DECISION

ENVIRONMENTAL ASSESSMENT: REDUCING BIRD DAMAGE THROUGH AN INTEGRATED WILDLIFE DAMAGE MANAGEMENT PROGRAM IN THE STATE OF NORTH CAROLINA

I. PURPOSE

The United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Wildlife Services (WS) program has prepared an Environmental Assessment (EA) to analyze the potential environmental and social impacts to the quality of the human environment from resolving damage, including conflicts and threats, to agricultural resources, property, natural resources, and human safety associated with birds (USDA 2010). The EA documents the need for bird damage management in the State and assesses potential impacts on the human environment of three alternatives to address that need. WS' proposed action in the EA would continue an integrated damage management program to fully address the need to manage damage and threats associated with birds in the State.

Damage and threats of damage associated with the following bird species were addressed in the EA: double-crested cormorants (*Phalacrocorax auritus*), great blue herons (*Ardea herodias*), great egrets (*Ardea alba*), little blue herons (*Egretta caerulea*), cattle egrets (*Bubulcus ibis*), green herons (*Butorides virescens*), black-crowned night herons (*Nycticorax nycticorax*), white ibis (*Eudocimus albus*), black vultures (*Coragyps atratus*), turkey vultures (*Cathartes aura*), Atlantic brants (*Branta bernicla hrota*), mute swans (*Cygnus olor*), feral geese, feral ducks, wood ducks (*Aix sponsa*), American wigeons (*Anas americana*), American black ducks (*Anas rubripes*), mallards (domestic/wild) (*Anas platyrhynchos*), blue-winged teal (*Anas discors*), Northern shovelers (*Anas clypeata*), Northern pintails (*Anas acuta*), green-winged teal (*Anas crecca*), canvasbacks (*Aythya valisineria*), lesser scaup (*Aythya affinis*), greater scaup (*Aythya marila*), hooded mergansers (*Lophodytes cucullatus*), common mergansers (*Mergus merganser*), ruddy ducks (*Oxyura jamaicensis*), osprey (*Pandion haliaetus*), bald eagles (*Haliaeetus leucocephalus*), Northern harriers (*Circus cyaneus*), sharp-shinned hawks (*Accipiter striatus*), Cooper's hawks (*Accipiter cooperii*), red-shouldered hawks (*Buteo lineatus*), red-tailed hawks (*Buteo jamaicensis*), American kestrels (*Falco sparverius*), peregrine falcons (*Falco peregrinus*), ring-necked pheasants (*Phasianus colchicus*), wild turkeys (*Meleagris gallopavo*), American coots (*Fulica americana*), killdeer (*Charadrius vociferous*), black-bellied plovers (*Pluvialis squatarola*), semipalmated plovers (*Charadrius semipalmatus*), greater yellowlegs (*Tringa melanoleuca*), lesser yellowlegs (*Tringa flavipes*), spotted sandpipers (*Actitis macularia*), solitary sandpipers (*Tringa solitaria*), semipalmated sandpipers (*Calidris pusilla*), Western sandpipers (*Calidris mauri*), least sandpipers (*Calidris minutilla*), pectoral sandpipers (*Calidris melantos*), buff-breasted sandpipers (*Tryngites suberficllis*), common snipe (*Gallinago gallinago*), laughing gulls (*Larus atricilla*), ring-billed gulls (*Larus delawarensis*), herring gulls (*Larus argentatus*), lesser black-backed gulls (*Larus fuscus*), great black-backed gulls (*Larus marinus*), royal terns (*Sterna maxima*), common terns (*Sterna hirundo*), mourning doves (*Zenaida macroura*), great horned owls (*Bubo virginianus*), barred owls (*Strix varia*), common nighthawks (*Chordeiles minor*), chimney swifts (*Chaetura pelagica*), belted kingfishers (*Megaceryle alcyon*), downy woodpeckers (*Picoides pubescens*), hairy woodpeckers (*Picoides villosus*), Northern flickers (*Colaptes auratus*), loggerhead shrikes (*Lanius ludovicianus*), blue jays (*Cyanocitta cristata*), American crows (*Corvus brachyrhynchos*), fish crows (*Corvus ossifragus*), horned larks (*Eremophila alpestris*), tree swallows (*Tachycineta bicolor*), Northern rough-winged swallows (*Stelgidopteryx serripennis*), bank swallows (*Riparia riparia*), cliff swallows (*Hirundo pyrrhonota*), barn swallows (*Hirundo rustica*), American robins (*Turdus migratorius*), gray catbirds (*Durnetella carolinensis*), Northern mockingbirds (*Mimus polyglottos*), Northern cardinals (*Cardinalis cardinalis*), red-winged blackbirds (*Agelaius phoeniceus*), Eastern meadowlarks (*Sturnella magna*), common grackles (*Quiscalus quiscula*), boat-tailed grackles

(*Quiscalus major*), brown-headed cowbirds (*Molothrus ater*), purple finches (*Carpodacus purpureus*), and house finches (*Carpodacus mexicanus*).

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

II. NEED FOR ACTION

The need for action arises from requests for assistance received by WS to reduce and prevent damage associated with birds from occurring to four major categories: agricultural resources, natural resources, property, and threats to human safety. WS only conducts bird damage management after receiving a request for assistance. Before initiating bird damage management activities in the State, a Memorandum of Understanding, cooperative service agreement, or other comparable document would be signed between WS and the cooperating entity which lists all the methods the property owner or manager would allow to be used on property they own and/or manage.

Most requests for WS' assistance are associated with areas where birds congregate during migration periods and during nesting periods. Those requests for assistance are associated with fecal accumulations in public-use areas, damage to agricultural resources, hazards posed to aircraft from bird strikes, and damage occurring to property.

WS' activities would only be conducted when requested and only when damage or a threat is occurring to agricultural resources, natural resources, property, or posing a threat to human health and safety. WS may also be requested to participate in disease surveillance and monitoring in the event of a disease outbreak or potential outbreak in a bird population.

III. SCOPE OF ANALYSES IN THE EA

The EA evaluates bird damage management under three alternatives to reduce threats to human health and safety and to resolve damage to property, natural resources, and agricultural resources wherever such management is requested by a cooperator. The analyses in the EA are intended to apply to any action taken by WS to alleviate damage or threats of damage associated with birds that may occur in any locale and at any time within the State of North Carolina. The EA emphasizes major issues as they relate to specific areas; however, the issues addressed apply wherever bird damage and the resulting damage management activities would occur. The standard WS Decision Model (Slate et al. 1992, USDA 1997) would be the site-specific procedure for individual actions conducted by WS in North Carolina.

The United States Fish and Wildlife Service (USFWS) has jurisdiction over the management of migratory birds and has specialized expertise in identifying and quantifying potential adverse affects to the human environment from bird damage management activities. Native migratory bird species are afforded protection from take by the Migratory Bird Treaty Act (MBTA); however, take can occur when deemed appropriate to the Act and a depredation permit has been issued by the USFWS. Therefore, any take involved with the alternative would only occur when a depredation permit has been issued by the USFWS and only at levels permitted.

The EA was made available to the public for review and comment by a legal notice published in *The News and Observer* newspaper on October 1, 2010. A notice of availability and the EA were also made available for public review and comment on the APHIS website at http://www.aphis.usda.gov/wildlife_damage/nepa.shtml beginning on September 27, 2010. A letter of availability was also mailed directly to agencies, organizations, and individuals with probable interest in bird damage management in the State. The public involvement process ended on November 5, 2010. WS received no comment letters during the public comment period.

IV. DECISIONS TO BE MADE

Based on the scope of the EA, the decisions to be made are: 1) should WS conduct bird damage management to alleviate damage to agriculture, property, natural resources, and threats to human health and safety, 2) should WS conduct disease surveillance and monitoring in the bird population when requested, 3) should WS implement an integrated wildlife damage management strategy, including technical assistance and direct operational assistance, to meet the need for bird damage management in North Carolina, 5) if not, should WS attempt to implement one of the alternatives to an integrated damage management strategy as described in the EA, and 6) would the proposed action result in adverse impacts to the environment requiring the preparation of an Environmental Impact Statement (EIS).

V. RELATIONSHIP OF THE EA TO OTHER ENVIRONMENTAL DOCUMENTS

WS has developed a programmatic Final Environmental Impact Statement (FEIS) that addressed the need for wildlife damage management (USDA 1997). The FEIS contains a detailed discussion of the potential impacts to the human environment from wildlife damage management methods and techniques employed by WS, including methods used to manage damage associated with birds. Pertinent information in the FEIS has been incorporated into the EA and this decision document by reference.

The USFWS has developed a FEIS to address the need to manage resident Canada goose populations (USFWS 2005). The FEIS evaluates the potential impacts associated with implementing alternative strategies to manage increasing resident Canada goose populations to alleviate damage and threats. Information from the FEIS has been incorporated into the EA and this Decision document by reference.

The USFWS has also developed a FEIS to manage damage and increasing population of double-crested cormorants in the United States (USFWS 2003). The selected alternative in the FEIS established a Public Depredation Order (see 50 CFR 21.48) and modified the existing Aquaculture Depredation Order (see 50 CFR 21.47). To allow for an adaptive evaluation of activities conducted under the PRDO and the AQDO established by the FEIS, those Orders would have expired on April 30, 2009 (USFWS 2003). To evaluate activities authorized under the FEIS, the USFWS developed an EA. The EA determined that a five-year extension of the expiration date of the PRDO and the AQDO would not threaten cormorant populations and activities conducted under those Orders would not have a significant impact on the human environment (74 FR 15394-15398; USFWS 2009).

The USFWS has also developed an EA that evaluated permitting the take of bald eagles and golden eagles pursuant to the Bald and Golden Eagle Protection Act (USFWS 2010). The selected alternative in the EA authorized the disturbance of eagles, authorized the removal of eagle nests where necessary to reduce human safety, and evaluated the issuance of permits for the limited lethal take of eagles (USFWS 2010).

In addition, the WS program in North Carolina developed an EA to evaluate the need for and alternatives to addressed damage and threats of damage associated with Canada geese in the State (USDA 2003*a*) along with rock pigeons, European starlings, and house sparrows (USDA 2003*b*).

VI. AUTHORITY AND COMPLIANCE

WS is authorized by law to reduce damage caused by wildlife through 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). Management of native migratory birds is the responsibility of the USFWS under the MBTA. As the authority for the management of birds, the USFWS was consulted during the development of the EA and provided input to ensure an interdisciplinary approach according to the NEPA and agency mandates, policies, and regulations. The North Carolina Wildlife Resources Commission (NCWRC) is responsible for managing wildlife in the State of North Carolina, including birds. Information from the USFWS and the NCWRC has been provided to WS to assist in the analysis of potential impacts of WS' proposed activities on bird populations in the State.

The EA and this Decision ensures WS' actions comply with the NEPA, with the Council on Environmental Quality guidelines (40 CFR 1500), and with APHIS' NEPA implementing regulations (7 CFR 372). All bird damage management activities, including disposal requirements, are conducted consistent with: 1) the Endangered Species Act of 1973, 2) the MBTA, 3) Bald and Golden Eagle Protection Act, 4) the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), 5) applicable Executive Orders, and 6) applicable Federal, State, and local laws, regulations and policies, including WS' Directives.

VII. AFFECTED ENVIRONMENT

Upon receiving a request for assistance, bird damage management activities could be conducted on federal, state, tribal, municipal, and private properties in North Carolina. The areas of the proposed action could include areas in and around commercial, industrial, public, and private buildings, facilities and properties and at other sites where birds may roost, loaf, feed, nest, or otherwise occur. Examples of areas where bird damage management activities could be conducted are, but are not necessarily limited to: agricultural fields, vineyards, orchards, farmyards, dairies, ranches, livestock operations, aquaculture facilities, fish hatcheries, grain mills, grain handling areas, railroad yards, waste handling facilities, industrial sites, natural areas, government properties and facilities, private properties, corporate properties, schools, hospitals, parks, woodlots, recreation areas, communally-owned homeowner/property owner association properties, wildlife refuges, wildlife management areas, military bases, and airports. Bird damage management would be conducted when requested by a landowner or manager and only on properties where a cooperative service agreement or other comparable document has been signed between WS and the cooperating entity.

VIII. ISSUES ADDRESSED IN THE ANALYSIS OF ALTERNATIVES

Issues related to wildlife damage management were initially identified and defined during the development of WS' programmatic FEIS (USDA 1997). Issues related to bird damage management in North Carolina were defined and preliminary alternatives were identified through consultation with the USFWS and with the NCWRC. The EA was also made available to the public for review and comment through notices published in local media and through direct notification of interested parties.
Chapter 2 of the EA describes in detail the issues considered and evaluated in the EA (USDA 2010). The following issues were identified as important to the scope of the analysis (40 CFR 1508.25) with each alternative evaluated in the EA relative to the impacts on the major issues:

- Issue 1 - Effects of Damage Management Activities on Target Bird Populations
- Issue 2 - Effects on Non-target Wildlife Species Populations, Including T&E Species
- Issue 3 - Effects of Damage Management Methods on Human Health and Safety

- Issue 4 - Effects on the Aesthetic Values of Birds
- Issue 5 - Humaneness and Animal Welfare Concerns of Methods
- Issue 6 - Effects of Bird Damage Management Activities on the Regulated Harvest of Birds

IX. ISSUES CONSIDERED BUT NOT ANALYZED IN DETAIL WITH RATIONALE

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

- Appropriateness of Preparing an EA For Such a Large Area
- WS' Impact on Biodiversity
- A Loss Threshold Should Be Established Before Allowing Lethal Methods
- Bird Damage Management Should Not Occur at Taxpayer Expense
- Cost Effectiveness of Management Methods
- Effectiveness of Bird Damage Management Methods
- Impacts of Avian Influenza on Bird Populations
- Bird Damage Should Be Managed By Private Nuisance Wildlife Control Agents
- Effects from the Use of Lead Ammunition in Firearms
- Impacts of Dispersing a Bird Roost on People in Urban/Suburban Areas
- A Site Specific Analysis Should be Made for Every Location Where Bird Damage Management Could Occur

X. DESCRIPTION OF THE ALTERNATIVES

The following three alternatives were developed to respond to the issues identified in Chapter 2 of the EA (USDA 2010). A detailed discussion of the effects of the alternatives on the issues is described in the EA under Chapter 4; below is a summary of the alternatives.

Alternative 1 - Continuing the Current Integrated Approach to Managing Bird Damage (Proposed Action/No Action)

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

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

Alternative 2 - Bird Damage Management by WS through Technical Assistance Only

Under the technical assistance only alternative, WS would address every request for assistance with technical assistance only. Technical assistance would provide those persons seeking assistance with information and recommendations on bird damage management that those cooperators could employ without WS' direct involvement in the action. Technical assistance could be employed through personal or telephone consultations and through site visits. Under this alternative, the immediate burden of resolving threats or damage associated with birds would be place on those persons experiencing damage. Those persons could employ those methods recommended by WS, could employ other methods, or could take no further action.

Birds could still be lethally taken to alleviate damage under this alternative when committing or about to commit damage or posing a human health and safety threat in accordance with depredation permits issued by the USFWS or under the established depredation orders. In addition, Atlantic brant, wood ducks, American wigeon, American black ducks, mallards, blue-winged teal, Northern shovelers, Northern pintails, green-winged teal, canvasbacks, lesser scaup, greater scaup, hooded mergansers, common mergansers, ruddy ducks, ring-necked pheasants, wild turkeys, American coots, mourning doves, American crows, and fish crows could continue to be taken during the regulated hunting seasons in the State. As was shown in the EA, entities besides WS have lethally taken birds in the State when permitted through the issuance of depredation permits by the USFWS. Under this alternative the level of take is likely to remain at least similar to the levels of take that have occurred previously but could increase to levels addressed under the proposed action alternative even if WS only provides technical assistance. The lack of direct operational assistance provided by WS under this alternative is not likely to result in a decline in the number of birds lethally taken in the State since WS' take is likely not additive to the number of birds that would have been taken if WS had not participated in those activities. Similar to Alternative 1, those methods described in Appendix B would be available to those experiencing damage or threats associated with birds in the State except for alpha-chloralose, DRC-1339, and mesurol which are only available to WS. All other methods described in Appendix B of the EA would be available to those persons experiencing damage.

Alternative 3 – No Bird Damage Management Conducted by WS

Under the no involvement alternative, WS would not be involved with any aspect of bird damage management activities in North Carolina. All requests for assistance received by WS would be referred to the USFWS, the NCWRC, and/or other entities. The take of birds could continue to occur under this alternative when damage or threats were occurring in accordance with depredation permits issued by the USFWS as well as under the depredation orders and during the regulated hunting season in the State. Most of the methods described in Appendix B of the EA under this alternative to alleviate bird damage and threats would be available under any of the alternatives. The only methods that would not be available to manage damage caused by birds under this alternative would be the immobilizing drug alpha chloralose, the avicide DRC-1339, and the repellent mesurol which are only available for use by WS.

XI. ALTERNATIVES CONSIDERED BUT NOT ANALYZED IN DETAIL WITH RATIONALE

Additional alternatives were also evaluated but were not considered in detail in the EA with rationale provided in the EA (USDA 2010). The alternatives analyzed but not in detail included:

- Non-lethal Methods Implemented Before Lethal Methods
- Use of Non-lethal Methods Only by WS
- Use of Lethal Methods Only by WS

- Trap and Translocate Birds Only
- Reducing Damage by Managing Bird Populations through the Use of Reproductive Inhibitors
- Compensation for Bird Damage

XII. MINIMIZATION MEASURES AND STANDARD OPERATING PROCEDURES

The current WS program, nationwide and in North Carolina, uses many standard operating procedures and minimization measures. Standard operating procedures and minimization measures are discussed in detail in Chapter 5 of WS' programmatic FEIS (USDA 1997) and in Chapter 3 of the EA (USDA 2010). Those standard operating procedures would be incorporated into activities conducted by WS when addressing bird damage and threats in North Carolina under the proposed action alternative (Alternative 1) and when applicable, under the technical assistance alternative (Alternative 2). If the no involvement by WS alternative (Alternative 3) is selected, the lack of assistance by WS would preclude the employment or recommendation of those standard operating procedures and minimization measures addressed in the EA by WS.

XIII. ENVIRONMENTAL CONSEQUENCES FOR ISSUES ANALYZED IN DETAIL

The EA analyzes the environmental consequences of each alternative as that alternative relates to the issues identified to provide information needed for making informed decisions in selecting the appropriate alternative to address the need for action. The following resource values in North Carolina are not expected to be significantly impacted by any of the alternatives analyzed in the EA: soils, geology, minerals, water quality/quantity, flood plains, wetlands, critical habitats (areas listed in threatened and endangered (T&E) species recovery plans), visual resources, air quality, prime and unique farmlands, aquatic resources, timber, and range. The activities proposed in the alternatives would have a negligible effect on atmospheric conditions including the global climate. Meaningful direct or indirect emissions of greenhouse gases would not occur as a result of any of the alternatives. Those alternatives would meet the requirements of applicable laws, regulations, and Executive Orders, including the Clean Air Act and Executive Order 13514.

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

Issue 1 - Effects of Damage Management Activities on Target Bird Populations

Under the proposed action, WS would incorporate non-lethal and lethal methods described in Appendix B of the EA in an integrated approach in which all or a combination of methods could be employed to resolve a request for assistance. WS would recommend and operational employ both non-lethal and lethal methods, as governed by Federal, State, and local laws and regulations under the proposed action.

Non-lethal methods can disperse or otherwise make an area unattractive to birds that are causing damage; thereby, reducing the presence of birds at the site and potentially the immediate area around the site where non-lethal methods are employed. Non-lethal methods would be given priority when addressing requests for assistance (WS Directive 2.101). However, non-lethal methods would not necessarily be employed to resolve every request for assistance if deemed inappropriate by WS' personnel using the WS Decision Model, especially in situations where the requesting entity has already attempted to resolve the damage or threats of damage using non-lethal methods. Non-lethal methods are used to excluded, harass, and

disperse target wildlife from areas where damage or threats are occurring. When effective, non-lethal methods would disperse birds from the area resulting in a reduction in the presence of those birds at the site where those methods were employed. From FY 2004 through FY 2009, WS employed non-lethal methods to harass and disperse birds in North Carolina as part of an integrated approach to managing damage and threats. Non-lethal methods are generally regarded as having minimal impacts on overall populations of wildlife since those species are unharmed. The continued use of non-lethal methods often leads to the habituation of birds to those methods which can decrease the effectiveness of those methods. Lethal methods are often employed to reinforce non-lethal methods and to remove birds that have been identified as causing damage or posing a threat to human safety. The use of lethal methods would result in local reductions of birds in the area where damage or threats were occurring. The number of birds removed from the population using lethal methods would be dependent on the number of requests for assistance received, the number of birds involved with the associated damage or threat, and the efficacy of methods employed.

Birds that could be taken by WS under the proposed action could be taken by those persons experiencing damage or threats in the absence of WS' direct involvement under the other alternatives since the take of birds can occur when a depredation permit has been issued by the USFWS pursuant to the MBTA. In addition, birds could be lethally taken to alleviate damage or reduce threats under depredations orders and/or during the regulated hunting seasons in the State. For those bird species afforded no protection under the MBTA, lethal take can occur without a need for a depredation permit. Since the lack of WS' direct involvement does not preclude the taking of birds by those persons experiencing damage or threats, WS' involvement in the taking of those birds under the proposed action would not be additive to the number of birds that could be taken by other entities in the absence of WS' involvement. As was shown in the EA, the take of bird species addressed in the assessment have been lethally taken by other entities in the State to alleviate damage or threats of damage. The number of birds taken annually would likely be similar across the alternatives, since the take of birds could occur even if WS was not directly involved with providing assistance under Alternative 2 and Alternative 3. Those activities proposed, including the proposed take of birds, under Alternative 1 would not be additive to the number of birds that could be taken by other entities under the other alternatives despite the lack of WS' involvement.

In addition, most non-lethal and lethal methods available for resolving damage or threats associated with birds would be available under any of the alternatives. The immobilizing drug alpha chloralose, the avicide DRC-1339, and the repellent mesurol would be the only methods that would not be available under all of the alternatives. The use of alpha chloralose, DRC-1339, and mesurol would only be available under the proposed action alternative since those products are only available for use by WS' personnel. Therefore, WS' use of those methods available under all of the alternatives would not be additive to the environmental status quo since those methods could be employed by any entity experiencing damage or threats caused by birds. Alpha chloralose is only available to live-capture waterfowl, coots, and pigeons. DRC-1339 is only available for use to manage damage associated with blackbird species and gulls. Mesurol is registered to discourage crows from feeding on eggs of threatened and endangered species. Based on the evaluation in the EA (USDA 2010), the availability of alpha chloralose, DRC-1339, and mesurol to manage damage or threats of damage associated with birds under the proposed action would not pose significant environmental risks when used by trained WS' personnel and in accordance with the use guidelines.

Based on those quantitative and qualitative parameters addressed in the EA, the proposed take levels of bird species addressed under the proposed action alternative (Alternative 1) would be considered of low magnitude when compared to population trend data, population estimates, and/or harvest data. The number of birds lethally taken annually under the alternatives is likely to be similar since the take of birds could occur despite no involvement by WS. As was shown in the EA, other entities have addressed bird species to alleviate damage and therefore; any birds that could be lethally taken under the proposed action

alternative could be taken by other entities under the other alternatives. WS does not have the authority to regulate the number of birds taken annually by other entities. WS' take of birds would only occur at levels authorized and only when permitted by the USFWS for those species for which a depredation permit is required for take.

In addition, based on the levels of take that have occurred previously by WS and other entities and in anticipation of the USFWS permitting the take of birds at levels addressed in the EA, the cumulative take of levels addressed are also of low magnitude when compared to those quantitative and qualitative parameters addressed in the EA. The permitting of the take by the USFWS ensures that cumulative take levels occur within allowable levels to maintain species' populations and meet population objectives for each species.

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

Another issue often raised is the potential impacts to populations of wildlife that could be taken as non-targets during damage management activities. While every effort is made to minimize the risks of lethally taking non-target wildlife, the potential does exist for the unintentional take of non-targets during damage management activities. Since FY 2004, no non-targets are known to have been killed by WS during previous bird damage management activities using an integrated approach. Methods available to address bird damage would be similar across all the alternatives. Therefore, risks to non-targets from the use of those methods would be similar across the alternatives analyzed in detail when those methods are used as intended. The only methods that would not be available under all the alternatives analyzed in detail would be the use of alpha chloralose, DRC-1339, and mesurol which are restricted to use by personnel of WS only. Although some risks to non-targets do occur from the use of those methods, those risks are minimal when those methods are used by trained personnel in accordance with WS Directive 2.430 and use guidelines. Based on information in the EA (USDA 2010), the use patterns of alpha chloralose, DRC-1339, and mesurol would not pose increased risks to non-targets.

Under the no involvement by WS alternative, WS would not be directly involved with any aspect of bird damage management; therefore, no direct impacts to non-targets would occur from WS. Under the technical assistance only alternative, WS could provide information on the proper use of methods and provide demonstration on the use of methods but would not be directly involved with using methods to alleviate bird damage or threats. Similar to the no WS involvement alternative, under the technical assistance alternative, if methods are applied as intended and with regard for non-target hazards, those methods would not result in the decline in non-target species' populations. If requestors are provided technical assistance but do not implement any of the recommended actions and takes no further action, the potential impacts to non-targets would be lower compared to the proposed action. If those persons requesting assistance implement recommended methods appropriately and as instructed or demonstrated, the potential impacts to non-targets would be similar to the proposed action. Methods or techniques not implemented as recommended or used inappropriately would likely increase risks to non-targets. When employing direct operational assistance under the proposed action alternative, WS could employ methods and use techniques which would avoid non-target take as described in Chapter 3 of the EA under the Standard Operating Procedures and those measures and procedures discussed in WS' programmatic FEIS (USDA 1997).

The ability to reduce damage and threats caused by birds would be variable based upon the skills and abilities of the person implementing damage management actions under Alternative 2 and Alternative 3. If those methods available are applied as intended, risks to non-targets would be minimal to non-existent. If methods available are applied incorrectly or applied without knowledge of bird behavior, risks to non-target wildlife would be higher under any of the alternatives. If frustration from the lack of available assistance under Alternative 2 and Alternative 3 causes those persons experiencing bird damage to use

methods that are not legally available for use, risks to non-targets would be higher under those alternatives. People have resorted to the use of illegal methods to resolve wildlife damage that have resulted in the lethal take of non-target wildlife (USDA 1997, White et al. 1989, USFWS 2001, Food and Drug Administration 2003). Under the proposed action alternative, those persons could request direct operational assistance from WS to reduce damage and threats occurring which increases the likelihood that non-target species would be unaffected by damage management activities.

Based on a review of those T&E species listed in the State during the development of the EA (see Appendix C and Appendix D in the EA), WS determined that activities conducted pursuant to the proposed action would not likely adversely affect those species listed in the State by the USFWS and the National Marine Fisheries Services nor their critical habitats. Based on a review of the proposed action and the methods available under the proposed action, WS has determined that the proposed bird damage management program would not adversely affect any of the species listed by the NCWRC in the State.

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

The threats to human safety of methods available would be similar across the alternatives since those methods would be available across the alternatives. However, the expertise of WS' employees in using those methods available likely would reduce threats to human safety since WS' employees are trained and knowledgeable in the use of those methods. If methods are used incorrectly or without regard for human safety, risks to human safety would increase under any of the alternatives that those methods could be employed. The EA determined that the availability of alpha chloralose, DRC-1339, and mesurol under the proposed action would not increase risks to human safety from the use of the method under the proposed action alternative (USDA 2010). Although risks do occur from the use of alpha chloralose, DRC-1339, and mesurol, when those methods are used in consideration of human safety, the use of those methods does not pose additional risks to human safety beyond those associated with the use of other methods.

Issue 4 - Effects on the Aesthetic Values of Birds

Birds often provide aesthetic enjoyment to many people in the State through observations, photographing, and knowing they exist as part of the natural environment. Under all the alternatives, methods available that could be employed are intended to make resources unavailable or unattractive. Therefore, the use of methods often results in the removal of birds from the area where damage is occurring or the dispersal of birds from an area. Since methods available are similar across the alternatives, the use of those methods would have similar potential impacts on the aesthetics of birds. However, even under the proposed action alternative, the dispersal and/or take of birds under the alternatives would not reach a magnitude that would prevent the ability to view birds outside of the area where damage was occurring. The effects on the aesthetic values of birds would therefore be similar across the alternatives and would be minimal.

Issue 5 - Humaneness and Animal Welfare Concerns of Methods

The issue of humaneness was also analyzed in detail in relationship to the alternatives. Since many methods addressed in Appendix B of the EA are available under all the alternatives, the issue of method humaneness would be similar for those methods across all the alternatives. As stated previously alpha chloralose, DRC-1339, and mesurol are the only methods that would not be available under all the alternatives. The ability of WS to provide direct operational assistance under the proposed action alternative would ensure methods are employed by WS as humanely as possible. Under the other alternatives, methods could be used inhumanely if used inappropriately or without consideration of bird behavior. However, most methods, when used as intended, would be considered humane and when attended to appropriately, would not increase distress of birds.

Issue 6 - Effects of Bird Damage Management Activities on the Regulated Harvest of Birds

Hunting seasons in the State exist for the following bird species addressed in the EA: Atlantic brant, wood ducks, American wigeon, American black ducks, mallards, blue-winged teal, Northern shovelers, Northern pintails, green-winged teal, canvasbacks, lesser scaup, greater scaup, hooded mergansers, common mergansers, ruddy ducks, ring-necked pheasants, wild turkeys, American coots, mourning doves, American crows, and fish crows. WS would have no impact on regulated hunting under Alternative 2 since WS would not lethally remove birds under this alternative. However, resource/property owners may remove birds under depredation permits and depredation orders issued by the USFWS resulting in impacts similar to the proposed action and Alternative 3. The recommendation of non-lethal methods could disperse or exclude birds from areas under this alternative which could limit the ability of those interested to harvest birds in the damage management area. However, the bird populations would be unaffected by WS under the technical assistance alternative (Alternative 2).

Similarly, WS would have no impact on regulated hunting under Alternative 3. WS would not be involved with any aspect of bird damage management. The USFWS and the NCWRC could continue to regulate bird populations through adjustments in allowed take during the regulated harvest season and through depredation orders or permits to manage damage or threats of damage.

The magnitude of lethal bird take addressed in the proposed action would be low when compared to the mortality of those bird species from all known sources. When WS' proposed take of birds was included as part of the known mortality of birds and compared to the known populations of those species, the impact on the bird population was below the level of removal required to lower population levels. The USFWS and the NCWRC would determine the number of birds taken annually by WS through the issuance of depredation permits.

Bird damage management activities conducted by WS would occur after consultation and approval by the USFWS and the NCWRC. With oversight by the USFWS and the NCWRC, the number of birds allowed to be taken by WS would not limit the ability of those persons interested to harvest birds during the regulated season. All take by WS would be reported to the USFWS annually to ensure take by WS is incorporated into population management objectives established for bird populations. Based on the limited take proposed by WS and the oversight by the USFWS and the NCWRC, WS' take annually would have no effect on the ability of those interested to harvest birds during the regulated harvest season.

XIV. CUMULATIVE IMPACTS OF THE PROPOSED ACTION

No significant cumulative environmental impacts are expected from any of the three alternatives, including the proposed action. Under the proposed action, the lethal removal of birds by WS would not have significant impacts on statewide bird populations when known sources of mortality are considered. No risk to public safety is expected when activities are provided and expected by requesting individuals in Alternative 1 and Alternative 2 since only trained and experienced personnel would conduct and/or recommend damage management activities. There is a slight increased risk to public safety when persons who reject assistance and recommendations and conduct their own activities under Alternative 2, and when no assistance is provided under Alternative 3. However, under all of the alternatives, those risks would not be to the point that the impacts would be significant. The analysis in this EA indicates that an integrated approach to managing damage and threats caused by birds would not result in significant cumulative adverse impacts on the quality of the human environment.

XV. DECISION AND RATIONALE

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

Decision

I have carefully reviewed the EA prepared for to meet the need for action. I find the proposed action alternative (Alternative 1) to be environmentally acceptable, addressing the issues and needs while balancing the environmental concerns of management agencies, landowners, advocacy groups, and the public. The analyses in the EA adequately addresses the identified issues which reasonably confirm that no significant impact, individually or cumulatively, to wildlife populations or the quality of the human environment are likely to occur from the proposed action, nor does the proposed action constitute a major federal action. Therefore, the analysis in the EA does not warrant the completion of an EIS.

Based on the analyses in the EA, the issues identified are best addressed by selecting Alternative 1 (proposed action/no action) and applying the associated Standard Operating Procedures and minimization measures discussed in Chapter 3 of the EA. Alternative 1 successfully addresses (1) bird damage management using a combination of the most effective methods and does not adversely impact the environment, property, human health and safety, and/or non-target species, including T&E species; (2) it offers the greatest chance of maximizing effectiveness and benefits to resource owners and managers 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 bird damage management activities in the State, that affect the natural or human environment, or from the issuance of new environmental regulations. Therefore, it is my decision to implement the proposed action/no action alternative (Alternative 1) as described in the EA.

Finding of No Significant Impact

Based on the analyses provided in the EA, there are no indications that the proposed action (Alternative 1) would have a significant impact, individually or cumulatively, on the quality of the human environment. I agree with this conclusion and therefore, find that an EIS should not be prepared. This determination is based on the following factors:

1. Bird damage management as conducted by WS in the State 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 many of the methods described in the EA were determined to be low in a formal risk assessment (USDA 1997). Based on the analyses in the EA, the methods available would not adversely affect human safety based on their use patterns.

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. WS' standard operating procedures and adherence to applicable laws and regulations would 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 bird damage management, this action is not highly controversial in terms of size, nature, or effect.

5. Based on the analysis documented in the EA and the accompanying administrative file, the effects of the proposed damage management program on the human environment would not be significant. The effects of the proposed activities are not highly uncertain and do not involve unique or unknown risks.

6. The proposed action would not establish a precedent for any future action with significant effects.

7. No significant cumulative effects were identified through the assessment. The EA analyzed cumulative effects 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 of North Carolina.

8. The proposed activities would not affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places, nor would they likely cause any loss or destruction of significant scientific, cultural, or historical resources.

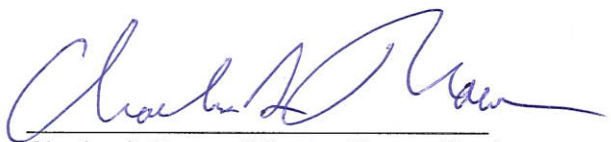
9. WS has determined that the proposed program would not adversely affect any federally listed T&E species currently listed in the State and the USFWS has concurred with WS' determination. In addition, WS has determined that the proposed activities would not adversely affect State-listed species.

10. The proposed action would be in compliance with all applicable Federal, State, and local laws.

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

Rationale

The rationale for this decision is based on several considerations. This decision takes into account public comments, social/political and economic concerns, public health and safety, and the best available science. The foremost considerations are that: 1) bird damage management would 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 Decision, the WS program in North Carolina would continue to provide effective and practical technical assistance and direct management techniques that reduce damage and threats of damage.



11/23/10

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

Date

XVI. LITERATURE CITED

Food and Drug Administration. 2003. Bird poisoning of federally protected birds. Office of Criminal Investigations. Enforcement Story 2003. http://www.fda.gov/ora/about/enf_story/archive/2003/default.htm. Accessed on February 2, 2009.

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

USDA. 1997. Animal Damage Control Program: Final Environmental Impact Statement (revised). USDA/APHIS/WS-Operational Support Staff, 4700 River Road, Unit 87, Riverdale, Maryland 20737.

USDA. 2003*a*. Environmental Assessment: Canada goose damage management. United States Department of Agriculture, Animal and Plant Health Inspection Service, Wildlife Services. Raleigh, North Carolina.

USDA. 2003*b*. Environmental Assessment: Bird damage management. United States Department of Agriculture, Animal and Plant Health Inspection Service, Wildlife Services. Raleigh, North Carolina.

USDA. 2010. Environmental Assessment: Reducing bird damage through an integrated wildlife damage management program in the state of North Carolina. United States Department of Agriculture, Animal and Plant Health Inspection Service, Wildlife Services. Raleigh, North Carolina.

USFWS. 2001. Inside Region 3: Ohio man to pay more than $11,000 for poisoning migratory birds. Volume 4(2):5.

USFWS. 2003. Final Environmental Impact Statement: Double-crested cormorant management. U.S. Dept. of the Interior, USFWS, Div. of Migratory Bird Management, 4401 N. Fairfax Drive MS 634, Arlington, VA 22203.

USFWS. 2005. Final Environmental Impact Statement: Resident Canada goose management. United States Fish and Wildlife Service, Division of Migratory Birds. Arlington, Virginia. http://www.fws.gov/migratorybirds/issues/cangeese/finaleis.htm. Accessed November 24, 2009.

USFWS. 2009. Environmental Assessment: Extended management of double-crested cormorants under 50 CFR 21.47 and 21.48. United States Fish and Wildlife Service, Division of Migratory Bird Management, 4401 N. Fairfax Drive, Mail Stop 4107, Arlington, VA 22203.

USFWS. 2010. Final Environmental Assessment: proposal to permit take as provided under the Bald and Golden Eagle Protection Act. United States Fish and Wildlife Service, Division of Migratory Bird Management. Arlington, Virginia.

White, D.H., L.E. Hayes, and P.B. Bush. 1989. Case histories of wild birds killed intentionally with famphur in Georgia and West Virginia. Journal of Wildlife Diseases 25:144-188.