

DECISION

ENVIRONMENTAL ASSESSMENT: REDUCING BIRD DAMAGE IN THE STATE OF FLORIDA

I. PURPOSE

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 impacts to the quality of the human environment from resolving damage, including conflicts and threats, associated with birds. 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. The proposed action alternative in the EA would continue an integrated damage management program to address the need to manage damage and threats associated with birds.

Damage and threats of damage associated with the following bird species were addressed in the EA Canada Geese (*Branta canadensis*), Mallards (domestic/wild) (*Anas platyrhynchos*), Mottled Ducks (*Anas fulvigula*), feral waterfowl¹, Wild Turkeys (*Meleagris gallopavo*), Wood Storks (*Mycteria Americana*), Brown Pelicans (*Pelecanus occidentalis*), Double-crested Cormorants (*Phalacrocorax auritus*), Great Blue Herons (*Ardea herodias*), Great Egrets (*Ardea alba*), Cattle Egrets (*Bubulcus ibis*), Black Vultures (*Coragyps atratus*), Turkey Vultures (*Cathartes aura*), Osprey (*Pandion haliaetus*), Mississippi Kites (*Ictinia mississippiensis*), Bald Eagles (*Haliaeetus leucocephalus*), Red-shouldered Hawks (*Buteo lineatus*), Red-tailed Hawks (*Buteo jamaicensis*), Common Gallinule (*Gallinula galeata*), American Coots (*Fulica americana*), American Golden-Plovers (*Pluvialis dominica*), Killdeer (*Charadrius vociferous*), Black-necked Stilts (*Himantopus mexicanus*), Least Sandpipers (*Calidris minutilla*), Dunlins (*Calidris alpina*), Laughing Gulls (*Leucophaeus atricilla*), Ring-billed Gulls (*Larus delawarensis*), Herring Gulls (*Larus argentatus*), Least Terns (*Sternula antillarum*), Black Terns (*Chlidonias niger*), Rock Pigeons (*Columba livia*), Eurasian Collared-Doves (*Streptopelia decaocto*), Mourning Doves (*Zenaida macroura*), Common Nighthawks (*Chordeiles minor*), American Kestrels (*Falco sparverius*), Peregrine Falcons (*Falco peregrines*), Monk Parakeets (*Myiopsitta monachus*), Eastern Kingbird (*Tyrannus tyrannus*), American Crows (*Corvus brachyrhynchos*), Fish Crows (*Corvus ossifragus*), Tree Swallows (*Tachycineta bicolor*), Barn Swallows (*Hirundo rustica*), American Robins (*Turdus migratorius*), European Starlings (*Sturnus vulgaris*), Red-winged Blackbirds (*Agelaius phoeniceus*), Eastern Meadowlarks (*Sturnella magna*), Common Grackles (*Quiscalus quiscula*), Boat-tailed Grackles (*Quiscalus major*), Brown-headed Cowbirds (*Molothrus ater*), and House Sparrows (*Passer domesticus*). In addition to those species, WS also could receive requests for assistance to manage damage and threats of damage associated with several other bird species. Damages and threats of damages associated with those species would occur primarily at airports where those species pose a threat of aircraft strikes. Appendix E in the EA contains a list of species that WS could address in low numbers and/or infrequently when those species cause damage or pose a threat of damage at airports.

The EA evaluated the issues and alternatives associated with WS' potential participation in managing damage and threats caused by birds in the State. WS prepared the EA to determine if the alternatives could have a significant impact on the quality of the human environment. Specifically, WS prepared the EA 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

¹Free-ranging or feral domestic waterfowl refers to captive-reared, domestic, of some domestic genetic stock, or domesticated breeds of ducks, geese, and swans. Examples of domestic waterfowl include, but are not limited to, Mute Swans, Muscovy Ducks, Pekin Ducks, Rouen Ducks, Cayuga Ducks, Swedish Ducks, Chinese Geese, Toulouse Geese, Khaki Campbell Ducks, Embden Geese, and Pilgrim Geese. Feral Ducks may include a combination of Mallards, Muscovy Duck, and Mallard-Muscovy Hybrids.

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 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 would only conduct bird damage management after receiving a request for assistance. Before initiating damage management activities, WS and the cooperating entity would sign a Memorandum of Understanding (MOU), cooperative service agreement, or other comparable document. The MOU, cooperative service agreement, or other comparable document would list all the methods the property owner or the property manager would allow WS to use 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 could also 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 a cooperator requests such management. The analyses in the EA 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 Florida. The EA emphasizes major issues as those issues relate to specific areas; however, the issues addressed apply wherever bird damage and the resulting damage management activities could occur. The standard WS Decision Model (Slate et al. 1992) would be the site-specific procedure for individual actions conducted by WS in Florida.

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 effects to the human environment from damage management activities. The Migratory Bird Treaty Act (MBTA) prohibits the "take" of migratory bird species; however, the MBTA does allow for the lethal removal of those bird species listed in 50 CFR 10.13 when depredation occurs through the issuance of depredation permits or the establishment of depredation/control orders (see 50 CFR 13 and 50 CFR 21). Under authorities in the MBTA, the USFWS is the federal agency responsible for the issuance of depredation permits or the establishment of depredation/control orders for the take of those protected bird species when damage or threats of damage are occurring.

WS made the EA available to the public for review and comment by a legal notice published in the *Tallahassee Democrat* from July 1, 2013 through July 3, 2013. WS also made the EA available to the public for review and comment by posting a notice of availability and the EA on the APHIS website at http://www.aphis.usda.gov/wildlife_damage/nepa.shtml beginning on June 26, 2013. WS also mailed a letter of availability directly to agencies, organizations, and individuals with probable interest in bird damage management in the State. The public involvement process ended on August 9, 2013. WS received no comment letters during the public comment period.

IV. RELATIONSHIP OF THE EA TO OTHER ENVIRONMENTAL DOCUMENTS

WS and other entities have developed several environmental documents to address the need for damage management activities associated with bird species. The USFWS, in cooperation with WS, have issued a double-crested cormorant management Final Environmental Impact Statement (USFWS 2003, USFWS 2009a) and a resident Canada goose management Final Environmental Impact Statement (USFWS 2005). 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 2009b). Hunter et al. (2006) developed a regional waterbird conservation plan for the southeastern region of the United States to assist with the recovery of high priority waterbird species. In response to increasing populations of Mute Swans along the Atlantic Flyway, the Atlantic Flyway Council (2003) developed a Mute Swan plan to reduce swan populations in the Flyway to minimize negative ecological damages occurring to wetland habitats from the overgrazing of submerged aquatic vegetation by swans.

WS previously developed an EA that analyzed the need for action to manage damage associated with vultures in Florida (USDA 2005a). WS has also prepared a separate EA to evaluate the need to manage damage associated with wildlife in Palm Beach County, Florida, which included an evaluation of damage management associated with feral domesticated waterfowl, Rock Pigeons, and Monk Parakeets (USDA 2005b). Since the current EA re-evaluated activities conducted under those previous EAs to address the new need for action and the associated affected environment, the analysis and the outcome of the Decision issued based on the analyses in the current EA will supersede the previous EAs that addressed birds. However, the need for action associated with those previous EAs relative to birds continues to be appropriate to the need for action associated with the current EA (USDA 2005a, USDA 2005b).

V. 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 USC 426-426b), as amended and the Act of December 22, 1987 (101 Stat. 1329-331, 7 USC 426c). Management of migratory birds is the responsibility of the USFWS under the MBTA. As the authority for the management of birds, WS consulted with the USFWS during the development of the EA. The USFWS provided input to ensure an interdisciplinary approach according to the National Environment Policy Act (NEPA) and agency mandates, policies, and regulations. The Florida Fish and Wildlife Conservation Commission (FWC) is responsible for managing wildlife in the State of Florida, including birds. Information provided by the USFWS and the FWC assisted in the analysis of potential impacts associated with the implementation of the alternatives.

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). WS would conduct all damage management activities, including disposal requirements, consistent with: 1) the Endangered Species Act of 1973, 2) the MBTA, 3) the National Historic Preservation Act, 4) the Federal Insecticide, Fungicide, and Rodenticide Act, 5) applicable Executive Orders, and 6) applicable federal, state, and local laws, regulations, and policies, including WS' Directives.

VI. 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 and threats of damage, 2) should WS conduct disease surveillance and monitoring in the bird population when requested by the FWC, the USFWS, and other agencies, 3) should WS implement an integrated damage management strategy, including technical assistance and direct operational assistance, to meet the need for bird damage management, 4) if not, should WS attempt to

implement one of the other alternatives described in the EA, and 5) would the alternatives result in effects to the human environment requiring the preparation of an Environmental Impact Statement (EIS).

VII. AFFECTED ENVIRONMENT

Upon receiving a request for assistance, WS could conduct activities to alleviate bird damage or threats on federal, state, tribal, municipal, and private properties in Florida. Assistance requests to resolve bird damage could occur, but would not necessarily be limited to, 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: residential buildings, golf courses, athletic fields, recreational areas, swimming beaches, parks, corporate complexes, subdivisions, businesses, industrial parks, schools, agricultural areas, wetlands, restoration sites, cemeteries, public parks, bridges, industrial sites, urban/suburban woodlots, hydro-electric dam structures, reservoirs and reservoir shore lands, nuclear, hydro and fossil power plant sites, substations, transmission line rights-of-way, landfills, on ship fleets, military bases, or at any other sites where birds may roost, loaf, or nest. WS could conduct damage management activities at agricultural fields, vineyards, orchards, farmyards, dairies, ranches, livestock operations, grain mills, and grain-handling areas (e.g., railroad yards) where birds destroy crops, feed on spilled grains, or contaminate food products for human or livestock consumption. Additionally, activities could be conducted at airports and surrounding properties where birds represent a threat to aviation safety.

VIII. ISSUES ADDRESSED IN THE ANALYSIS OF ALTERNATIVES

WS defined the issues related to bird damage management in Florida and identified preliminary alternatives through consultation with the USFWS and with the FWC. To identify additional issues and concerns, WS also made the EA 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. WS identified the following issues 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, WS identified several issues during the development of the EA but WS did not consider those issues in detail. The EA provided the rationale for the decision not to analyze those issues in detail. Those issues not analyzed in detail were:

- Appropriateness of Preparing an EA (Instead of an EIS) 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

WS developed the following three alternatives to respond to the issues identified in Chapter 2 of the EA and to meet the need for action discussed in Chapter 1. Chapter 4 of the EA analyzes the environmental consequences of each alternative in comparison to determine the extent of actual or potential impacts on the issues. The EA analyzed the following alternatives in detail.

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. A major goal of the program would be to resolve and prevent bird damage and to reduce threats to human safety. To meet this goal, WS would continue to respond to requests for assistance with, at a minimum, technical assistance, or when funding was available, operational damage management. WS would recommend and employ an integrated damage management strategy, 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. WS would give non-lethal methods first consideration in the formulation of each damage management strategy. WS would recommend or implement non-lethal methods when practical and effective before recommending or implementing lethal methods. However, WS would not always apply non-lethal methods 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.

WS could employ all the methods addressed in Appendix B of the EA 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 placed those persons experiencing damage. Those persons could employ those methods recommended by WS, could employ other methods, could seek assistance from other entities, or could take no further action.

Those entities experiencing damage or threats of damage associated with birds could still lethally take birds to alleviate damage under this alternative when those birds were 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/control orders. In addition, American Crows, Fish Crows, Wild Turkeys, Mallards, Blue-winged Teal, Green-winged Teal, American Coots, American Black Ducks, Common Mergansers, Hooded Mergansers, Wood Ducks, Wilson's Snipe, and Mourning Doves could continue to be harvested during the regulated hunting seasons in the State. The MBTA does not protect European Starlings, Rock Pigeons, House Sparrows, Monk Parakeets, Mute Swans, and domesticated waterfowl from lethal removal and those persons experiencing damage can lethally remove those birds using legally available methods at any time. American Crows, Fish Crows, Red-winged Blackbirds, Common Grackles, Boat-tailed Grackles, and Brown-headed Cowbirds can be removed when committing or about to commit damage without the need for a depredation permit under the blackbird depredation order established by the USFWS. Under an aquaculture depredation order and a public resources depredation order, entities can lethally remove Double-crested Cormorants without the need for a depredation permit when those cormorants meet the criteria described in those orders. Similarly, people experiencing damage caused by Canada Geese could remove those geese under several depredation/control orders. Entities can also lethally remove Muscovy Ducks at any time pursuant to a control order established by the USFWS.

Similar to Alternative 1, those methods described in Appendix B would be available to those persons 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 provide any assistance related to bird damage management in Florida. WS would refer all requests for assistance received to the USFWS, the FWC, and/or other entities. The take of birds by other entities 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 depredation/control 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

The EA also evaluated additional alternatives; however, the EA did not consider those alternatives in detail for the reasons provided in Chapter 3 of the EA. The alternatives analyzed but not in detail included:

- Non-lethal Methods Implemented by WS Before Lethal Methods
- Use of Non-lethal Methods Only by WS
- Use of Lethal Methods Only by WS
- Trap and Translocate Birds Only by WS
- Reducing Damage by Managing Bird Populations through the Use of Reproductive Inhibitors
- Compensation for Bird Damage

XII. STANDARD OPERATING PROCEDURES

The WS program would incorporate many standard operating procedures that improve the safety, selectivity, and efficacy of activities to manage damage associated with birds. Chapter 3 of the EA discusses standard operating procedures. WS would incorporate those standard operating procedures into activities when addressing bird damage and threats in Florida under the proposed action alternative (Alternative 1). WS would also incorporate those applicable procedures into recommendations under the technical assistance alternative (Alternative 2). If the decision-maker selected the no involvement by WS alternative (Alternative 3), the lack of assistance by WS would preclude the employment or recommendation of those standard operating procedures 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 Florida 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 from 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 potential impacts among the alternatives. The analysis also takes into consideration mandates, directives, and the procedures of WS, the USFWS, and the FWC. 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 could incorporate non-lethal and lethal methods described in Appendix B of the EA in an integrated approach in which WS could employ all or a combination of methods to resolve a request for assistance. WS could recommend and/or operationally employ both non-lethal and lethal methods, as governed by federal, state, and local laws and regulations under the proposed action.

Non-lethal methods could disperse or otherwise make an area unattractive to birds that were causing damage, which would reduce the presence of those birds at the site and potentially the immediate area around the site where WS employed non-lethal methods. WS would give non-lethal methods priority when addressing requests for assistance (see WS Directive 2.101). However, WS would not necessarily employ non-lethal methods to resolve every request for assistance if deemed inappropriate by WS' personnel using the WS Decision Model, especially in situations where the requesting entity had already attempted to resolve the damage or threats of damage using non-lethal methods. WS would use non-lethal methods to exclude and harass target birds from areas where damage or threats were 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 an entity employed those methods. From FY 2007 through FY 2012, WS employed non-lethal methods to harass and disperse birds in Florida as part of an integrated approach to managing damage and threats. Generally, many entities regard non-lethal methods as having

minimal impacts on overall populations of birds since those birds are unharmed. Dispersing those birds to other areas would have minimal impact on the populations of those bird species. WS would not employ non-lethal methods over large geographical areas or apply those methods at such intensity that essential resources (*e.g.*, food sources, habitat) would be unavailable for extended durations or over such a wide geographical scope that long-term adverse effects would occur to a species' population. The continued use of non-lethal methods often leads to the habituation of birds to those methods, which can decrease the effectiveness of those methods.

Employing lethal methods often reinforces non-lethal methods and removes birds that caused damage or posed a threat to human safety. The use of lethal methods could 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.

Under Alternative 2 and Alternative 3, other entities could remove those birds causing damage or posing threats of damage in the absence of WS' direct involvement since the take of birds could occur when the USFWS issued a depredation permit pursuant to the MBTA. In addition, other entities could lethally remove birds to alleviate damage or reduce threats under depredation/control orders and/or during the regulated hunting seasons in the State. For those bird species afforded no protection under the MBTA, lethal take could occur at any time without the need for a depredation permit. Since the lack of WS' direct involvement does not preclude the lethal removal of birds by those persons experiencing damage or threats, WS' involvement in removing 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, other entities have lethally removed many of the bird species addressed in the EA to alleviate damage or threats of damage. The number of birds lethally removed 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 lethal removal of birds, under Alternative 1 would not be additive to the number of birds that could be lethally removed by other entities under the other alternatives despite the lack of WS' involvement.

The level of lethal removal under Alternative 2 and Alternative 3 would likely remain at least similar to the levels of removal that have occurred previously but could increase to levels addressed under the proposed action alternative even if WS only provides technical assistance or provides no assistance. The lack of direct operational assistance provided by WS would not likely result in a decline in the number of birds lethally removed in the State since removal by WS would likely not be additive to the number of birds that could have been taken if WS had not participated in those activities.

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. DRC-1339 is the only avicide the EA considered for use to manage bird damage. Formulations of DRC-1339 are registered with the Environmental Protection Agency (EPA) to manage damage associated with Rock Pigeons, European Starlings, Red-winged Blackbirds, Brown-headed Cowbirds, Common Grackles, American Crows, and several gull species. However, during the development of the EA, none of the formulations registered with the EPA were available for use in the State by WS. In addition, mesurol was also not available for use in the State during development of the EA.

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 would only be available for use to manage damage associated with blackbird species and gulls. Mesurol would only be available to discourage crows from feeding on eggs of threatened and endangered species. Based on the evaluation in the EA, 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 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) were of low magnitude when compared to population trend data, population estimates, and/or harvest data. The number of birds lethally removed annually under the alternatives would likely to be similar since the removal of birds could occur despite no involvement by WS. As was shown in the EA, other entities have addressed bird species to alleviate damage. Therefore, any birds that WS could lethally remove under the proposed action alternative other entities could remove under the other alternatives. WS does not have the authority to regulate the number of birds lethally removed annually by other entities. WS' lethal removal of birds would only occur at levels authorized and only when the USFWS issues a permit for those species for which a depredation permit is required for lethal removal.

In addition, based on the levels of lethal removal that occurred previously by WS and other entities and in anticipation of the USFWS permitting the lethal removal of birds at levels addressed in the EA, the cumulative removal at levels addressed would also be of low magnitude when compared to those quantitative and qualitative parameters addressed in the EA. The permitting of lethal removal by the USFWS would ensure that cumulative take levels occurred 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 due to the unintentional lethal removal of animals as non-targets during damage management activities. While WS would attempt to minimize the risks of lethally removing non-target wildlife, the potential would exist for the unintentional removal of non-targets during damage management activities. Since FY 2007, WS use of an integrated methods approach has not resulted in the known lethal removal of non-target animals in the State. 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 using those methods 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 would be restricted to use by personnel of WS only, if available. Although some risks to non-targets do occur from the use of those methods, those risks would be minimal when trained WS' personnel used those methods in accordance with WS Directive 2.430 and use guidelines. Based on information in the EA, 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 provide any assistance related to bird damage management in Florida; 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 demonstrations on the use of methods. However, WS would not directly use methods to alleviate bird damage or threats. Similar to the no WS involvement alternative, under the technical assistance alternative, if other entities applied methods as intended and with regard for non-target hazards, those

methods would not result in the decline in non-target species' populations. If WS provided requestors with technical assistance but those entities did not implement any of the recommended actions and conducted no further action, the potential for impacts to occur could be lower than the risks associated with the proposed action. If those persons requesting assistance implemented methods appropriately that WS recommended and as instructed or demonstrated, the potential impacts to non-targets would be similar to the proposed action. Methods not implemented as recommended by WS or the use of methods not recommended by WS would likely increase risks to non-targets. When employing direct operational assistance under the proposed action alternative, WS would employ methods and use techniques in accordance with the Standard Operating Procedures discussed in Chapter 3 of the EA, which would lower the risk of unintentionally lethally removing a non-target animal.

The ability of other entities to reduce damage and threats caused by birds could be variable under Alternative 2 and Alternative 3 since the skills and abilities of the person implementing damage management actions would determine success. If other entities applied those methods available as intended, risks to non-targets would be minimal to non-existent. If other entities applied those methods available incorrectly or if other entities applied those methods without knowledge of wildlife behavior, risks to non-target wildlife would be higher under any of the alternatives. If frustration from the lack of available assistance under Alternative 2 and Alternative 3 caused those persons experiencing bird damage to use methods that were not legally available for use, risks to non-targets would be higher under those alternatives. People have resorted to the use of illegal methods to resolve wildlife damage that have resulted in the lethal take of non-target wildlife. Under the proposed action alternative, those persons could request direct operational assistance from WS to reduce damage and threats occurring, which would increase the likelihood that non-target species would be unaffected by damage management activities.

Based on a review of those T&E species listed in the State during the development of 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 damage management program would not adversely affect any of the species listed by the FWC in the State. The USFWS and the FWC have concurred with WS' determinations. Appendix C and Appendix D in the EA contain lists of those species currently considered threatened and endangered 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 would be trained and knowledgeable in the use of those methods. If WS or other entities used methods incorrectly or without regard for human safety, risks to human safety could increase under any of the alternatives. The EA determined that the availability of alpha chloralose, DRC-1339, and mesurool would not increase risks to human safety from the use of those methods under the proposed action alternative. Although risks do occur from the use of alpha chloralose, DRC-1339, and mesurool, when WS uses those methods in consideration of human safety, the use of those methods would not pose additional risks to human safety beyond those associated with the use of other methods.

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. Since those birds that could be removed by WS under the proposed action alternative could be removed by other entities in the absence of WS'

involvement, WS' involvement in lethally removing those birds would not likely be additive to the number of birds that could be removed in the absence of WS' involvement. Birds could be lethally removed by other entities if a depredation permit were issued by the USFWS, under depredation/control orders, without the need for a permit from the USFWS (*e.g.*, some non-native species), or during the regulated hunting seasons.

The potential impacts on aesthetics from a technical assistance program (Alternative 2) would only be lower than the proposed action if those persons experiencing damage were not as diligent as WS would be in employing methods. If those persons experiencing damage abandoned the use of those methods, then birds would likely remain in the area and available for viewing and enjoying for those people interested in doing so. Similar to the other alternatives, activities conducted by other entities to disperse or remove birds, after WS recommended those methods through a technical assistance program, would be limited geographically and would not occur over such large areas that opportunities to view and enjoy birds would be severely limited.

Since other entities could continue to disperse and lethally remove birds under Alternative 3, despite WS' lack of involvement, the ability to view and enjoy birds would likely be similar to the other alternatives. The lack of WS' involvement would not likely result in a reduction in the number of birds dispersed or lethally removed since WS has no authority to regulate lethal removal or the harassment of birds in the State.

Under all the alternatives, the intent of using non-lethal and lethal methods, that WS and/or other entities could employ, would be to make resources unavailable, unattractive, or to remove birds causing damage. Therefore, the use of methods often results in the removal or dispersal of birds from the area where damage was occurring. Since methods available would be 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 lethal removal of birds 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 EA also evaluated in detail the issue of humaneness and animal welfare concerns as those concerns relate to methods and activities that would be available for use and conducted under each of the alternatives analyzed in detail. Since many methods addressed in Appendix B of the EA would be available under all the alternatives, the issue of method humaneness would be similar for those methods across all the alternatives. As stated previously, alpha chloralose, DRC-1339, and mesuroil would be the only methods that would not be available under all the alternatives; however, DRC-1339 and mesuroil were not available for use in Florida during the development of the EA. When providing direct operational assistance as the proposed action alternative describes, WS would apply methods as humanely as possible. Under the other alternatives, other entities could apply methods inhumanely if those entities use methods inappropriately or without consideration of wildlife behavior. However, when used as intended and attended to appropriately, many people would consider most of the methods as humane.

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

Of the bird species addressed in the EA, hunting seasons in the State exist for American Crows, Fish Crows, Wild Turkeys, Mallards, Blue-winged Teal, Green-winged Teal, American Coots, Hooded Mergansers, Wood Ducks, Wilson's Snipe, and Mourning Doves. WS would not adversely affect the ability to harvest birds during the regulated hunting seasons under Alternative 2 since WS would not lethally remove birds to alleviate damage under the alternative. However, other entities could remove

birds under depredation permits and depredation/control orders issued by the USFWS resulting in potential impacts similar to the proposed action and Alternative 3. The use and/or recommendation of non-lethal methods could disperse or exclude birds from areas under Alternative 1 and Alternative 2, which could limit the ability of those persons interested to harvest birds in the damage management area. However, bird populations would be unaffected by WS under the technical assistance alternative (Alternative 2).

Similarly, WS would have no effect on regulated hunting under Alternative 3 since WS would not conduct any activities related to bird damage management in the State. The USFWS and the FWC could continue to regulate bird populations through adjustments in allowed removals during the regulated harvest season and through depredation/control orders or permits to manage damage or threats of damage. If those persons experiencing damage or threats conducted damage management activities or contacted other entities to provide assistance, the number of birds removed annually under Alternative 3 could be similar to the proposed action alternative.

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

Activities to alleviate damage or threats of damage conducted by WS would occur after consultation and approval by the USFWS. With oversight by the USFWS and the FWC, the number of birds that WS could lethally remove would not limit the ability of those persons interested to harvest birds during the regulated season. WS would report the number of birds lethally removed to the USFWS annually, which would ensure the USFWS incorporated the number of birds lethally removed by WS into population management objectives established for bird populations. Based on the limited take proposed by WS and the oversight by the USFWS and the FWC, WS' lethal removal of birds annually would have no effect on the ability of those persons interested to harvest birds during the regulated harvest season.

XIV. CUMULATIVE IMPACTS OF THE PROPOSED ACTION

Based on evaluations documented in the EA, implementation of the any of the three alternatives, including the proposed action, would not result in significant cumulative environmental impacts. Under the proposed action, the lethal removal of birds by WS would not have significant impacts on statewide bird populations when considering known sources of mortality. When WS receives a request for assistance and provides direct assistance and/or provides technical assistance recommendation under Alternative 1 or provides only technical assistance recommendations under Alternative 2, no expected risks to public safety would occur since only trained and experienced personnel would conduct activities and/or make recommendations. If persons receiving technical assistance from WS under Alternative 1 or Alternative 2 implemented methods incorrectly without regard to WS' recommendations, there could be a higher risk potential to public safety from the use of those methods. There would be a potential increased risk to public safety when persons reject assistance and recommendations and conduct their own activities under Alternative 2, and when WS provides no assistance 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 the EA indicates that an integrated approach to managing damage and threats caused by birds would not result in significant cumulative adverse effects on the quality of the human environment.

XV. DECISION AND RATIONALE

Based on the analyses of the alternatives developed to address those issues analyzed in detail within the EA, including individual and cumulative impacts of those alternatives, I, the decision-maker, have made the following decision.

Decision

I have carefully reviewed the EA prepared to meet the need for action. I find the proposed action alternative (Alternative 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 address 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 evaluation documented in the EA, I find that implementing Alternative 1 (proposed action/no action) and applying the Standard Operating Procedures discussed in Chapter 3 of the EA would best meet the need for action and would address the issues identified during the development of the EA. Alternative 1 would successfully address bird damage management using a combination of the most effective methods and does not adversely affect the environment, property, human health and safety, and/or non-target species, including T&E species. Alternative 1 would offer 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. In addition, Alternative 1 would present the greatest chance of maximizing net benefits while minimizing adverse effects to public health and safety. Alternative 1 would also offer a balanced approach to the issues of humaneness and aesthetics when all facets of those issues are considered. As stated in the EA, WS would continue to monitor activities associated with the selected alternative. Changes that broaden the scope of damage management activities in the State beyond those described in the EA, changes that affect the natural or human environment, or changes from the issuance of new environmental regulations would trigger further analysis pursuant to the NEPA. 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. I base this determination on the following factors:

1. Bird damage management as conducted by WS in the State would not be regional or national in scope.
2. The proposed action would pose minimal risk to public health and safety. Based on the analyses in the EA, the methods available would not adversely affect human safety based on their use patterns.
3. No significant effects would occur to unique characteristics, such as parklands, prime farmlands, wetlands, wild and scenic areas, or ecologically critical areas. 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. The evaluation documented in the EA did not identify significant cumulative effects. 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 Florida.
8. The proposed activities would not affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places, nor would they likely cause any loss or destruction of significant scientific, cultural, or historical resources.
9. WS has determined that the proposed program would not adversely affect any federally listed T&E species currently listed in the State and the USFWS has concurred with WS' determination. In addition, WS has determined that the proposed activities would not adversely affect State-listed species.
10. The proposed action would comply with all applicable federal, state, and local laws.
11. The evaluation documented in the EA found no significant cumulative effects associated with 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) WS would only conduct bird damage management at the request of landowners/managers, 2) management actions would be consistent with applicable laws, regulations, policies and orders, and 3) no cumulative effects to the environment were identified in the analysis. As a part of this Decision, the WS program in Florida would continue to provide effective and practical technical assistance and direct management techniques that reduce damage and threats of damage.



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

8/19/13

Date

XVI. LITERATURE CITED

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