS also employed firearms to lethally take 42 House Sparrows and 53 European Starlings.

### **WS' Pigeon, Starling, and Sparrow Damage Management Activities in Georgia during FY 2008**

Similar to previous years, damages reported and verified by WS in FY 2008 occurred primarily from excessive fecal material accumulating under roosting areas. Through technical assistance, WS made recommendations on the appropriate lethal and non-lethal methods available for use that a requestor can employ to resolve damage or reduce threats without WS' direct involvement. During FY 2008, 14 technical assistance projects were conducted involving starlings, three were conducted for pigeons, and no projects were conducted for House Sparrows.

Through direct operational assistance, WS continued to apply multiple methods as part of an integrated damage management program to resolve requests for assistance in FY 2008. As part of an integrated management program, 2,525 pigeons were lethally removed by shooting and trapping to resolve requests for assistance in FY 2008. To resolve requests for assistance to reduce threats to human safety and damage to property, WS used shooting to remove 53 starlings and 73 House Sparrows in FY 2008.

### **Pigeon, starling, and house sparrow population impact analysis from WS' activities**

As discussed in the EA, Rock Pigeons, European Starlings, and House Sparrows are all non-native species in North America that often compete with native species for food and nesting habitat (USDA 2004). The communal nesting behavior and roosting behavior of those three species along with the close association of those species with human activities often raises concerns about economic damage to agricultural resources, property, natural resources, and threats to human safety. Therefore, a reduction in populations of those species could be viewed as benefiting the native environment in Georgia. Rock Pigeons, European Starlings, and House Sparrows are afforded no protection under the Migratory Bird Treaty Act nor afforded any protection by the State of Georgia.

Of primary concern is the magnitude of take on a species' population from the use of lethal methods. Lethal methods are employed to remove an individual or those individuals responsible for causing damage and only after requests for such assistance are received by WS. The use of lethal methods would therefore result in local population reductions in the area where damage or threats were occurring. The number of target species removed from the population using lethal methods under the proposed action would be dependent on the number of requests for assistance received, the number of individuals involved with the associated damage or threat, and the efficacy of methods employed. The EA evaluated a lethal take of up to 100,000 European Starlings, 5,000 Rock Pigeons, and 1,000 House Sparrows annually by WS in Georgia to alleviate damage.

The analysis for magnitude of impact lethal take generally follows the process described in Chapter 4 of

WS' programmatic FEIS (USDA 1997). Magnitude is described in WS' programmatic FEIS as "...a measure of the number of animals killed in relation to their abundance." Magnitude may be determined either quantitatively or qualitatively. Quantitative determinations are based on population estimates, allowable harvest levels, and actual harvest data. Qualitative determinations are based on population trends and harvest data when available. Generally, WS only conducts damage management involving species whose population densities are high and only after they have caused damage. WS' take is monitored by comparing numbers of animals killed with overall populations or trends in populations to assure the magnitude of take is maintained below the level that would cause significant adverse impacts to the viability of native species populations (USDA 1997).

From FY 2004 through FY 2008, the WS program in Georgia lethally removed 9,855 pigeons, 341 starlings, and 245 sparrows by shooting, by trapping, and by rocket-netting (See Table 1). Additionally, the WS program in Georgia non-lethally dispersed 30 starlings.

**Table 1 - Take of pigeons, starlings, and sparrows by the WS' program in Georgia by Fiscal Year**

Fiscal Year	Rock Pigeons	European Starlings	House Sparrows
2004	1,045	0	0
2005	1,448	199	47
2006	2,201	36	83
2007	2,636	53	42
2008	2,525	53	73
<b>Total</b>	<b>9,855</b>	<b>341</b>	<b>245</b>

The EA evaluated an annual take of up to 5,000 pigeons by WS to resolve requests for assistance to manage damage (USDA 2004). WS' highest level of take occurred in FY 2007 when 2,636 pigeons were taken. WS' annual take of pigeons has been within the level of take analyzed in the EA. The Partners in Flight (PIF) landbird population database estimated the pigeon population in Georgia to be 190,000 birds (Rich et al. 2004). Trend data from pigeons observed on routes during the Breeding Bird Survey (BBS) indicates populations of pigeons in the State have declined significantly estimated at -3.4% annually since 1966 (Sauer et al. 2008). Pigeons in the southeast region of the United States (USFWS Region 4) are showing a slight population decline estimated at -0.1% annually since 1966 (Sauer et al. 2008). Pigeons overwintering in Georgia were showing a general increasing trend until 2002 when population trends show a decline according to the Christmas Bird Count (CBC) (National Audubon Society 2002). Take from other sources is currently not known and is not reported by the State nor the USFWS since pigeons are considered a non-native species. Based on the best available population estimate and WS' highest level of pigeon take, take of pigeons by WS in FY 2007 represented 1.4% of the estimated population of pigeons in Georgia. Although survey data for pigeons in Georgia shows downward trends, regional populations appear to be stable. WS' removal of pigeons occurs where damages are occurring which could result in a reduction of pigeons at localized sites. However, WS' activities are limited and are not adversely affecting populations of pigeons statewide in Georgia.

An annual take of up to 100,000 starlings by WS was evaluated in the EA (USDA 2004). WS' total take of starlings from FY 2004 through FY 2008 was 341 birds. WS' total take of starlings from FY 2004 through FY 2008 is below the estimated annual take analyzed in the EA. The PIF population database estimates the starling population in Georgia to be 1.1 million birds (Rich et al. 2004). Trend data from routes surveyed during the BBS indicates starlings are showing a declining population trend in Georgia estimated at -0.7% annually since 1966 (Sauer et al. 2008). Regionally (USFWS Region 4), BBS trend data indicates starlings populations are declining at -0.1% annually since 1966 (Sauer et al 2008). Starlings overwintering in Georgia are showing a slightly declining trend since 1966 (National Audubon Society 2002). Similar to pigeons, take by other entities is currently not available since starlings are

affording no protection under federal or state laws and regulations. The highest level of take by WS occurred in FY 2005 when 199 starlings were lethally taken to alleviate damage. Based on the best available population information, WS' take of 199 starlings represents 0.02% of the estimated population. WS' activities to alleviate damage associated with starlings are not adversely affecting starling populations in the State based on the limited take by WS.

The annual estimated take of House Sparrows by WS evaluated in the EA was up to 1,000 sparrows based on previous requests for assistance (USDA 2004). WS' lethal take of house sparrows from FY 2004 through FY 2008 totaled 245 sparrows. WS' annual take was within the level of take analyzed in the EA. The PIF population database estimates the house sparrow population in Georgia to be 360,000 birds (Rich et al. 2004). BBS trend data from 1966 to 2007 indicates house sparrow breeding populations in Georgia are declining significantly estimated at -6.9% annually (Sauer et al. 2008). Regionally, house sparrow populations are also showing significant declines estimated at -4.0% annually since 1966 (Sauer et al. 2008). CBC survey data has also shown a decline since 1966 with more stable long-term trends since the early 1970s (National Audubon Society 2002). WS' take of house sparrows from FY 2004 through FY 2008 totaled 245 sparrows which represents 0.07% of the estimated population in the State. WS' activities to reduce house sparrow damage are not contributing to the decline of house sparrows in the State. WS' limited take of house sparrows annually has not adversely affected sparrow populations in the State.

WS' activities to alleviate damage or threats associated with pigeons, starlings, and sparrows have not changed from those analyzed in the EA. WS' take from FY 2004 through FY 2008 of pigeons, starlings, and sparrows was within the scope analyzed in the EA (USDA 2004). Although populations of those species are showing declines in Georgia, WS' activities do not result in wide-scale removal of those species with the magnitude of WS' take being low. However, any decline in populations of pigeons, starlings, and sparrows could be considered as benefiting native wildlife through a reduction in competition for resources. The magnitude of take by WS on pigeon, starling, and sparrow populations will continue to be minor and will not threaten the viability of those species' populations.

## **Issue 2 – Effects on other wildlife species, including T&E species**

The issue of non-target species effects, including effects on threatened and endangered species arises from the use of non-lethal and lethal methods identified in the alternatives. The use of non-lethal and lethal methods has the potential to inadvertently disperse, capture, or kill non-target wildlife. WS' minimization measures and Standard Operating Procedures are designed to reduce the effects of damage management activities on non-target species' populations. To reduce the risks of adverse affects to non-target wildlife, WS selects damage management methods that are as target-selective as possible or applies such methods in ways that reduces the likelihood of capturing non-target species. Before initiating management activities, WS also selects locations which are extensively used by the target species and employs baits or lures which are preferred by those species. Despite WS' best efforts to minimize non-target take during program activities, the potential for adverse affects to non-targets exists when applying both non-lethal and lethal methods to manage damage or reduce threats to human safety.

Non-lethal methods have the potential to cause adverse affects on non-targets primarily through exclusion, harassment, and dispersal. Any exclusionary device erected to prevent access of target species also potentially excludes species that are not the primary reason the exclusion was erected. Therefore, non-target species excluded from areas may potentially be adversely impacted if the area excluded is large enough. Auditory and visual dispersal methods used to reduce damage or threats caused by target species are also likely to disperse non-targets in the immediate area the methods are employed. Therefore, non-targets may be dispersed from an area while employing non-lethal dispersal techniques. However, like target species, the potential impacts on non-target species are expected to be temporary with target and

non-target species often returning after the cessation of dispersal methods.

The lethal take of non-targets from using those methods described in the EA is unlikely with take never reaching a magnitude that a negative impact on populations would occur. Any potential non-targets live-captured using non-lethal methods would be handled in such a manner as to ensure the survivability of the animal if released. The potential adverse affects associated with non-lethal methods are negligible and, in the case of exclusion and harassment methods, often temporary. The use of firearms is selective for target species since animals are identified prior to application; therefore no adverse impacts are anticipated from the use of those methods. The use of chemical methods, when used according to label directions, poses minimal hazards to non-target wildlife (USDA 1997).

While every precaution is taken to safeguard against taking non-targets during operational use of methods and techniques for resolving damage and reducing threats caused by wildlife, the use of such methods can result in the incidental take of unintended species. Those occurrences are minimal and should not affect the overall populations of any species. WS' take of non-target species during activities to reduce damage or threats to human safety caused by pigeons, starlings, and sparrows is expected to be extremely low to non-existent. WS will continue to monitor annually the take of non-target species to ensure program activities or methodologies used do not adversely impact non-targets. WS' activities are not likely to adversely affect the viability of any wildlife populations from damage management activities.

The EA concluded that WS' damage management activities would have no adverse affects on other wildlife species (non-target), including threatened and endangered species throughout the State when those activities were conducted within the scope analyzed in the EA. As discussed in Issue 1, the primary methods used during direct operational assistance by WS from FY 2004 through FY 2008 to resolve requests for assistance were non-lethal harassment techniques, shooting with firearms, and the live-capture of pigeons, starlings, and sparrows in cage traps and cannons nets which were subsequently euthanized by cervical dislocation. No take of non-target species occurred from WS' activities to resolve requests for assistance from FY 2004 through FY 2008 and no adverse affects were noted or brought to WS' attention from the use of any methods employed by WS.

***Threatened & Endangered (T&E) Species:*** A review of T&E species listed by the USFWS, the National Marine Fisheries Service (NMFS), and the GDNR showed that additional listings have occurred since the completion of the EA. Additional species listed as threatened and endangered in Georgia by the USFWS and the NMFS since the Decision/FONSI was signed in 2004 include the cylindrical lioplax (*Lioplax cyclostomaformis*), ovate clubshell (*Pleurobema perovatum*), fat three-ridge (*Amblema neislerii*), spotfin entire chub (*Erimonax monachus*), smalltooth sawfish (*Pristis pectinata*), gulf sturgeon (*Acipenser oxyrinchus desotoi*), American burying beetle (*Nicrophorus americanus*), Eskimo Curlew (*Numenius borealis*), Brown Pelican (*Pelecanus occidentalis*), Florida panther (*Puma concolor coryi*), gray wolf (*Canis lupus*), and Virginia spiraea (*Spiraea virginiana*).

Based on WS' activities described in the EA, WS has determined that program activities to manage damage caused by pigeons, starlings, and sparrows will have no effect on those species listed as threatened or endangered by the USFWS and/or the NMFS since the Decision/FONSI was signed for the EA. The American burying beetle, spotfin chub, ovate clubshell, Eskimo Curlew, cylindrical lioplax, Florida panther, Brown Pelican, gulf sturgeon, fat three-ridge, and the gray wolf are currently listed in Georgia but are not known to occur in Georgia. The smalltooth sawfish historically has occurred in the shallow coastal waters of the Gulf of Mexico and the shallow coastal areas along the Atlantic Ocean from Florida to New York. WS' activities to resolve damage or threats associated with pigeons, starlings, and sparrows are not those that cause major disturbances to habitat or the introduction of pollutants into the waters where sawfish are known to occur. Therefore, WS' activities will have no effect on the sawfish in the State.

Virginia spiraea is known to occur in Dade and Walker counties in extreme northwest Georgia on gravel bars in streams, rocky ledges, and rock rubble that are periodically scoured by water (Patrick et al. 1995). WS' activities are not likely to occur in habitat areas where Virginia spiraea is known to occur. Therefore, WS' activities will have no effect on Virginia spiraea.

WS' program activities in Georgia to manage damage caused by pigeons, starlings, and sparrows has not changed from those described in the EA. Thus, WS' determination for those T&E species addressed in the EA is still valid and appropriate for the proposed action (USDA 2004). Program activities and their potential impacts on other wildlife species, including T&E species have not changed from those analyzed in the EA. Impacts of the program on this issue are expected to remain insignificant.

### **Issue 3 – Effects on human health and safety**

Management activities conducted by WS to resolve damage or threats associated with pigeons, starlings, and sparrows have not resulted in any injuries or illness to any members of the public or to WS' personnel. WS' program activities had a positive impact in those situations that reduced the risks of potential injury, illness, and loss of human life from injurious bird species associated with aircraft strikes and diseases transmission. The EA concluded that an integrated approach to wildlife damage management had the greatest potential of successfully reducing potential risks to human health and safety.

Program activities and methods, and their potential impacts on human health and safety have not changed from those analyzed in the EA. Impacts of the program on this issue are expected to remain insignificant.

### **Issue 4 – Impacts to stakeholders, including aesthetics**

As analyzed in the EA, WS would employ methods when requested that would result in the dispersal, exclusion, or removal of individuals or small groups of pigeons, starlings, and sparrows to resolve damage and threats. In some instances where individuals of those species are dispersed or removed, the ability of interested persons to observe and enjoy those individuals would likely decline temporarily. The presence of pigeons, starlings, and sparrows in areas where those individuals were dispersed will likely increase upon cessation of damage management activities.

Even the use of exclusionary devices can lead to the dispersal of birds if the resource being damaged was acting as an attractant. Thus, once the attractant has been removed or made unavailable, birds will likely disperse to other areas where resources are more vulnerable.

The use of lethal methods would result in temporary declines in local populations resulting from the removal of those birds responsible for causing damage. WS' goal is to respond to requests for assistance and to manage only those birds responsible for the resulting damage. Therefore, the removal of birds would result in localized declines depending on the number of birds removed and population densities in surrounding areas. However, the overall populations of those target species would not be impacted. Based on the localized decline in the presence of birds, the EA concluded the effects on aesthetics would be variable depending on the stakeholders' values towards wildlife. However, the ability to view and enjoy pigeons, starlings, and sparrows in Georgia would still remain if a reasonable effort is made to locate those species outside the area in which damage management activities occurred.

Conflicts with pigeons, starlings, and sparrows were reduced at each location that WS provided direct management assistance thereby improving the aesthetic values of affected properties. Program activities and methods and their potential impacts on aesthetics have not changed from those analyzed in the EA. Impacts of the program on aesthetics are expected to remain insignificant.

## **Issue 5 – Humaneness and animal welfare concerns of methods used**

As analyzed in the EA, humaneness, in part, appears to be a person’s perception of harm or pain inflicted on an animal. People may perceive the humaneness of an action differently. The challenge in coping with this issue is how to achieve the least amount of animal suffering.

Some individuals believe any use of lethal methods to resolve damage associated with wildlife is inhumane because the resulting fate is the death of the animal. Others believe that certain lethal methods can lead to a humane death. Others believe most non-lethal methods of capturing wildlife to be humane because the animal is generally unharmed and alive. Still others believe that any disruption in the behavior of wildlife is inhumane. With the multitude of attitudes on the meaning of humaneness, the analyses must consider the most effective way to address damage and threats caused by wildlife in a humane manner. WS is challenged with conducting activities and employing methods that are perceived to be humane while assisting those persons requesting assistance to manage damage and threats associated with wildlife. The goal of WS is to use methods as humanely as possible to effectively resolve requests for assistance to reduce damage and threats to human safety. WS continues to evaluate methods and activities to minimize the potential pain and suffering of those methods when attempting to resolve requests for assistance.

As mentioned previously, some methods have been stereotyped as “humane” or “inhumane”. However, many “humane” methods can be inhumane if not used appropriately. For instance, a cage trap is generally considered by most members of the public as “humane”. Yet, without proper care, live-captured wildlife in a cage trap can be treated inhumanely if not attended to appropriately.

Therefore, WS’ mission is to effectively address requests for assistance using methods in the most humane way possible that minimizes the stress and pain of the animal. WS’ personnel are experienced and professional in their use of management methods and methods are applied as humanely as possible.

The EA concluded that the methods used by WS to manage damage caused by pigeons, starlings, and house sparrows are relatively humane, but that some persons will view some methods used as inhumane. WS will continue to adhere to minimization measures and protocols discussed in the EA (USDA 2004) and WS’ programmatic FEIS (USDA 1997) to ensure methods and techniques to resolve damage and threats are employed as humanely as possible. Impacts of the program on humaneness and animal welfare are expected to remain insignificant.

## **VIII. ISSUES NOT CONSIDERED IN DETAIL**

WS has reviewed the issues not considered in detail as described in the EA and has determined that the analysis provided in the EA has not changed and is still appropriate. Effects on those issues continue to be insignificant.

## **IX. ALTERNATIVES ANALYZED IN DETAIL**

The following four alternatives were developed in response to the issues identified in the EA and through public involvement:

Alternative 1: Technical Assistance Only

Alternative 2: Integrated Bird Damage Management Program (Proposed Action/No Action)

Alternative 3: Non-lethal Bird Damage Management Only by WS

Alternative 4: No Federal WS Bird Damage Management

The EA contains a detailed description and discussion of the alternatives and the effects of the alternatives on the issues identified (USDA 2004). Appendix B of the EA provides a description of the methods that could be used or recommended by WS under each of the alternatives. WS has reviewed the alternatives analyzed and determined the analyses in the EA are still appropriate for those alternatives.

## **X. ALTERNATIVES CONSIDERED BUT NOT ANALYZED IN DETAIL**

Several alternatives were also considered to address the issues but were not analyzed in detail with the rationale discussed in the EA (USDA 2004). WS has reviewed the alternatives analyzed but not in detail and determined the analyses in the EA are still appropriate for those alternatives considered.

## **XI. PIGEON, STARLING, AND SPARROW DAMAGE MANAGEMENT METHODS**

Since the completion of the EA, a product with the reproductive inhibitor known as nicarbazin has been registered for use in Georgia to manage pigeon populations by reducing the likelihood that eggs laid by pigeons will hatch. Nicarbazin is a complex of two compounds, 4,4'-dinitrocarbanilide (DNC) and 4,6-dimethyl-2-pyrimidinol (HDP) that interferes with the formation of the vitelline membrane that separates the egg yolk and egg white which prevents the development of an embryo inside the egg (EPA 2005). The active component of nicarbazin is the DNC compound with the HDP compound aiding in absorption of DNC into the bloodstream (EPA 2005). Nicarbazin was first developed to treat outbreaks of the fungal disease coccidiosis<sup>8</sup> in broiler chickens and has been approved as a veterinary drug by the United States Food and Drug Administration (FDA) since 1955 for use in chicken feed to prevent coccidiosis (EPA 2005).

Nicarbazin, as a reproductive inhibitor for pigeons, has been registered with the Environmental Protection Agency (EPA) as a pesticide pursuant to the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) under the trade name OvoControl<sup>®</sup> P (Innolytics, LLC, Rancho Sante Fe, CA). OvoControl<sup>®</sup> P (EPA Reg. No. 80224-1) is a restricted-use pesticide registered for use in Georgia for reducing the egg hatch of urban pigeons. The formulation for pigeons contains 0.5% of the active ingredient nicarbazin by volume as ready-to-use baits for pigeons in urban areas only. Urban areas have been defined by the EPA as municipalities and surrounding areas with a population of 50,000 or more people. Baiting can only occur by applicators certified by the State and only on rooftops or other flat paved or concrete surfaces such as buildings, office parks, malls, hospitals, bridges, airports, tunnels, and commercial sites.

Since OvoControl<sup>®</sup> P is commercially available to those with a certified applicators license, the use of the product could occur under any of the alternatives discussed in the EA and therefore, the effects of the use would be similar across all the alternatives. Under the proposed action, WS could use or recommend nicarbazin under the trade name OvoControl<sup>®</sup> P as part of an integrated approach to managing damages associated with pigeons. WS' use of nicarbazin under the proposed action would not be additive to the overall amount that could be used since the use of the product could occur by other entities (e.g., pest management companies) in the absence of WS' use of the product.

Population management from the use of reproductive inhibitors occurs through a reduction in the recruitment of new birds into the population by limiting reproductive output. A reduction in the population occurs when the number of birds being recruited into the population can not replace those individuals that die from other causes each year. The lack of recruitment back into the population equates to a net loss in the number of individuals in the population. Although not generally considered a lethal

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<sup>8</sup>Coccidiosis is a fungal pathogen known to infect birds and livestock causing diarrhea, dehydration, and can prevent proper growth of livestock. For more information on coccidiosis, see the EA (USDA 2003).

method since no direct take occurs, reproductive inhibitors can result in the reduction of a target species' population. WS' use or recommendation of ncarbazine would target local pigeon populations identified as causing damage or threatening human safety. Although a reduction in pigeon populations would likely occur from constant use of ncarbazine, the actual reduction in the population annually would be difficult to derive prior to the initiation of the use of ncarbazine.

One of the difficulties in calculating an actual reduction in a targeted population prior to application of the bait is that consumption of ncarbazine treated bait as currently formulated does not appear to completely eliminate egg hatch in pigeons. Current studies on the use of ncarbazine as a reproductive inhibitor for pigeons has shown variability in hatch rates of pigeons fed treated baits. In addition, pigeons must consume bait treated with ncarbazine daily in the correct dosage throughout the breeding season to achieve the highest level of effectiveness in reducing egg hatch. Pigeons can breed year-around with peak breeding occurring from February through October (Johnston 1992). Giunchi et al. (2007) found that when pigeons were fed treated baits (800 parts per million (ppm)) the number of hatchlings produced declined between 13% and 48% compared to a control group. When pigeons were fed doses of ncarbazine treated bait daily in cage studies at the levels currently found in OvoControl® P (5,000 ppm), Avery et al. (2008) found that the rate of egg hatch was reduced by 59% in captive pigeons. In simulating a 50% reduction in egg hatch, Giunchi et al. (2007) predicted through modeling that a population of 5,000 pigeons would be reduced by half if a 50% reduction in pigeon egg hatch occurred annually over a five-year period. The same population would rebound back to 5,000 individuals within five years if egg hatch returned to normal.

Since the effects of ncarbazine on egg hatch are reversible if no longer provided for consumption (Avery et al. 2006, Giunchi et al. 2007, Avery et al. 2008), the reduction in the local pigeon population from the use of ncarbazine can be maintained at appropriate levels where damages or threats are resolved by increasing or decreasing the amount of ncarbazine treated bait available to target pigeons. Although localized pigeon populations would likely be reduced from the use of ncarbazine, the extent of the reduction would be variable given the uncertainty in effectiveness of ncarbazine to reduce egg hatch in pigeons. When pigeons were provided ncarbazine in cage trials at dosage levels found formulated in OvoControl® P (5,000 ppm), not all eggs laid were infertile with 41% of the eggs producing apparently healthy chicks (Avery et al. 2008).

Label requirements of OvoControl® P restrict the application of the product to urban areas where treated bait can be placed on rooftops or other flat, concrete surfaces which further limits the extent of the products use for reducing pigeon populations. Based on current information, WS' use or recommendation of ncarbazine formulated under the trade name OvoControl® P will not adversely affect pigeon populations in Georgia since WS' activities will not be additive to those activities that could occur in the absence of WS' use of the product. The resultant reduction in the pigeon population from the use of ncarbazine would be highly variable given the variability in the effectiveness of the product to reduce egg hatch in pigeons. However, given that the effects of ncarbazine are only temporary if birds are not fed an appropriate dose of ncarbazine daily, the reduction in the population could be fully reversed if treated bait is no longer supplied and other conditions (e.g., food, disease) are favorable for population growth. As discussed previously, any reduction in local pigeon populations could be viewed as benefitting other native wildlife since pigeons can compete with native bird species for food and shelter.

The potential adverse affects to non-target wildlife are also a concern from the use of ncarbazine to manage pigeon populations. Exposure of non-target wildlife to ncarbazine could occur either from direct ingestion of the bait by non-target wildlife or from secondary hazards associated with wildlife consuming birds that have eaten treated bait. Several label restrictions of OvoControl® P are intended to mitigate risks to non-target wildlife from direct consumption of treated bait (EPA 2005). Daily observation of bait sites for

pigeon and non-target activity must occur during a five to fourteen day acclimation period. The required acclimation period habituates pigeons to feeding in one location at a certain time period. Once pigeons are acclimated and no targets are observed feeding on the bait, observations for non-targets must continue to occur once weekly until application of treated bait ends. During the observation periods, the applicator must be present on site until all bait has been consumed. Non-target risks are further minimized by requirements that bait only be placed on rooftops in urban areas and if not practical, baiting is limited to paved and/or on hard concrete surfaces. All unconsumed bait must also be retrieved daily which further reduces threats of non-target consuming treated bait.

In addition, nicarbazine is only effective in reducing the hatch of eggs when blood levels of DNC are sufficiently elevated in a bird species. When consumed by birds, nicarbazine is broken down into the two base components of DNC and HDP which are then rapidly excreted. To maintain the high blood levels required to reduce egg hatch, birds must consume nicarbazine daily at a sufficient dosage that appears to be variable depending on the bird species (Yoder et al. 2005, Avery et al. 2006). For example, to reduce egg hatch in Canada geese (*Branta canadensis*), geese must consume nicarbazine at 2,500 ppm compared to 5,000 ppm required to reduce egg hatch in pigeons (Avery et al. 2006, Avery et al. 2008). In pigeons, consuming nicarbazine at a rate that would reduce egg hatch in Canada geese did not reduce the hatchability of eggs in pigeons (Avery et al. 2006). With the rapid excretion of the two components of nicarbazine (DNC and HDP) in birds, non-targets birds would have to consume nicarbazine daily at sufficient doses to reduce the rate of egg hatching.

Secondary hazards also exist from wildlife consuming pigeons that have ingested nicarbazine. As mentioned previously, once consumed, nicarbazine is rapidly broken down into the two base components DNC and HDP. DNC is the component of nicarbazine that limits egg hatchability while HDP only aids in absorption of DNC into the bloodstream. DNC is not readily absorbed into the bloodstream and requires the presence of HDP to aid in absorption of appropriate levels of DNC. Therefore, to pose a secondary hazard to wildlife, ingestion of both DNC and HDP from a pigeon carcass would have to occur and HDP would have to be consumed at a level to allow for absorption of the DNC into the bloodstream. In addition, an appropriate level of DNC and HDP would have to be consumed from a pigeon carcass daily to produce any negative reproductive affects to other wildlife since current evidence indicates a single dose does not limit reproduction. To be effective nicarbazine (both DNC and HDP) must be consumed daily during the duration of the reproductive season to limit the hatchability of eggs. Therefore, to experience the reproductive affects of nicarbazine, a pigeon that had consumed nicarbazine would have to be consumed daily and a high enough level of DNC and HDP would have to be available in the pigeon carcass and consumed for reproduction to be affected. Based on the risks and likelihood of wildlife consuming a treated pigeon daily and receiving the appropriate levels of DNC and HDP daily to negatively impact reproductively, secondary hazards to wildlife from the use of nicarbazine are extremely low (EPA 2005).

Although some risks to other non-target species besides bird species does occur from the use of OvoControl® P, those risks are likely to be minimal given the restrictions on where bait can be applied (e.g., on rooftops, on pavement at airports). Although limited toxicological information for nicarbazine exists for wildlife species besides certain bird species, available toxicology data indicates nicarbazine is relatively non-toxic to other wildlife species (World Health Organization 1998, EPA 2005, California Department of Pesticide Regulation 2007). Given the use restriction of OvoControl® P and the limited locations where bait can be applied, the risks of exposure to non-targets would be extremely low.

WS has reviewed the list of threatened and endangered species listed in Georgia and determined that the use of nicarbazine under the trade name OvoControl® P will have no effect on those species listed in the State. Restricting the use of the product to rooftops and paved concrete areas where pigeons are conditioned to feed along with the bait-type (pellets) of the product and the limited availability of the

product during application ensures the use of nicarbazin will have no effect on threatened and endangered species. WS will continue to monitor pigeon damage management activities and those species listed in the State to ensure compliance with the Endangered Species Act.

Threats to human safety from the use of OvoControl® P will likely be minimal if labeled directions are followed. The use pattern of OvoControl® P will also ensure threats to public safety are minimal. Label requirements require treated bait to be applied on rooftops of buildings or other areas restricted to public access (e.g., airports). The EPA has characterized OvoControl® P as a moderate eye irritant. The FDA has established a tolerance of nicarbazin residues of 4 parts per million allowed in uncooked chicken muscle, skin, liver, and kidney (21 CFR 556.445). The EPA characterized the risks of human exposure as low for a similar product used to reduce egg hatch in Canada geese. The EPA also concluded that if human consumption occurred, a prohibitively large amount of nicarbazin would have to be consumed to produce toxic effects (EPA 2005). Based on the use pattern of the OvoControl® P and if label instructions are followed, risks to human safety will be low with the primary exposure occurring to those handling and applying the product. Safety procedures required by the label, when followed, will minimize risks to handlers and applicators.

The use of nicarbazin on the aesthetic values of pigeons occurs primarily from the inability of those interested to enjoy viewing, feeding, and photographing pigeons along with knowing pigeons are free-ranging. The aesthetic value of a local pigeon population would likely lessen from a reduction in a population that would result from the use of nicarbazin. As previously mentioned, the rate of population decline would be variable from the use of nicarbazin since effectiveness of the product varies. However, the rate of decline in a localized pigeon population is likely to occur at a gradual rate compared to other lethal removal programs that target localized pigeon populations. Giunchi et al. (2007) predicted through modeling that a population of 5,000 pigeons would be reduced by half if a 50% reduction in pigeon egg hatch occurred annually over a five-year period. However, damage would continue to occur from those pigeons which could affect the aesthetic value of property and threaten human safety if pigeon populations remain sufficient for extended periods of time. Overall, the aesthetic value of a localized pigeon population would be similar to the use of other lethal methods discussed in the EA since a population decline would occur.

The use of nicarbazin would generally be considered as a humane method of managing local populations of pigeons. Nicarbazin reduces the hatchability of eggs laid by pigeons and appears to have no adverse affects on pigeons consuming bait daily and does not appear to adversely affect those chicks that do hatch from parents fed nicarbazin (Avery 2006, Avery 2008). Nicarbazin has been characterized as a veterinary drug since 1955 by the FDA for use in broiler chickens to treat outbreaks of coccidiosis with no apparent ill effects to chickens. Based on current information, the use of nicarbazin would generally be considered humane based on current research.

Overall, the use of nicarbazin would have no adverse affects on non-target wildlife that may consume bait or consume pigeons that have consumed bait, will not adversely affect human safety given the use restriction of the product that are found on the label, which if followed, will minimize human exposure to the product, will not adversely affect the aesthetic values of pigeons since pigeons are common in the State and the population decline would be gradual, and the product would likely be considered humane since only the hatching rate of eggs laid would be reduced after consumption with no apparent adverse affects to the pigeons consuming bait or the chicks that do hatch from eggs. WS' potential use of OvoControl® P under the proposed action would not adversely affect any aspect of the issues identified and would allow for additional methods to be available for use in an integrated approach to managing damage caused by pigeons.

## **XII. ANALYSIS**

WS has reviewed the potential environmental impacts and the scope of analysis contained in the EA. The EA and the associated Decision/FONSI determined that activities conducted pursuant to and within the scope of analyses would not have significant impacts on the quality of the human environment. After review of the EA, the associated Decision/FONSI, and information contained in this summary report, WS has determined that the environmental impacts on the quality of the human environment from those activities conducted pursuant to the EA and its Decision/FONSI will continue to be insignificant and that no substantive changes in the analyses are necessary.

WS' pigeon, starling, and sparrow damage management activities in Georgia, based on the information found within this report, fall within the scope of analysis in the EA. No substantive changes have occurred in activities conducted or methods used since implementing the EA decision during the reporting period. Program activities have not changed from those described and analyzed in the EA. The EA discusses program procedures, protection measures, and mitigations that the WS program implements during direct control activities to provide an assurance of quality and consideration for environmental impacts.

## **XIII. DECISION AND RATIONALE**

I have carefully reviewed the EA, the comments received during the public involvement process, the 2004 Decision/FONSI, and the information in this summary and new Decision document. I find the proposed program 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 that would warrant the development of an EIS. Therefore, the analysis in the EA remains valid and does not warrant the completion of an EIS.

Based on the EA, the issues identified are best addressed by continuing Alternative 2 (Proposed Action/No Action) and applying the associated mitigation measures discussed in Chapter 3 of the EA. Alternative 2 successfully addresses (1) pigeon, starling, and sparrow damage management using a combination of the most effective methods and does not adversely impact the environment, property, and/or non-target species, including T&E species; (2) 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; (3) it presents the greatest chance of maximizing net benefits while minimizing adverse impacts 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 WS' damage management activities, that affect the natural or human environment, or from the issuance of new environmental regulations.

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

The WS program in Georgia will implement the proposed action in compliance with all applicable standard operating procedures and minimization measures described in Chapter 3 of the EA (USDA 2004). If no substantive issues or alternatives are identified after publication of a legal notice making the EA, the 2004 Decision/FONSI, and this Decision available to the public for review and comment, this new Decision will take effect at the close of the public notification period. New issues or alternatives raised after publication of public notices will be fully considered to determine whether the EA and this Decision should be revisited and, if appropriate, revised, or if a Notice of Intent to prepare an EIS should be issued.

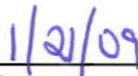
### **FINDING OF NO SIGNIFICANT IMPACT**

The analyses provided in the EA, the 2004 Decision/FONSI, and this summary report and new Decision indicates that there will not be a significant impact, individually or cumulatively, on the quality of the human environment as a result of the proposed action. I agree with this conclusion and therefore, find that an EIS should not be prepared. This determination is based on the following factors:

1. Pigeon, starling, and sparrow damage management, as conducted in Georgia, is not regional or national in scope.
2. The proposed action will not have an impact on unique characteristics of areas such as historical or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecological critical areas.
3. The proposed action will not significantly affect public health and safety.
4. The effects on the quality of the human environment are not highly controversial. Although there is opposition to government-sponsored damage management, this action in Georgia is not controversial in relation to size, nature, or effects.
5. Standard operating procedures adopted as part of the proposed action lessen risks to the public and prevent adverse affects on the human environment and reduce uncertainty and risks.
6. The proposed action does not establish precedence for future actions with significant effects. This action would not set precedent for additional WS' damage management that may be implemented or planned in Georgia.
7. The number of animals taken (both target and non-target) annually would be very small in comparison to total populations. Adverse affects on wildlife or wildlife habitats would be minimal.
8. Pigeon, starling, and sparrow damage management would not affect cultural or historic resources. The proposed action does not affect districts, sites, highways, structures or objects listed in or eligible for listing in the National Register of Historic Places, nor would it cause a loss or destruction of significant scientific, cultural, or historical resources.
9. An evaluation of the proposed action and its effects on state and federally listed T&E species determined that no significant adverse affects would be created for these species. The proposed action complies fully with the Endangered Species Act of 1973, as amended.
10. This action would be in compliance with federal, state, and local laws or requirements for damage management and environmental protection.

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

  
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Robert Hudson, Acting Director – Eastern Region  
USDA/APHIS/WS  
Raleigh, North Carolina

  
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Date

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