DECISION
AND
FINDING OF NO SIGNIFICANT IMPACT

REDUCING BIRD DAMAGE
THROUGH AN
INTEGRATED WILDLIFE DAMAGE MANAGEMENT PROGRAM
IN THE STATE OF VERMONT

The U.S. Department of Agriculture, Animal and Plant Health Inspection Service (USDA APHIS), Wildlife Services (WS) program responds to requests for assistance from individuals, organizations and agencies experiencing damage caused by wildlife. Ordinarily, according to APHIS procedures implementing the National Environmental Policy Act (NEPA), individual wildlife damage management actions may be categorically excluded (7 CFR 372.5(c), 60 Fed. Reg. 6000-6003, 1995). To evaluate and determine if any potentially significant impacts to the human environment from WS' planned and proposed program would occur, an environmental assessment (EA) was prepared. The EA documents the need for bird damage management (BDM) in Vermont and assessed potential impacts of various alternatives for responding to damage problems. The EA analyzes the potential environmental and social effects for resolving bird damage related to the protection of resources, and health and safety on private and public lands in Vermont. WS' proposed action is to implement an Integrated Wildlife Damage Management (IWDM) program on public and private lands in Vermont. Comments from the public involvement process were reviewed for substantive issues and alternatives which were considered in developing this decision. The EA is tiered to the U.S. Fish and Wildlife Service (FWS) Final Environmental Impact Statement (FEIS) on the management of double-crested cormorants (USFWS 2003) in which WS was a formal cooperating agency and subsequently adopted and issued a Record of Decision (ROD) for the FEIS to support WS' program decisions for its involvement in the management of DCCO damage. As such, many of the issues addressed in the EA have been analyzed in the FWS double-crested cormorant (DCCO) FEIS.

WS is the Federal program authorized by law to reduce damage caused by wildlife (Act of 1931, as amended (46 Stat. 1486; 7 U.S.C. 426-426c) and the Rural Development, Agriculture, and Related Agencies Appropriations Act of 1988, Public Law 100-102, Dec. 27, 1987. Stat. 1329-1331 (7 U.S.C. 426c), and the Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act of 2001, Public Law 106-387, October 28, 2000. Stat. 1549 (Sec 767). Wildlife damage management is the alleviation of damage or other problems caused by or related to the presence of wildlife, and is recognized as an integral part of wildlife management (The Wildlife Society 1992). WS uses an IWDM approach, commonly known as Integrated Pest Management (WS Directive 2.105) in which a combination of methods may be used or recommended to reduce damage. WS wildlife damage management is not based on punishing offending animals but as one means of reducing damage and is used as part of the WS Decision Model (Slate et al. 1992, USDA 1997, WS Directive 2.201). The imminent threat of damage or loss of resources is often deemed sufficient for wildlife damage management actions to be initiated (U.S. District Court of Utah 1993). Resource management agencies, organizations, associations, groups, and individuals have requested WS to conduct bird damage management to protect resources and human health and safety in Vermont. All WS wildlife damage management activities are in compliance with relevant laws, regulations, policies, orders and procedures, including the Endangered Species Act of 1973.

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

Monitoring
The Vermont WS program will annually review its impacts on target bird species and other species addressed in the EA each year to ensure that WS program activities do not impact the viability of target and non-target wildlife species. In addition, the EA will be reviewed each year to ensure that it and the analysis are sufficient.

Public Involvement
The pre-decisional EA was prepared and released to the public for a 30-day comment period by a legal notice in the Burlington Free Press on Aril 20 and 21, 2004. A letter of availability for the pre-decisional EA was also mailed directly to agencies, organizations, and individuals with probable interest in the proposed program. One comment document was received from the public after review of the pre-decisional EA. All comments were analyzed to identify substantial new issues, alternatives, or to re-direct the program. Responses to specific comments are included in Appendix A. Based upon these comments, several minor editorial changes have been incorporated into the EA. These minor changes enhanced the understanding of the proposed program, but did not change the analysis provided in the EA. All letters are maintained in the administrative file located at the Vermont State Wildlife Services Office, Parker Professional Center, 617 Comstock Road, Berlin, VT 05602.

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

- Effects on Target Bird Populations
- Effects on Other Wildlife Species, including T&E Species
- Effects on Human Health and Safety
- Impacts to Stakeholders, including Aesthetics
- Humaneness and Animal Welfare Concerns of Methods Used

Affected Environment
The proposed action may be conducted on properties held in private, local, state or federal ownership. 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 wildlife damage management activities could be conducted are, but are not necessarily limited to: agricultural fields, vineyards, orchards, farmyards, dairies, ranches, livestock operations, grain mills, grain handling areas, railroad yards, waste handling facilities, bridges, industrial sites, natural areas, government properties and facilities, private homes and properties, corporate properties, schools, hospitals, cemeteries, parks and recreation areas (including sports fields, playgrounds, swimming pools, etc.), swimming lakes, communally-owned homeowner/property owner association properties, natural areas, wildlife refuges, wildlife management areas, coastal and tidal beaches, ponds, rivers, and inlets, airports and surrounding areas. In addition, WS may conduct double-crested cormorant control activities in any breeding colony site in Vermont, including any of the 5 breeding sites currently identified throughout the state (Wires et al. 2001). [redacted] Of these 5 breeding sites, 2 are privately owned and 3 are publicly owned (Young Island, Mud Island and Shad Island).

Alternatives That Were Fully Evaluated
The following four alternatives were developed to respond to the issues. Five additional alternatives were considered but not analyzed in detail. Appendix B of the EA provides a description of the methods that could be used or recommended by WS under each of the alternatives. A detailed discussion of the effects of the Alternatives on the issues is described in the EA; below is a summary of the Alternatives.

<u>Alternative 1:</u> **Technical Assistance Only.** This alternative would not allow for WS operational BDM in Vermont. WS would only provide technical assistance and make recommendations when requested. Producers, property owners, agency personnel, corporations, or others could conduct BDM using any legal lethal or non-lethal method available to them. Following USFWS review of a complete justified application (USDA –Wildlife Damage Report –Form 37A, Depredation Permit Application) for a depredation permit from a property owner to take specified bird species, a

depredation permit could be issued by the USFWS. The USFWS permit issuance procedure would follow that described in Alternative 2. Currently, DRC-1339 and alpha-chloralose are only available for use by WS employees. Therefore, use of these chemicals by others would not occur legally. However, the restricted use pesticide, Starlicide®, is similar to DRC-1339 and may be used by certified applicators if it becomes registered for use in the state. Avitrol® could also be used by state certified restricted-use pesticide applicators.

Alternative 2: Integrated Bird Damage Management Program (Proposed Action/No Action). USDA, APHIS, WS proposes to continue the current damage management program that responds to bird damage in the State of Vermont. An IWDM approach would be implemented to reduce bird damage to property, agricultural resources (including livestock), natural resources, and human/public health and safety. Damage management would be conducted on public and private property in Vermont when the resource owner (property owner) or manager requests assistance. An IWDM strategy would be recommended and used, encompassing the use of practical and effective methods of preventing or reducing damage while minimizing harmful effects of damage management measures on humans, target and non-target species, and the environment. Under this action, WS could provide technical assistance and direct operational damage management, including non-lethal and lethal management methods by applying the WS Decision Model (Slate et al. 1992). When appropriate, physical exclusion, habitat modification or harassment would be recommended and utilized to reduce damage. In other situations, birds would be removed as humanely as possible using shooting, trapping, egg addling/destruction, nest destruction, and registered pesticides and other products. In determining the damage management strategy, preference would be given to practical and effective non-lethal methods. However, non-lethal methods may not always be applied as a first response to each damage problem. The most appropriate response could often be a combination of non-lethal and lethal methods, or could include instances where application of lethal methods alone would be the most appropriate strategy. Bird damage management activities would be conducted in the State, when requested and funded, on private or public property, including airport facilities and adjacent or nearby properties, after an *Agreement for Control* or other comparable document has been completed. All management activities would comply with appropriate Federal, State, and Local laws, including applicable laws and regulations authorizing take of birds, and their nest and eggs.

Producers, property owners, agency personnel, corporations, or others could conduct BDM using any legal lethal or non-lethal method available to them. Following USFWS review of a complete justified application (USDA –Wildlife Damage Report –Form 37A, Depredation Permit Application) for a depredation permit from a property owner to take specified bird species, a depredation permit could be issued by USFWS. Upon receipt of a USFWS depredation permit, the permittee (or any listed sub-permittee) may commence the authorized activities and must submit a written report of their activities upon expiration of their permit to the USFWS. Permits may be renewed yearly by the USFWS as needed to resolve the damages, after going through the reauthorization process which includes justification. Not all of the methods listed in Appendix B of the EA as potentially available to WS would be legally available to property owners.

Alternative 3: Non-lethal Bird Damage Management Only by WS. This alternative would require WS to use non-lethal methods only to resolve bird damage problems. Information on lethal BDM methods would still be available to producers and property owners through other sources such as USDA Agricultural Extension Service offices, universities, or pest control organizations. Requests for information regarding lethal management approaches would be referred to Vermont Fish and Wildlife Department (VTFW), FWS, local animal control agencies, or private businesses or organizations. Individuals might choose to implement WS non-lethal recommendations, implement lethal methods or other methods not recommended by WS, contract for WS direct control services, use contractual services of private businesses, or take no action. Persons receiving WS's non-lethal technical and direct control assistance could still resort to lethal methods that were available to them. Under this alternative, property owners might be limited to using non-lethal techniques only. Because the USFWS needs professional recommendations on individual damage situations before issuing a depredation permit for lethal takes and the USFWS does not have the mandate or resources to conduct this work, state agencies with responsibilities for migratory birds would have to provide this information to the USFWS, such as VTFW. If the necessary information was provided to the USFWS, following the agency's review of a complete application package for a depredation permit from a property owner to lethally take birds causing damage, the permit issuance procedure would follow that described in Alternative 2.

Currently, DRC-1339 and alpha-chloralose are only available for use by WS employees. Therefore, use of these chemicals by others would be illegal. However, the restricted use pesticide, Starlicide®, is similar to DRC-1339 and may be used by certified applicators if it becomes registered for use in the state. Avitrol® could also be used by state certified restricted-use pesticide applicators.

Alternative 4: No Federal WS Bird Damage Management. This alternative would eliminate WS involvement in BDM in Vermont. WS would not provide direct operational or technical assistance and requesters of WS's assistance would have to conduct their own BDM without WS input. Information on BDM methods would still be available to producers and property owners through other sources such as USDA Agricultural Extension Service offices, universities, or pest control organizations. Requests for information would be referred to VTFW, FWS, local animal control agencies, or private businesses or organizations. Individuals might choose to conduct BDM themselves, use contractual services of private businesses, or take no action. DRC-1339 and alpha-chloralose are only available for use by WS employees. Therefore, use of these chemicals by private individuals would be illegal. However, the restricted use pesticide, Starlicide®, is similar to DRC-1339 and may be used by certified applicators if it becomes registered for use in the state. Avitrol® could also be used by state certified restricted-use pesticide applicators. Under this alternative, property owners might be limited to using non-lethal techniques only. Because the USFWS needs professional recommendations on individual damage situations before issuing a depredation permit for lethal takes and the USFWS does not have the mandate or resources to conduct this work, state agencies with responsibilities for migratory birds would have to provide this information to the USFWS, such as VTFW. If the necessary information was provided to the USFWS, following the agency's review of a complete application package for a depredation permit from a property owner to lethally take birds causing damage, the permit issuance procedure would follow that described in Alternative 2.

Alternatives Considered but not Analyzed in Detail:

Lethal Bird Damage Management Only By WS

Under this alternative, WS would not conduct any non-lethal control of birds for BDM purposes in the State, but would only conduct lethal BDM. This alternative was eliminated from further analysis because some bird damage problems can be resolved effectively through non-lethal means. Additionally, lethal methods may not always be available for use due to safety concerns or local ordinances prohibiting the use of some lethal methods, such as the discharge of firearms. For example, a number of damage problems involving the encroachment of injurious birds into buildings can be resolved by installing barriers or repairing of structural damage to the buildings, thus excluding the birds. Further, damage situations such as large flocks of injurious birds on/near airport runways could not be alleviated immediately by lethal means, while scaring them away using various harassment devices might resolve the threat to passenger safety at once.

Compensation for Bird Damage Losses

The compensation alternative would require the establishment of a system to reimburse persons impacted by bird damage. This alternative was eliminated from further analysis because no federal or state laws currently exist to authorize such action. Under such an alternative, WS would not provide any direct control or technical assistance. Aside from lack of legal authority, analysis of this alternative in the ADC Final EIS indicated that the concept has many drawbacks (USDA 1997):

- It would require larger expenditures of money and labor to investigate and validate all damage claims to determine and administer appropriate compensation.

- Compensation would most likely be less than full market value. Responding in a timely fashion to all requests to assess and confirm damage would be difficult and certain types of damage could not be conclusively verified. For example, proving conclusively in individual situations that birds were responsible for disease outbreaks would be impossible, even though they may actually have been responsible. Thus, a compensation program that requires verification would not meet its objective for mitigating such losses.

- Compensation would give little incentive to resource owners to limit damage through improved cultural, husbandry, or other practices and management strategies.

- Not all resource owners would rely completely on a compensation program and unregulated lethal control would most likely continue as permitted by state law.

- Compensation would not be practical for reducing threats to human health and safety.

Use of Bird-proof Feeders in Lieu of Lethal Control at Dairies and Cattle Feeding Facilities
Bird-proof feeders were proposed by Animal Protection of New Mexico (APNM), Inc. as a method for excluding birds at dairies and cattle feeding facilities in that State. This method would involve the installation of 1/8" thick steel panel feed troughs, covered by parallel 4-6 inch spaced steel cables or wires running from the outer top edge of the trough up at a 30-45 degree angle to the top of the head chutes that cattle use to access the feed. Vertical canvas strips would be hung from the cables. The feeder was reportedly designed for use with horses. A copy of a diagram of this system was sent to Mr. Jim Glahn, Bird Control Research Biologist at the WS-National Wildlife Research Center (NWRC), who has nearly 12 years of experience researching problems caused by European starlings at livestock feeding operations. He found the following:

- A major flaw in the design is the spacing of the cables at 4-6" which would allow European starlings to drop through. Reducing the spacing to 2" as recommended by Johnson and Glahn (1994) would likely interfere with the delivery of feed to the troughs. Interference would occur because the feed mixture currently used by most dairies is a mixture of chopped alfalfa hay and corn silage with a grain component. The alfalfa/corn silage portion would likely hang up on the cable or wire strands of the troughs and much would fall outside the troughs, with increased feed waste a result (Twedt and Glahn 1982).

- the spacing of the canvas strips is not specified, and canvas would deteriorate quickly from cattle licking and weather (Twedt and Glahn 1982).

Mr. Glahn expressed the opinion, based on Twedt and Glahn (1982) and Feare (1984), that exclusion methods to reduce starling depredations at livestock feeding operations are usually the least cost-effective solution. Despite the above concerns about the bird-proof feeder system recommended by APNM, Inc., similar types of systems could be recommended by WS under the current program should any become available that are effective, practical, and economically feasible for producers to implement.

Short Term Eradication and Long Term Population Suppression
An eradication alternative would direct all WS program efforts toward total long term elimination of bird populations on private, State, Local and Federal government land wherever a cooperative program was initiated in the State. In Vermont, eradication of native bird species is not a desired population management goal of State agencies or WS. Eradication as a general strategy for managing bird damage will not be considered in detail because:

- All State and Federal agencies with interest in, or jurisdiction over, wildlife oppose eradication of any native wildlife species.

- Eradication is not acceptable to most people.

Suppression would direct WS program efforts toward managed reduction of certain problem populations or groups. In areas where damage can be attributed to localized populations of birds, WS can decide to implement local population suppression as a result of using the WS Decision Model.

It is not realistic or practical to consider large-scale population suppression as the basis of the WS program. Typically, WS activities in the State would be conducted on a very small portion of the sites or areas inhabited or frequented by problem species.

Nonlethal Methods Implemented Before Lethal Methods

This alternative is similar to Alternative 2 except that WS personnel would be required to always recommend or use nonlethal methods prior to recommending or using lethal methods to reduce bird damage. Both technical assistance and direct damage management would be provided in the context of a modified IWDM approach. Alternative 2, the Proposed Action, recognizes nonlethal methods as an important dimension of IWDM, gives them first consideration in the formulation of each management strategy, and recommends or uses them when practical before recommending or using lethal methods. However, the important distinction between the Nonlethal Methods First Alternative and the Proposed Alternative is that the former alternative would require that all nonlethal methods be used before any lethal methods are recommended our used.

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

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

Finding of No Significant Impact

Many of the issues analyzed in the EA as they relate to DCCO damage management were also analyzed in the FWS DCCO FEIS (USFWS 2003). The analysis in the EA indicates that there will not be a significant impact, individually or cumulatively, on the quality of the human environment as a result of this proposed action. I agree with this conclusion and therefore find that an EIS need not be prepared. This determination is based on the following factors:

1. Bird damage management as conducted by WS in Vermont is not regional or national in scope. Impacts of DCCO management that are regional or national in scope have been addressed and analyzed in the FWS DCCO FEIS.

2. The proposed action would pose minimal risk to public health and safety. Risks to the public from WS methods were determined to be low in a formal risk assessment (USDA 1997, Appendix P).

3. There are no unique characteristics such as park lands, prime farm lands, wetlands, wild and scenic areas, or ecologically critical areas that would be significantly affected. Built-in mitigation measures that are part of WS's standard operating procedures and adherence to laws and regulations will further ensure that WS activities do not harm the environment.

4. The effects on the quality of the human environment are not highly controversial. Although there is some opposition to wildlife damage management, this action is not highly controversial in terms of size, nature, or effect. Public controversy over DCCO management has been acknowledged and addressed in the FWS DCCO FEIS and the EA.

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. The issue of uncertainty about effects of DCCO management in general has also been addressed in the FWS DCCO FEIS.

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

7. No significant cumulative effects were identified through this assessment. The EA discussed cumulative effects of WS on target and non-target species populations and concluded that such impacts were not significant for this or other anticipated actions to be implemented or planned within the State. The FWS DCCO FEIS analyzed the potential for significant cumulative impacts on national and regional cormorant populations and other species from implementing cormorant damage management activities and has determined that such impacts would not be significant.

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. If an individual activity with the potential to affect historic resources is planned under the selected alternative, then site-specific consultation as required by Section 106 of the NHPA would be conducted as necessary.

9. WS has determined that the proposed project would not adversely affect any Federal or Vermont State listed threatened or endangered species. This determination is based upon concurrence from the FWS that the project will not likely adversely affect any threatened or endangered species in Vermont.

10. The proposed action would be in compliance with all federal, state, and local laws.

Decision and Rationale

I have carefully reviewed the Environmental Assessment prepared for this proposal and the input from the public involvement process. I believe that the issues identified in the EA are best addressed by selecting Alternative 2 (Integrated Bird Damage Management Program (Proposed Action/No Action) and applying the associated mitigation measures discussed in Chapter 3 of the EA. Alternative 2 is selected because (1) it offers the greatest chance at maximizing effectiveness and benefits to resource owners and managers while minimizing cumulative impacts on the quality of the human environment that might result from the program's effect on target and non-target species populations; (2) it presents the greatest chance of maximizing net benefits while minimizing adverse impacts to public health and safety; and, (3) it offers a balanced approach to the issues of humaneness and aesthetics when all facets of these issues are considered. The comments identified from public involvement were minor and did not change the analysis. Therefore, it is my decision to implement the preferred alternative as described in the EA.

Copies of the EA are available upon request from the Vermont State Wildlife Services Office, Parker Professional Center, 617 Comstock Road, Berlin, VT 05602.

Rick D. Owens

Rick D. Owens, Acting Regional Director
APHIS-WS Eastern Region

6/14/4
Date

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APPENDIX A

RESPONSE TO PUBLIC COMMENTS RECEIVED ON PRE-DECISIONAL ENVIRONMNETAL ASSESSMENT

Issue 1: The National Environmental Policy Act (NEPA) requires consideration of a "No Action" alternative. The "No Action" alternative identified in the EA is not equivalent to a "No Action" alternative as required under NEPA.

Program Response 1: The "No Action" alternative (proposed action) identified in the EA is consistent with the Council on Environmental Quality's (CEQ's) definition (CEQ 1981). CEQ has made two distinct interpretations of what constitutes a "no action" alternative. One of these cases involves the situation where an ongoing program initiated under existing legislation and regulations will continue, even as a new plan is being developed. For a continuing program, such as the proposed program identified in the EA, the "no action" is defined as "no change" from current management direction. Because the proposed program has been in existence for several years and would be carried out under existing WS legislative authority and USFWS regulations authorizing the take of migratory birds in Vermont, it is considered an ongoing program.

Issue 2: Scope of the EA is too broad.

Program Response 2: This issue is addressed in Sections 1.8.4 and 2.3.3 of the EA.

Issue 3: What means or methods will WS use to determine whether birds are impacting a specific resource and that the course of action taken will reduce impacts to acceptable levels? How does WS plan to monitor the effectiveness of control actions on affected resources?

Program Response 3: As described in Section 3.2.3 of the EA, WS uses a decision model which involves evaluating each request for assistance, taking action and evaluating and monitoring results of the actions taken. This decision model will be used when WS receives a request for assistance. Furthermore, when using the authority provided to WS through the double-crested cormorant public resource depredation order (PRDO), WS is required on an annual basis, to provide the U.S. Fish and Wildlife Service (USFWS) with a description of the impacts or anticipated impacts to public resources by double-crested cormorants (DCCO) and a statement of the management objectives for the area in question; a description of the evidence supporting the conclusion that DCCOs are causing or will cause impacts to a public resource; and a discussion of other limiting factors affecting the resource (50 CFR 21.48(d)(10).

When appropriate, WS will assist in research projects evaluating the impacts of DCCO management actions. Information obtained from these studies will be used to evaluate program activities and may be used in planning subsequent DCCO management actions.

Issue 4: WS should not take action based upon perceived risks to human health or safety or threats of damage to resources.

Program Response 4: WS has the legal direction to respond to requests for assistance, and it is program policy to aid each requester to minimize losses. The USDA is directed by law to protect American agriculture and other resources from damage associated with wildlife. The primary statutory authority for the Wildlife Services program is the Act of 1931 (7 U.S.C. 426-426c; 46 Stat. 1468), as amended in the Rural Development, Agriculture, Related Agencies Appropriations Act of 1988, Public Law 100-102, Dec. 27, 1987. Stat. 1329-1331 (7 U.S.C. 426c), and the Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act of 2001, Public Law 106-387, October 28, 2000. Stat. 1549 (Sec 767), which provides that:

"The Secretary of Agriculture may conduct a program of wildlife services with respect to injurious animal species and take any action the Secretary considers necessary in conducting the program. The Secretary shall administer the program in a manner consistent with all of the wildlife services authorities in effect on the day before the date of the enactment of the Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act, 2001."

Since 1931, with the changes in societal values, WS policies and its programs place greater emphasis on the part of the Act discussing "bringing (damage) under control", rather than "eradication" and "suppression" of wildlife populations. In 1988, Congress strengthened the legislative directive and authority of WS with the Rural Development, Agriculture, and Related Agencies Appropriations Act.

In the Southern Utah Wilderness Alliance, et al. vs. Hugh Thompson, Forest Supervisor for the Dixie National Forest, et al., the United States District Court of Utah denied plaintiffs' motion for preliminary injunction. In part, the court found that a forest supervisor need only show imminent threat of damage is probable to establish a need for wildlife damage management (U.S. District Court of Utah 1993).

Issue 5: The EA does not analyze an alternative that would require, in each damage situation, that all feasible non-lethal methods be exhausted before using lethal control.

Program Response 5: This alternative is similar to the proposed action described in Section 3.1.2 of the EA. As described in the proposed action, when determining the damage management strategy, preference would be given to practical and effective non-lethal methods. However, non-lethal methods may not always be applied as a first response to each damage problem. The most appropriate response could often be a combination of non-lethal and lethal methods, or could include instances where application of lethal methods alone would be the most appropriate strategy.

Issue 6: The EA must address the economic impact of birders and other non-consumptive users on Vermont's economy.

Program Response 6: This issue is outside the scope of the EA.

Issue 7: Potential impacts of WS management actions on wildlife watching; specifically those people that enjoy the presence of birds and other wildlife in their natural settings are not mentioned in the EA.

Program Response 7: The WS program does not anticipate that the proposed action will have a significant impact on those that enjoy the presence of birds or other wildlife species. The WS program does not attempt to eradicate any species of wildlife, including birds, in Vermont. As discussed in Section 4.1.1, WS management actions would generally be restricted to local sites and to small, unsubstantial percentages of the overall bird population. Even though some local populations of target bird species may decline on the short term, these birds would remain common and abundant, and available for viewing by persons with that interest. Mitigation measures to reduce potential adverse impacts to target bird species and other wildlife are provided in Section 3.4 of the EA. By adhering to these mitigation measures, WS bird damage management actions will not have a significant impact on wildlife populations in Vermont.

Issue 8: Lethal methods are cruel and inhumane.

Program Response 8: The issue of humaneness is addressed in the EA in Sections 2.2.5 and 4.1.5. The definition of humaneness varies among people and cultures. Common knowledge about the various animal rights and humane groups is their prejudice towards their definition of animal humaneness which may vary from a producer and consumer's point of view. Vermont Wildlife Specialists take every measure to be as humane as possible while still providing an effective and efficient damage control program.

The WS program is concerned about animal welfare and continuously evaluates existing and new methods because of our concern for animals. While it is regrettable that wild animals die to alleviate some damage, we believe that if an animal death must occur, then it should occur with a minimum amount of distress and pain, in as short period of time as practical, and with compassion.

Issue 9: The need to protect sport fisheries and other public resources on a broad scale (regional level) from cormorant damage has not been substantiated, is based upon perceived conflicts, is not justified or warranted, and is not supported by science. Cormorant damage to public resources may occur on a localized level, but is having minimal impacts on resources at a broader regional level.

Program Response 9: As described in Sections 1.3.5 and 1.3.7, WS recognizes that cormorant damage to public resources is not a wide spread or common occurrence and occurs on a localized level. When determining if DCCOs are impacting a resource, including sport fisheries and other public resources, WS will use the best information that is available at that time to make this decision. This could include the use of published literature, results of on-going or completed research activities, consultation with the agency or agencies charged with responsibility of overseeing or managing a specific resource, consultation with person(s) with expertise in managing a particular resource, or any other information that will assist WS in making an informed decision.

WS has the legislative authority and responsibility to respond to such requests for assistance, the Vermont WS office will respond to these types of requests for assistance and will take the appropriate course of actions based upon the site specific information collected at the time of the request. Upon receiving a request for assistance, WS will use the WS Decision Model described in Section 3.2.3 when determining the necessary course of action.

Admittedly, part of the impetus for doing cormorant control is based upon human perception and desire beyond what science can clearly document. Conversely, part of the opposition to conducting such control is also based upon human perception and desires beyond what science can justify.

Issue 10: In Michigan, DCCO impacts on fish populations in the Les Cheneaux area of Lake Huron showed that DCCOs have very little impacts on the yellow perch fish population.

Program Response 10: WS recognize that there is currently contradictory scientific information regarding cormorant impact on the perch fishery in Lake Huron. As discussed in Appendix 6 of the DCCO FEIS (USFWS 2003), WS recognizes that the 1995 study by Belyea et al. (1997) concluded that DCCOs were having minimal impacts on the yellow perch fish population in the Les Cheneaux region in Lake Huron at that time. However, since the completion of the 1995 study, Fielder (2004) has observed that the timing of the rise in the DCCO population in the Les Cheneaux region coincides closely with the collapse of the yellow perch fishery and such a predation scenario would account for the continued high total annual mortality rate and decline in mean perch age. Fielder (2004) further concludes that these data indicate that the collapse of the fishery and range contraction of perch were caused at least in part by the predatory effects of cormorants and that DCCOs may be contributing to the ongoing suppression of the perch population in the region.

Issue 11: The EA did not to include relevant information from Cuthbert et al (2002) as it relates the potential impacts that DCCOs may have on waterbirds.

Program Response 11: Information from this citation has been added to Section 1.3.7.

Issue 12: WS cormorant damage management assistance provided to aquaculture producers should focus on making aquaculture facilities less attractive to cormorants and on "good" husbandry practices. Cormorant predation at aquaculture facilities can be prevented or reduced through the use of nonlethal methods such as harassment, exclusion methods or design of facilities.

Program Response 12: As described in Section 3.1.2 and Appendix B of the EA, WS considers such non-lethal approaches as part of the proposed program and WS will make such recommendations to persons requesting assistance when determined practical and effective for the given situation.

Issue 13: The EA does not analyze the impacts of the cormorant damage management program on fish populations or angling in Vermont.

Program Response 13: The management of fish populations is outside the scope of this EA. The intent of the proposed program is not to manage fish populations, but is to manage cormorant and other bird damage to specific resources, including fisheries. When a DCCO damage management program is implemented, it is predicted that recreational fishing opportunities will improve in those situations where DCCOs are negatively impacting a fisheries resource. The level of potential increase will be dependent upon not only the reduction of DCCO predation on the resource, but also on environmental and human-induced factors that affect aquatic ecosystems and fish populations as well.

Issue 14: WS implementation of control efforts under the PRDO could have adverse effects on communal nesting bird species, and threatened and endangered species (non-target species).

Program Response 14: These potential effects were analyzed in the DCCO EIS (Sections 4.2.3 and 4.2.5). As that analysis concluded, and as further described in Section 4.1.2, WS impacts on non-target species are predicted to be minimal and should not affect the overall populations of any non-target species. WS personnel are trained and experienced to select the most appropriate method for taking target animals and excluding nontargets. Methods used by WS would be highly selective with very little risk to non-target species. Non-target migratory bird species and other non-target wildlife species are usually not affected by WS's BDM methods, except for the occasional scaring from harassment devices and when WS conducts breeding DCCO management in mixed-species waterbird colonies. Mitigation measures to eliminate or reduce impacts to non-target species, including nesting colonial waterbird species, are listed in Section 3.4. Furthermore, as described in Section 4.1.2, WS has determined that bird damage management activities in Vermont will not adversely impact any Federally or State listed T&E species.

Issue 15: The Public Resource Depredation Order may adversely impact DCCO populations since the order does not put any restrictions or limits on the number of cormorants that WS may kill.

Program Response 15: As discussed in Section 4.1.1, the USFWS determined in the DCCO FEIS that cormorant populations are unlikely to be adversely affected by implementation of this depredation order. According to the DCCO FEIS (USFWS, 2003), under the PRDO, the implementation of a state-wide program to reduce cormorant impacts to public resources could result in the lethal take of up to an additional 4,140 cormorants on an annual basis in Vermont. WS anticipates that no more than 800 cormorants will be lethally removed annually by WS in Vermont under the proposed action. This includes birds taken under the PRDO and under USFWS issued depredation permits. In addition WS may remove up to 1,000 nests on an annual basis. The FEIS predicts that the implementation of the PRDO in Vermont will have no significant impact to regional or continental DCCO populations (USFWS 2003).

As specified in 50 CFR 21.48, on an annual basis WS will report all take of cormorants and eggs to the USFWS to assure that the cumulative impacts of cormorant damage management actions in Vermont are not adversely affecting the long-term sustainability of DCCOs in Vermont, the region or nationwide. Furthermore, as described in Section 1.8.3, WS will on an annual basis review this EA to ensure the analysis provided (including impacts to DCCO populations) in the EA is sufficient.

Issue 16: WS should coordinate cormorant damage management activities with other states to avoid adverse impacts to cormorant populations and other wildlife species that may be affected by management actions.

Program Response 16: WS agrees that a coordinated approach should be taken to manage DCCO damage in a socially acceptable and biologically controlled manner. As described in the WS Record of Decision (ROD) for the

FEIS (68 Federal Register 68020), WS supports a management strategy that includes national, regional, and local DCCO population goals and objectives. This type of coordinated approach to managing DCCO damage would be developed jointly and in cooperation with affected state and federal agencies. Furthermore, as specified in 50 CFR 21.48, on an annual basis WS will report all take of cormorants and eggs to the USFWS to assure that the cumulative impacts of cormorant damage management actions in Vermont are not adversely affecting the long-term sustainability of DCCOs in Vermont, the region or nationwide. As described in Section 1.8.3, WS will on an annual basis review this EA to ensure the analysis provided (including impacts to DCCO populations and other wildlife species) in the EA is sufficient.

Issue 17: WS implementation of the DCCO Public Resource Depredation Order violates the Migratory Bird Treaty Act (MBTA).

Program Response 17: As outlined in Section 1.1 of the EA and the USFWS Final Rule and ROD (68 Federal Register 58022), WS actions are conducted in accordance with applicable Federal, State, and Local environmental laws and regulations, including the MBTA. The MBTA authorizes the Secretary of Interior, subject to the provisions of, and in order to carry out the purposes of, the applicable conventions, to determine when, if at all, and by what means it is compatible with the terms of the conventions to allow the killing of migratory birds. DCCOs are covered under the terms of the Convention for the Protection of Migratory Birds and Game Mammals with Mexico. The DCCO is a nongame, noninsectivorous bird for which the applicable treaty does not impose specific prohibitions or requirements other than the overall purpose of protection so as not to be exterminated and to permit rational utilization for sport, food, commerce, and industry. In the FEIS for this action, the USFWS considered all of the statutory factors as well as compatibility with the provisions of the convention with Mexico. The Russian convention (Convention between the United States of America and the Union of Soviet Socialist Republics Concerning the Conservation of Migratory Birds and Their Environment, concluded November 19, 1976) provides an authority to cover DCCOs even though not listed in the Appendix. To the extent the USFWS choose to apply the convention, it contains an exception from the prohibitions that may be made for the protection against injury to persons or property.

Issue 18: To fully comply with NEPA, an Environmental Impact Statement (EIS) should be completed for the proposed bird damage management program in Vermont.

Program Response 18: WS follows all applicable laws, regulations, and guidelines in analyzing potential impacts of their actions, including those established by NEPA. In making an informed decision of potential environmental impacts, WS uses the best available scientific information, data and expert advice, including the DCCO FEIS (USFWS 2003). As allowed under CEQ NEPA regulations, this EA is tiered to the DCCO FEIS. Appendix A provides a list of documents that are used and referenced throughout the EA for analyzing potential impacts of the proposed program; Chapter 5 provides a list of the persons consulted in the development of the EA; and potential impacts are systematically analyzed in Chapter 4. Each issue is fully explained and analyzed against each alternative to allow the reader an objective way to evaluate potential outcomes of each alternative. By conducting such a systematic and objective analysis, and using the best available scientific information, data and expert advice, WS is able to make an informed decision as required by NEPA.

WS has determined that the analysis in the EA showed no significant impact on the quality of the human environment. The EA took a hard look at the need for action, the issues, alternatives, and environmental consequences, and resulted in a FONSI that discussed, under each of the ten CEQ points of significance, why each was not significant. WS carefully considered all comments from respondents to the public involvement efforts. The agency followed CEQ NEPA regulations, and Agency NEPA implementing procedures. Thus, the EA resulted in a FONSI that specified why an EIS was not required.