DECISION
AND
FINDING OF NO SIGNIFICANT IMPACT
For

Reducing Double-crested Cormorant Damage
Through an
Integrated Wildlife Damage Management Program
In the State of Michigan

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 cormorant damage management program would occur in the State of Michigan, including the take of birds under the Double-crested Cormorant Public Resource Depredation Order (PRDO), an environmental assessment (EA) was prepared, to which the U.S. Fish and Wildlife Service (USFWS) is a cooperating agency. The EA documents the need for double-crested cormorant damage management in Michigan and assessed potential impacts of various alternatives for responding to damage problems. The EA analyzes the potential environmental and social effects for resolving cormorant damage related to the protection of resources, and health and safety on private and public lands throughout the state. WS' proposed action is to implement an Integrated Wildlife Damage Management (IWDM) program on public and private lands in Michigan. 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 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 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). Resource management agencies, organizations, associations, groups, and individuals have requested WS to conduct cormorant damage management (CDM) to protect resources and human health and safety in Michigan. All WS wildlife damage management activities are in compliance with relevant laws, regulations, policies, orders and procedures, including the Endangered Species Act of 1973.

The USFWS has the primary statutory authority, under the Migratory Bird Treaty Act, for managing migratory bird populations in the U.S. The PRDO gives the USFWS responsibility for ensuring that the actions of agencies authorized to act under the PRDO (including WS): (1) do not threaten the long-term sustainability of regional double-crested cormorant populations, (2) do not adversely affect other bird species that nest with double-crested cormorants, (3) do not adversely affect Federally-listed species, and (4) comply with the terms and conditions of the PRDO, including notification and reporting procedures.

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

Monitoring
The Michigan WS program will monitor the impacts of its activities on cormorants and non-target species that could be affected by cormorant damage management activities. The USFWS will annually assess the impacts of the PRDO, as well as double-crested cormorant depredation and scientific collecting permits, to ensure that they do not impact the long-term sustainability of regional cormorant populations and that they are having minimal impacts on non-target wildlife species. This will be done primarily by review of USFWS permit records and annual reports submitted by agencies authorized to take cormorants under the PRDO. In addition, the EA will be reviewed each year to ensure that it is sufficient.

Public Involvement
The pre-decisional EA was prepared and released to the public for a 31-day comment period by a legal notice in *The Detroit News* and the *Detroit Free Press* on April 4, 2004. A notice of availability of pre-decisional EA was also mailed directly to agencies, organizations, and individuals with probable interest in the proposed program. The USFWS Region 3 office placed a notice of availability of the pre-decisional EA on their website (http://midwest.fws.gov/NEPA/MIcormorant/index.html). A total of 15 comment letters were received by WS within the comment period, ten (10) supporting the proposed action and five (5) opposed. All comments were analyzed to identify substantial new issues, alternatives, or to redirect the program. Wildlife Services responses to specific comments are included in Chapter 6 of the EA. All letters and comments are maintained at the Wildlife Services State Office in Okemos, Michigan.

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 double-crested cormorants
- Effects on other wildlife species, including T&E species
- Effects on human health and safety
- Effects on aesthetic values
- 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 public and private facilities and properties and at other sites where cormorants may roost, loaf, feed, nest or otherwise occur. Examples of areas where cormorant damage management activities could be conducted are, but are not necessarily limited to: aquaculture facilities; fish hatcheries; lakes; ponds; rivers; swamps; marshes; islands; communally-owned homeowner/property owner association properties; boat marinas; natural areas; wildlife refuges; wildlife management areas; and airports and surrounding areas. WS may conduct breeding bird control activities in any breeding colony site in Michigan, including any of the 48 breeding sites currently identified throughout the state (USDI/USGS 2001). This would include the Les Cheneaux Islands region of Lake Huron and possibly other nesting locations identified by Wires and Cuthbert (2001) as high priority for the conservation of colonial waterbirds in the U.S. Great Lakes. WS will consult the USFWS before undertaking cormorant control activities at the high-priority sites. Of the 48 cormorant breeding sites in Michigan, 19 have been identified to occur on publicly owned land (see Appendix D of the EA). WS will acquire the necessary landowner permission prior to conducting cormorant damage management activities, including breeding colony control activities.

Alternatives That Were Fully Evaluated

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

Alternative 1. Integrated CDM Program, including implementation of the Public Resource Depredation Order (Proposed Action). WS and United States Fish and Wildlife Service (USFWS) propose to implement a double-crested cormorant damage management program in the State of Michigan, including the implementation of the PRDO (50 CFR 21.48) as promulgated by the USFWS. An Integrated Wildlife Damage Management approach would be implemented to reduce cormorant damage and conflicts to aquaculture, property, natural resources, and human health and safety. Damage management would be conducted on public and private property in Michigan when the resource owner (property owner) or manager requests WS 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 humanely removed through use of shooting, egg addling/destruction, nest destruction, or euthanasia following live capture. In determining the damage management strategy, preference would be given to practical and effective non-lethal methods. However, non-lethal methods may not always be applied as a first response to each damage problem. The most appropriate response could often be a combination of non-lethal and lethal methods, or there could be instances where the application of lethal methods alone would be the most appropriate strategy. Wildlife damage management activities would be conducted in the State, when requested and funded, on private or public property, after an *Agreement for Control* or other comparable document has been completed. WS will acquire the necessary landowner permission prior to conducting cormorant damage management activities, including the appropriate landowner permission prior to conducting breeding colony control activities. All management activities would comply with appropriate Federal, State, and Local laws, including applicable laws and regulations authorizing take of double-crested cormorants, and their nests and eggs. The USFWS would be responsible for insuring compliance with the regulations at 50 CFR 21.48 and that the long-term sustainability of regional cormorant populations is not threatened.

Alternative 2. Non-lethal CDM Only By WS. Under this alternative, WS would be restricted to implementing or recommending only non-lethal methods in providing assistance with cormorant damage problems. Entities requesting CDM assistance for damage concerns would only be provided information on non-lethal methods such as harassment, resource management, exclusionary devices, or habitat alteration. However, it is possible that persons receiving WS' non-lethal technical and direct control assistance could still resort to lethal methods that were available to them. Information on lethal CDM methods would not be available from WS but would still be available to through sources such as USDA Agricultural Extension Service offices, USFWS, Michigan Department of Natural Resources (MDNR), universities, or pest control organizations.

Alternative 3. Technical Assistance Only. This alternative would not allow for WS operational CDM in Michigan. WS would only provide technical assistance and make recommendations when requested. Producers, property owners, agency personnel, or others could conduct CDM using any non-lethal or lethal method that is legally available to them. WS would not take part in the implementation of the PRDO.

Alternative 4. No Federal WS CDM. This alternative would eliminate WS involvement in CDM in Michigan. WS would not provide direct operational or technical assistance and requesters of WS services would have to conduct their own CDM without WS input. Information on CDM methods would still be available through other sources such as USDA Agricultural Extension Service offices, USFWS, MDNR, universities, or pest control organizations.

Alternative 5. Integrated CDM Program, excluding implementation of the PRDO (No Action). This alternative would be similar to Alternative 1, with the exception that WS will not

take part in the implementation of the PRDO. More specifically, WS would not kill DCCO's or conduct egg addling/destruction to protect public resources (fish, wildlife, plants, and their habitats) on private and public lands, and freshwaters under the authority provided to WS by 50 CFR 21.48. The MDNR and Indian Tribes would be able to implement the PRDO; and the USFWS would continue to issue migratory bird permits to take DCCOs and their eggs. An Integrated Wildlife Damage Management approach would be implemented to reduce cormorant damage and conflicts to aquaculture, property, natural resources, and human health and safety. Damage management would be conducted on public and private property in Michigan when the resource owner (property owner) or manager requests WS assistance including the use of lethal and non-lethal methods. 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).

Alternative Considered but not Analyzed in Detail:

Lethal CDM Only By WS. Under this alternative, WS would not conduct any non-lethal control of cormorants for CDM purposes in the State, but would only conduct lethal CDM. This alternative was eliminated from further analysis because some cormorant damage problems can be resolved effectively through non-lethal means and at times lethal methods may not be available for use due to safety concerns or local ordinances prohibiting the use of some lethal methods, such as the discharge of firearms.

Compensation for Cormorant Damage Losses. The compensation alternative would require the establishment of a system to reimburse persons impacted by cormorant 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 FEIS 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, and to determine and administer appropriate compensation. A compensation program would likely cost several times as much as the current program.
- Compensation would most likely be below full market value. It is difficult to make timely responses to all requests to assess and confirm damage, and certain types of damage could not be conclusively verified.
- 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 Federal and State law.
- Compensation would not be practical for reducing threats to human health and safety.

Non-lethal Methods Implemented Before Lethal Methods. This alternative is similar to Alternative 1 except that WS personnel would be required to always recommend or use non-

lethal methods prior to recommending or using lethal methods to reduce cormorant damage. Both technical assistance and direct damage management would be provided in the context of a modified IWDM approach. The Proposed Action recognizes non-lethal 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 Non-lethal Methods First Alternative and the Proposed Action Alternative is that the former alternative would require that all non-lethal methods be used before any lethal methods are recommended our used.

While the humaneness of the non-lethal management methods under this alternative would be comparable to the Proposed Action Alternative, the extra harassment caused by the required use of methods that may be ineffective could be considered less humane and may unduly disturb co-nesting species. 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 non-lethal management efforts were not effective. This may ultimately result in a greater number of birds being killed to reduce damage than if lethal management were immediately implemented at problem locations (Manuwal 1989). Once lethal measures were implemented, cormorant 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 cormorants 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 Non-lethal 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 were also analyzed in the 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. Cormorant damage management as conducted by WS in Michigan is not regional or national in scope. The impacts of cormorant management that are regional or national in scope have been addressed and analyzed in the 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 cormorant management has been acknowledged and addressed in the 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 cormorant management in general has also been addressed in the 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 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 (page 12, sub-section 1.7.2 of EA).

9. WS has determined that the proposed program would have no effect on any Federal listed threatened or endangered species. This determination is based upon an intra-Service biological evaluation and informal Section 7 consultation completed by the USFWS on the FEIS. WS will abide by the conservation measures provided in 50 CFR 21.48(d)(8) to avoid adverse impacts to the bald eagle and piping plover in Michigan. In addition WS has determined that the proposed program will not adversely affect any Michigan State listed T&E species.

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

Decision and Rationale

I have carefully reviewed the EA prepared for this proposal and the input from the public involvement process. I believe that the issues identified in the EA are best addressed by selecting Alternative 1 - Integrated CDM Program, including implementation of the PRDO

(Proposed Action) and applying the associated mitigation measures discussed in Chapter 3 of the EA. Alternative 1 is selected because (1) it offers the greatest chance at maximizing effectiveness and benefits to resource owners and managers while minimizing cumulative impacts on the quality of the human environment that might result from the program's effect on target and non-target species populations; (2) it presents the greatest chance of maximizing net benefits while minimizing adverse impacts to public health and safety; and, (3) it offers a balanced approach to the issues of humaneness and aesthetics when all facets of these issues are considered. The comments identified from public involvement were considered, and where appropriate, changes were made to the EA. The revisions that were made to the EA did not substantially change the analysis. Therefore, it is my decision to implement the proposed action as described in the EA.

Copies of the EA are available upon request from the Michigan Wildlife Services Office, 2803 Jolly Road, Suite 100, Okemos, MI 48864.

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

5/21/04
Date

Literature Cited:

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

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

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

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

United States Department of Interior (USDI)/United States Geological Survey (USGS). 2001. Waterbird Conservation for the Americas. Patuxent Wildlife Research Center; Laurel, MD. http://www.mp2-pwrc.usgs.gov/cwb/.

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

Wires, L.R. and Cuthbert, F.J. 2001. Prioritization of waterbird colony sites for conservation in the U.S. Great Lakes. Final Report to USFWS. Available at: http://www.waterbirds.umn.edu/F2-CWBPrior.pdf .