DECISION
AND
FINDING OF NO SIGNIFICANT IMPACT
FOR THE ENVIRONMENTAL ASSESSMENT:

REDUCING DOUBLE-CRESTED CORMORANT DAMAGE IN OHIO

November 2013

Across the United States, wildlife habitat has been substantially changed as the human population expands and more land is used to meet human needs. These human uses often come into conflict with the needs of wildlife, which increases the potential for negative human/wildlife interactions. Double-crested cormorants (*Phalacrocorax auritus*; DCCOs) are one of the wildlife species involved in these human/wildlife conflicts. Conflicts and damage caused by DCCOs in Ohio include but are not limited to foraging on fish at aquaculture facilities, negative impacts of increasing DCCO populations on vegetation and habitat used by other wildlife species, damage to private property from DCCO feces, and risks of aircraft collisions with DCCOs at or near airports. In 2006, the United States Department of Agriculture, Animal and Plant Health Inspection Service (APHIS), Wildlife Services (WS); the United States Department of the Interior, Fish and Wildlife Service (USFWS); and the Ohio Department of Natural Resources (ODNR), Division of Wildlife (ODW) completed an environmental assessment (2006 EA) evaluating ways by which the agencies may work together to resolve conflicts with DCCOs in the State of Ohio. The 2006 EA documented the need for DCCO damage management (CDM) in Ohio and assessed potential impacts on the human environment from various alternatives for responding to damage problems, including the take of birds under the Double-crested Cormorant Public Resource Depredation Order (PRDO; 50 CFR 21.48). The agencies prepared a Supplement to the 2006 EA in 2013 to review program impacts and update the analysis and alternatives in the 2006 EA. This document contains the WS decision on the management alternative to be implemented and the potential environmental impacts of the proposed alternative.

Based on analyses in the 2006 EA and 2013 Supplement and review of public comments, WS has chosen to continue implement the preferred alternative, Alternative 1 - Integrated CDM Including Implementation of the PRDO with the adjustments to mercury testing for compost described in the 2013 Supplement. The Integrated Wildlife Damage Management (IWDM) approach, commonly known as Integrated Pest Management (WS Directive 2.105)[1] involves the use of a combination of methods to reduce wildlife damage. Wildlife Services' wildlife damage management is not based on punishing offending animals but is focused on reducing or preventing damage and is implemented by using a thought process described by the WS Decision Model (Slate et al. 1992, WS Directive 2.201). All wildlife damage management activities will be conducted in compliance with applicable laws, regulations, policies, orders and procedures, including the Endangered Species Act of 1973.

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[1] WS Directives may be found at http://www.aphis.usda.gov/wildlife_damage/ws_directives.shtml.

Wildlife Services was the lead agency in the preparation of the 2006 EA and 2013 Supplement, and the USFWS (including both the Migratory Bird Program and West Sister Island National Wildlife Refuge [WSINWR]) and ODW were cooperating agencies. Wildlife Services is the Federal program authorized by law to reduce damage caused by wildlife (the Act of March 2, 1931 (46 Stat. 1468; 7 U.S.C. 426-426b) as amended, and the Act of December 22, 1987 (101 Stat. 1329-331, 7 U.S.C. 426c)). 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). However, WS, the USFWS, WSINWR, and the ODW decided to prepare the 2006 EA and 2013 Supplement to assist in planning CDM activities and to clearly communicate with the public the analysis of cumulative effects for a number of issues of concern in relation to alternative means of meeting needs for such management in the State, including the potential cumulative impacts on DCCOs and other wildlife species. The 2006 EA is tiered to the USFWS Final Environmental Impact Statement (FEIS) and Record of Decision (ROD) on the management of DCCOs in the U.S. (USFWS 2003). Wildlife Services was a formal cooperating agency on the FEIS and subsequently adopted the FEIS and issued its own Record of Decision (ROD) to support WS' program decisions for its involvement in the management of DCCO damage.

COOPERATING AGENCIES

The USFWS (Migratory Bird Management Office and WSINWR) and ODW are cooperating agencies for the 2006 EA and 2013 Supplement. The role and authority of these agencies is as follows:

United States Fish and Wildlife Service, Migratory Bird Management Office (USFWS): The USFWS has the primary statutory authority, under the Migratory Bird Treaty Act, for managing migratory bird populations in the U.S. In response to persistent conflicts and complaints relating to DCCOs, the USFWS in cooperation with WS completed the FEIS on the management of DCCOs in the U.S. in 2003 (USFWS 2003). Included in the selected management alternative were two depredation orders to address DCCO damage.

> **Public Resource Depredation Order (PRDO)**: The purpose of this order is to reduce the actual occurrence, and/or minimize the risk, of adverse impacts of DCCOs to public resources. Public resources include fish (both free-swimming fish and stock at Federal, State, and Tribal hatcheries that are intended for release in public waters), wildlife, plants, and their habitats. It authorizes WS, State fish and wildlife agencies, and Federally-recognized Tribes (acting only on tribal lands) to control DCCOs without a Federal permit, in 24 States (AL, AR, FL, GA, IL, IN, IA, KS, KY, LA, MI, MN, MS, MO, NY, NC, OH, OK, SC, TN, TX, VT, WV, and WI). It authorizes control on "all lands and freshwaters." This includes private lands, but landowner permission is required. It protects "public resources," which are natural resources managed and conserved by public agencies, as opposed to private individuals.
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> **Aquaculture Depredation Order (AQDO)**: The FEIS also revised an existing depredation order which authorizes aquaculture producers and State/Federal hatchery

operators (or their employees/agents) in 13 states (AL, AR, FL, GA, KY, LA, MN, MS, NC, OK, SC, TN, and TX) to shoot DCCOs "committing or about to commit depredations to aquaculture stocks" on their property. Although DCCOs do prey on fish at hatcheries in Ohio, the state is not included in the AQDO. Lethal removal of DCCOs to protect private hatchery stock in Ohio requires a Migratory Bird Permit (MBP) from the USFWS.

The USFWS is responsible for ensuring that the actions of agencies authorized to act under the PRDO (1) do not threaten the long-term sustainability of regional DCCO populations, (2) do not adversely affect other bird species that nest with DCCOs, (3) do not adversely affect Federally-listed species, and (4) comply with the terms and conditions of the PRDO, including notification and reporting procedures. The depredation orders were renewed in 2009 (USFWS 2009).

United States Fish and Wildlife Service, West Sister Island National Wildlife Refuge (WSINWR): West Sister Island National Wildlife Refuge is the oldest member of the Ottawa NWR Complex and the most isolated. The 80-acre island became a national wildlife refuge by Executive Order 7937 on August 2, 1937, and in 1975 was designated as a Federal wilderness area under the Wilderness Act of 1964. The Service manages 77 acres of the island and the U.S. Coast Guard owns the remaining acreage and a lighthouse. The island is home to the largest Great Blue Heron and Great Egret rookery in the United States Great Lakes and is also home to Snowy Egrets and one of the largest Black-crowned Night-Heron colonies on the United States Great Lakes. The island is not accessible to the public.

Ohio Department of Natural Resources (ODNR) Division of Widlife (ODW): As authorized by Ohio Revised Code (ORC) 1531.04, "the Division of Wildlife, at the direction of the Chief of the Division, shall do all of the following: (A) Plan, develop, and institute programs and policies based on the best available information, including biological information derived from professionally accepted practices in wildlife and fisheries management, with the approval of the director of natural resources; (B) Have and take the general care, protection, and supervision of the wildlife in the state parks known as Lake St. Mary's, The Portage Lakes, Lake Loramie, Indian Lake, Buckeye Lake, Guilford Lake, such part of Pymatuning Reservoir as lies in this state, and all other state parks and lands owned by the state or in which it is interested or may acquire or become interested, except lands and lakes the care and supervision of which are vested in some other officer, body, board, association, or organization; (C) Enforce by proper legal action or proceeding the laws of the state and division rules for the protection, preservation, propagation, and management of wild animals and sanctuaries and refuges for the propagation of those wild animals, and adopt and carry into effect such measures as it considers necessary in the performance of its duties" (ORC §1531.04).

Wildlife Services is in the process of updating the current Memorandum of Understanding (MOU) that defines USDA-APHIS-WS participation in a cooperative wildlife damage management program in Ohio. The MOU establishes a cooperative relationship between WS, Ohio Department of Agriculture, Ohio Department of Health (ODH), ODW, Ohio Department of Transportation (ODOT), The Ohio State University Extension (OSUE), and Ohio Agricultural Research and Development Center (OARDC), for planning, coordinating and implementing wildlife damage management policies to prevent or minimize damage caused by wild animal

species (including threatened and endangered species) to agriculture, horticulture, aquaculture, animal husbandry, forestry, wildlife, public health/safety, property, natural resources and to facilitate the exchange of information among the cooperating agencies.

Ohio Department of Natural Resources has authorized Ohio WS to collect wild animals as needed to fulfill the requirements of the USDA Wildlife Services. These actions may include take of wild animals, native and nonnative wildlife to relieve or prevent injurious situations impacting human health or safety, agriculture, natural resources, public and private property. Migratory birds may be taken in conjunction with issued U.S. Fish and Wildlife Service permits. WS may also act as the agent for the ODW for the issuance of U.S. Fish and Wildlife Service depredation permits for the take of non-state-listed migratory bird species.

CONSISTENCEY

The USFWS completed an Intra-Service Section 7 Biological Evaluation regarding the proposed action on November 15, 2013. The USFWS determined that implementation of Alternative 1 will have no effect on Indiana bat (*Myotis sodalis* - Endangered), Northern long-eared bat(*Myotis septentrionalis* – Proposed Endangered), Kirtland's Warbler (*Dendroica kirtlandii* - Endangered), Eastern massasauga (*Sistrurus catenatus* - Candidate), Karner blue butterfly (*Lycaeides Melissa samuelis* - Endangered), lakeside daisy (*Hymenoxys herbacea* - Threatened), Northern monkshood (*Aconitum noveboracense* - Threatened), Eastern prairie fringed orchid (*Platanthera leucophaea* - Threatened), and rayed bean (*Villosa fabalis* - Endangered). The proposed action may affect but is not likely to adversely affect the Piping Plover (*Charadrius melodus* - Endangered) and Red Knot (*Calidris canutus rufa* – Proposed Threatened). The proposed action will also have no effect on Critical Habitat used by Piping Plover.

MONITORING

Wildlife Services, the ODW and the USFWS (WSINWR) will monitor the impacts of their activities on DCCOs and non-target species that could be affected by CDM activities. The USFWS will annually assess the impacts of the PRDO and DCCO depredation and scientific collecting permits to ensure that cumulative CDM activities do not adversely impact the long-term sustainability of regional DCCO populations and that they are having minimal impacts on non-target wildlife species. This will be based on review of USFWS permit records and annual reports submitted by agencies and individuals authorized to take DCCOs under the PRDO combined with periodic population monitoring efforts. In addition, the 2006 EA and 2013 Supplement will be reviewed by WS to ensure that there are no new needs, issues or impacts meriting additional analysis.

PUBLIC INVOLVEMENT

The 2006 EA was prepared and released to the public for a 33-day comment period by a legal notice placed on January 10, 2006 in three of Ohio's major newspapers; The Cleveland Plain Dealer, Columbus Dispatch, and Cincinnati Enquirer. A notice of availability of the 2006 EA for public comment was also mailed directly to agencies, organizations, and individuals with probable interest in the proposed program. The USFWS Region 3 Regional Office issued a press

release to all news media in Ohio and provided a copy of the 2006 EA on their website (http://www.fws.gov/midwest/MidwestBird/cormorants.html). A total of 34 comment letters were received, 30 supporting the proposed action and 4 opposed. All comments were analyzed to identify substantial new issues, alternatives, or to redirect the program. Responses to specific comments are included in Chapter 6 of the 2006 EA.

The 2013 Supplement was released for public review for a 35–day comment period through a legal notice published in the Columbus Dispatch on June 28, 2013 and on regulations.gov. The 2006 EA, 2013 Supplement and notice of availability were also posted on the WS web site at http://www.aphis.usda.gov/ regulations/ws/ws_nepa_environmental_documents.shtml and on the USFWS web site at http://www.fws.gov/ midwest/midwestbird/cormorant.html. The USFWS Region 3 Regional Office also issued a press release notifying the public of the availability of the 2013 Supplement for review and comment. Agency responses to issues raised in the three comment letters submitted by the public are provided in Appendix A. The public notification procedures used by WS for the 2013 Supplement were in accordance with program public notification procedures for NEPA documents published in the Federal Register in 2007 (FR 72(54):13237-13238). All letters and comments on the 2006 EA and 2013 Supplement are maintained at the Wildlife Services State Office in Reynoldsburg, Ohio.

MAJOR ISSUES

The 2006 EA and 2013 Supplement describe the alternatives considered and evaluated using the identified issues. The following issues were identified as important to the scope of the analysis.

- Effects on DCCO populations
- Effects on other wildlife (and plant) species, including T&E species
- Effects on human health and safety
- Effects on aesthetic values
- Humaneness and animal welfare concerns of the methods used
- Impacts on recreation

AFFECTED ENVIRONMENT

The preferred alternative may be conducted in and around public and private facilities and properties and at other sites where DCCOs may roost, loaf, feed, nest or otherwise occur. Examples of areas where CDM activities could be conducted include, 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. The preferred alternative may be conducted on properties held in private, local government, state, federal, or tribal ownership once landowner permission has been obtained.

Wildlife Services and the ODW could conduct CDM at any of the areas where DCCOs cause damage or risks to health and safety in the state, including any of the DCCO breeding sites

currently identified throughout the state, with landowner permission (2006 EA Appendix D, 2013 Supplement Section III). The DCCO breeding sites specifically addressed in the 2006 EA and 2013 Supplement are mixed species colonies where CDM measures are intended to protect the vegetation including that used by co-nesting colonial waterbirds such as Great, Snowy and Cattle egrets, Great Blue Herons and Black-crowned Night-Herons. However, the CDM methods have the potential to negatively impact other colonial nesting waterbirds, so the control measures proposed for these sites have been carefully evaluated and modified to minimize risks to and disturbance of co-nesting species. The preferred alternative includes plans to monitor the impact of CDM activities on co-nesting colonial waterbirds. Cormorant damage management activities would be discontinued and re-evaluated/redesigned if the activities appear to be having a substantial negative impact on co-nesting colonial waterbirds.

This 2006 EA and 2013 Supplement analyze potential effects of WS and cooperating agency CDM activities that will occur or could occur at private and public property sites or facilities within Ohio with specific analysis of activities proposed for 5 DCCO breeding colonies including WSINWR. Because the purpose of the proposed action is to reduce damage and because the program's goals and directives are to provide services when requested and considered necessary, within the constraints of available funding and workforce, it is conceivable that additional CDM efforts could occur. With the exception of projects designed specifically to protect established free-swimming fish populations[2] and projects with impacts that may exceed those analyzed in the 2006 EA and 2013 Supplement, this analysis covers current and future CDM actions by WS, the USFWS, and the ODW wherever they might be requested or needed within the State of Ohio. An additional supplement would have to be prepared before CDM projects intended to protect established free-swimming fish populations or projects with the potential for impacts in excess of those analyzed in the 2006 EA and 2013 Supplement could be conducted. Supplementing the 2006 EA pursuant to NEPA would include providing the public the opportunity to comment on the proposed actions. Additionally, the Ohio DCCO Coordination Group will discuss all PRDO proposals. When considering whether a site is suitable or not for CDM, the agencies and coordination group will review the number and species of birds in the colony, the colony's longevity and stability, the colony's overall contribution to waterbird conservation in Ohio and the Great Lakes, and the nature of the DCCO damage being addressed.

ALTERNATIVES THAT WERE FULLY EVALUATED

The following five alternatives were developed to respond to the issues. Three additional alternatives were considered in the 2006 EA but not analyzed in detail (see 2006 EA Section 3.4). Each of the lead and cooperating agencies will make its own decision regarding the alternative to be selected. The alternative selected by each of the agencies may impact the alternatives available to the other agencies. Descriptions of each alternative are provided in Section V of the 2013 Supplement and in Chapter 3 of the 2006 EA. The 2006 EA also contains a discussion of how the selection of each alternative by one agency affects the management

[2] Cormorant damage management activities such as harassment could be conducted for brief periods to protect newly released hatchery fish.

actions of the other agencies in Chapter 3 and Appendix E. The following is a summary of the alternatives considered in the 2013 Supplement.

Alternative 1. Integrated CDM Program, including implementation of the Public Resource Depredation Order and Migratory Bird Depredation Permits (Preferred Alternative/No Action Alternative)

The lead and cooperating agencies propose to continue implementation of an integrated CDM program in the State of Ohio, including working under the PRDO and Migratory Bird Depredation Permits (MBPs). An integrated wildlife damage management (IWDM) approach would be implemented to reduce DCCO damage to and conflicts with public resources, aquaculture, private property, and human health and safety. The IWDM strategy would encompass the use and recommendation 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, the lead and cooperating agencies 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, nest destruction, or harassment would be recommended and utilized to reduce damage. In other situations, birds would be removed through use of shooting, egg oiling/addling/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. The primary strength of this alternative and the IWDM approach is that it allows for access to the full range of CDM techniques when developing site specific management plans. However, under this alternative, the lead and cooperating agencies could decide to only use a subset of the possible CDM methods for the management of DCCO damage at a specific site. For example, it would be possible to use only non-lethal techniques at specific sites.

Double-crested Cormorant conflict management activities would be conducted in the State, when requested and funded, on private or public property, after receiving permission from the landowner/land manager. All management activities would comply with applicable Federal, State, and local laws. The USFWS would be responsible for issuing MBPs (with input from WS), ensuring compliance with the PRDO and MBPs and ensuring that the long-term sustainability of regional DCCO populations is not threatened by CDM actions. Selection of this alternative by any of the agencies would not restrict the management options available to the other agencies.

Carcass Disposal: Carcasses of DCCOs killed for reduction of damage to public resources on Turning Point Island (TPI) or other near shore areas would be transported for disposal in a landfill. Composting sites would be built and maintained in accordance with Ohio Division of Soil and Water (ODSW) requirements. The compost sites typically consist of an eight-foot square area with a three-foot tall perimeter fence consisting of ½-inch mesh hardware cloth with a sheet of plastic on the bottom. A one-foot layer of wood shavings is placed on the plastic.

Alternating layers of carcasses and wood shavings are then placed inside the perimeter fence with a foot of wood shavings over the top layer of carcasses. There currently is one compost site on Green Island and three sites on West Sister Island. Personnel from ODW and ONWR would be specifically trained in the design and maintenance of these sites by the Ohio State University Extension. Carcasses from other CDM activities would be disposed of in landfills in accordance with State and Federal regulations.

When the 2006 EA was prepared, there was concern that composting cormorants on the Lake Erie Islands would concentrate unsafe levels of mercury in the soil that might harm the environment. Compost sites were tested for mercury levels in 2007 and 2010 and results show mercury levels below the legal threshold of 0.2 mg/L as set by the Ohio Environmental Protection Agency (EPA) (see 2013 Supplement, Table 2). Future composting at these sites (excluding TPI) is expected to continue to have a low level of impact. Given that current evidence appears to indicate that material in the compost sites is well below the legal threshold of 0.2 mg/L as set by the Ohio EPA (Table 2) and the cost of testing is substantial, the agencies are proposing to increase the interval between tests to once every 4 years.

Alternative 2. Only Non-lethal CDM by Federal Agencies
Under this alternative, the Federal agencies would only use and permit non-lethal techniques for DCCO management. WS would not assist with the site evaluations and completion of WS Form 37 required by the USFWS for a MBP. The USFWS would not issue MBPs for lethal techniques to resolve conflicts with DCCOs. Permits are not required from the USFWS for non-lethal CDM techniques. Entities requesting CDM assistance for damage concerns from the lead and cooperating agencies would only be provided information and assistance with non-lethal methods such as harassment, empty nest destruction, resource management, exclusionary devices, or habitat alteration. Depending upon which agency(ies) select this alternative, information on lethal CDM methods could still be available through sources such as USDA Agricultural Extension Service offices, USFWS, ODW, universities, or pest control organizations.

The USFWS FEIS on DCCO management permits PRDO actions that will result in the take of less than 10% of the local DCCO population (USFWS 2003). Decisions made by the USFWS in the 2006 EA and 2013 Supplement cannot affect this type of CDM action on non-Federal land. The ODW would use lethal methods to take up to 10% of local DCCO in combination with non-lethal methods to try and meet management goals (EA Section 1.5.6.3; USDA 2006) at all sites under its jurisdiction (i.e., not at WSINWR). Only non-lethal methods could be used for CDM at WSINWR because Federal agency (USFWS) approval would be needed to work there. Overall management goals for the Lake Erie islands and near shore areas would be as described for Alternative 1.

Alternative 3. Only Technical Assistance by Federal Agencies
The lead and cooperating agencies considered two ways to design this alternative. In one design, the Federal agencies would not conduct operational CDM, but all permitting including giving other agencies (ODW) permission to work on Federal lands would be considered a form of technical assistance and would be allowed. Impacts of this alternative would have been similar

to Alternative 1 and would have provided little new information. In the second design, the Federal agencies would not conduct operational CDM and would not permit CDM on Federal lands. The agencies selected this design for the 2006 EA because it allowed consideration of the impacts of an intermediate level of CDM not analyzed in any of the other alternatives and also allowed the agencies to consider the impacts of having CDM conducted at some but not all sites that were under consideration in Alternative 1. Analysis of the second design of this alternative also gave the agencies the opportunity to address concerns of individuals opposed to CDM on a National Wildlife Refuge (See EA Section 2.2.3; USDA 2006).

Under this alternative, the Federal agencies would not be able to conduct operational CDM in Ohio, and would only provide technical assistance. Wildlife Services would be able to assist with site evaluations and completion of WS Form 37 documents required by the USFWS for MBPs. Issuing permits is a type of technical assistance, so the USFWS would still be able to issue MBPs and grant approval for PRDO projects anticipated to take more than 10% of local DCCO population. However, operational CDM would not be conducted on Federal lands (e.g., WSINWR). Cormorant conflict management for the protection of public resources on the remaining Lake Erie islands and near shore areas and the inland colonies could only be conducted by ODW and would be the same as described for Alternative 1. Wildlife Services would not be involved in operational CDM.

Alternative 4. No CDM by Federal Agencies
Under this alternative, the Federal agencies would not participate in CDM. Wildlife Services would not conduct the consultations or complete the forms required by the USFWS to issue MBPs and the USFWS would not issue MBPs. Non-lethal CDM techniques could still be used without a permit. Depending upon which agency(ies) select this alternative, information on CDM methods would still be available through other sources such as USDA Agricultural Extension Service offices, ODW, universities, or pest control organizations.

As with Alternative 2, the USFWS would not grant approval for actions conducted under the PRDO that propose the take of more than 10% of the local DCCO population. The selection of this alternative by the USFWS would not affect ODW's use of lethal CDM methods under the PRDO that would result in the take of less than 10% of the local population. The ODW has made it clear that it would use lethal methods to take less than 10% of local DCCO in combination with non-lethal methods to try and meet management goals (EA Section 1.5.6.3; USDA 2006) at all sites under its jurisdiction (i.e., not at WSINWR). No CDM would be conducted at WSINWR because Federal agency (USFWS) approval would be needed for any activities at that location.

Alternative 5. Integrated CDM Program, Excluding Implementation of the PRDO As defined by the Council on Environmental Quality (CEQ), the no action alternative can be interpreted as the continuation of current CDM practices. At the time the 2006 EA was written, none of the action agencies had taken action under the PRDO. Consequently, this alternative evaluated the impacts of a CDM program in which the USFWS would not conduct/authorize CDM under the PRDO. The lead and cooperating agencies have been implementing Alternative 1 since the EA was completed in 2006 including managing DCCO in accordance with the

PRDO. Consequently, Alternative 1 is now the "no Action" alternative and Alternative 5 was not analyzed in the 2013 Supplement.

FINDING OF NO SIGNIFICANT IMPACT

Many of the issues analyzed in the 2006 EA and 2013 Supplement were also analyzed in the FEIS (USFWS 2003). The analyses in the 2006 EA and 2013 Supplement indicate that there will not be a significant impact, individually or cumulatively, on the quality of the human environment as a result of this preferred alternative. 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 and the other action agencies in Ohio 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 the action agencies' standard operating procedures and adherence to laws and regulations will further ensure that the agencies' 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 CDM, 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 2006 EA.

5. Based on the analysis documented in the 2006 EA, 2013 Supplement 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 FEIS.

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

7. No significant cumulative effects were identified through this assessment. The 2006 EA and 2013 Supplement discussed 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. The FEIS analyzed the potential for significant cumulative impacts on national and regional DCCO

populations and other species from implementing CDM 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 (Section 1.9.2 of 2006 EA).

9. The USFWS has determined that the proposed program would have no effect on or is not likely to adversely affect any federally-listed threatened or endangered species. This determination is based upon Intra-Service Section 7 Biological Evaluations completed by the USFWS for the FEIS, the 2006 EA and the 2013 Supplement. Wildlife Services and the other action agencies will abide by the conservation measures provided in 50 CFR 21.48(d)(8) and the Intra-Service Section 7 Biological Evaluations for CDM in Ohio to avoid adverse impacts to the Bald Eagle, Piping Plover, and Red Knot. In addition, WS and the ODW have determined that the proposed program will not adversely affect any Ohio State-listed threatened or endangered species.

10. The proposed action would be in compliance with all Federal, State, and local laws. The proposed action is consistent with the Ohio Coastal Zone Management Program

DECISION AND RATIONALE

I have carefully reviewed the 2006 EA and 2013 Supplement prepared for this proposal and the input from the public involvement process. I believe that the issues identified in the 2006 EA and 2013 Supplement are best addressed by selecting Alternative 1 - Integrated CDM Program, including implementation of the Public Resource Depredation Order and Migratory Bird Depredation Permits (Preferred Alternative) and applying the associated standard operating procedures discussed in Chapter 3 of the 2006 EA. Alternative 1 is selected because (1) it offers the greatest chance at maximizing effectiveness and providing 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 2006 EA and 2013 Supplement. The revisions that were made did not substantially change the analyses. Therefore, it is my decision to implement the preferred alternative as described in the 2006 EA and 2013 Supplement.

Copies of the 2006 EA and 2013 Supplement are available upon request from the USDA Wildlife Services Office, 6929 Americana Parkway, Reynoldsburg, OH, 43068, phone: (614)

861-6087, FAX: (614) 861-9018, at the WS Website http://www.aphis.usda.gov/regulations/ws/ws_environmental_ohio.shtml; on the USFWS Regional Office website at: http://www.fws.gov/midwest/midwestbird/cormorant.html, or from the U.S. Fish and Wildlife Service, 5600 American Blvd. West, Suite 990, Bloomington, MN 55437-1458.

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

11/26/13
Date

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APPENDIX A: RESPONSES TO COMMENTS

Wildlife Services received four letters during the public comment period for the 2013 Supplement. Issues raised in letters and agency responses are noted below. Issues are stated in bold text with the agency response following in standard text. Many of the comments and suggestions provided on the 2013 Supplement were also provided on the 2006 EA on cormorant damage management in Ohio (USDA 2006) and the FEIS on cormorant damage management (USFWS 2003). The 2006 EA was tiered to the USFWS FEIS and data and responses provided in the FEIS are applicable to issues raised on the 2006 EA and 2013 Supplement.

1. Wouldn't it be simpler and less expensive to just let the waterfowl hunters shoot them as game birds? Use of regulated hunting to address conflicts with DCCOs was analyzed in the USFWS FEIS on DCCO management (USFWS 2003) and was not selected as the management alternative. Therefore, use of regulated hunting is not an option legally available for CDM at this time. The FEIS acknowledged that regulated hunting would be an economical way to kill numerous DCCOs at minimal expense to the government. However, reasons provided in the FEIS for not selecting regulated hunting included: (1) concerns about monitoring and preventing adverse impacts on co-nesting and look-alike species; (2) the fact that birds taken during a hunting season might not be the ones causing problems, and (3) the agencies and numerous commenters had serious ethical reservations about permitting a non-traditional species to be hunted when it cannot be eaten or widely utilized.

2. Wouldn't it be better to eliminate all cormorants from Lake Erie? Complete eradication of DCCOs is not an ecologically or sociologically acceptable solution to DCCO conflicts. DCCOs, as a predatory species, are an integral part of a diverse and healthy native ecosystem (USFWS 2003). Double-crested Cormorants are native to North America and have inherent value regardless of their use to humans (USFWS 2003). Further, the people of the United States of America, through treaties negotiated by their elected officials, have indicated that conservation of native migratory birds is a fundamental priority for its own sake, regardless of economic values. Cormorants have been listed as a protected species under the Migratory Bird Treaty Act since 1972. Cormorants also have aesthetic value for individuals who enjoy watching migrating birds and large waterbird colonies.

3. How does the proposed action address impacts from migrating birds at inland lakes? The procedures for addressing conflicts at inland lakes are addressed in 2006 EA Section 1.5.6.3 (USDA 2006). In brief, the ODNR monitors DCCO colonies and DCCO activity in the state. Impacts of DCCOs are assessed on a case by case basis in collaboration with the USFWS and WS. We acknowledge that DCCO damage may occur at locations not specifically addresses in the 2006 EA and 2013 Supplement. Damage management actions may be taken at these locations, if warranted, so long as the action and associated impacts are within the parameters analyzed in the 2006 EA and 2013 Supplement.

4. Lethal cormorant damage management should not be conducted to protect fisheries in Ohio because there is no evidence that cormorants are harming sport fisheries. Management actions need to be backed by sound science. The 2006 EA presented examples of studies indicating that DCCOs can have an adverse impact on local fishery resources and a

discussion of how DCCOs might have an adverse impact on fisheries near the Ohio Lake Erie islands. We agree that this data is not sufficiently definitive to warrant action to protect fishery resources in Ohio at this time. All management actions proposed in the 2006 EA and 2013 Supplement are intended for the protection of vegetation and co-nesting waterbirds. A new Supplement would need to be prepared if lethal CDM other than very limited shooting to reinforce hazing were to be conducted for the protection of free-swimming fish populations.

5. Only nonlethal methods should be used to address cormorant damage to property. Exclusive use of nonlethal methods to address conflicts with DCCOs was analyzed in the USFWS FEIS on DCCO management (USFWS 2003) and the 2006 EA and was not selected as the management alternative (See Chapter 7 Issue 2 of USFWS (2003), the USFWS Final Rulemaking and Record of Decision on Double-crested Cormorant Management (Appendix G of USDA 2006), and evaluation of Alternative 2 in the 2006 Ohio DCCO EA (USDA 2006)). It is the determination of the lead and cooperating agencies that exclusive use of nonlethal method is unlikely to be sufficient to adequately address DCCO damage. However, the preferred alternative gives preference to the use of nonlethal methods where practical and effective.

6. EA and Supplement need to acknowledge the aesthetic and existence value of cormorants. Aesthetic enjoyment of birds should be given equal weight as fishing. This supplement is an update to the 2006 EA on CDM in Ohio and does not restate all material in the EA. Both the 2006 EA and the USFWS FEIS on DCCO management (USFWS 2003) to which the EA is tiered acknowledge the aesthetic, existence and ecological values of DCCOs. It should be noted that in Ohio, the majority of CDM is conducted under the PRDO for the protection of rare/sensitive plant communities such as Carolinian vegetation and the protection of other wildlife species and their habitats (e.g., co-nesting birds). The aesthetic, existence and ecological values of the native species and habitats which may be adversely impacted by high densities of DCCOs also need to be considered.

7. Cormorants should not be harassed or shot or trapped and euthanized. They should not have their eggs oiled or have their nests and eggs destroyed. Nature should be allowed to take its course. This comment appears to request that the agencies choose a "no management" alternative. A no management alternative was considered but eliminated from detailed analysis in the USFWS FEIS (USFWS 2003). The alternative was deemed unreasonable because implementation of this alternative would ignore conflicts associated with cormorants that must be addressed for the USFWS to meet its obligations to manage America's migratory birds responsibly. A "No CDM by Federal Agencies" alternative was analyzed in detail in the 2006 EA. However, as noted in the EA, selection of this alternative would not preclude non-federal entities from taking actions to address DCCO damage on non-federal lands using nonlethal methods which do not require federal approval (e.g., harassment).

8. Is it appropriate for federal agencies to allow or conduct CDM to support aquaculture facilities when fish farming businesses have accidentally released farmed fish and their parasites and pathogens to the determent of native fish? Aquaculture can also magnify the level of diseases already present in native systems. The existence and regulation of the aquaculture industry is outside the scope of this analysis. The USFWS, in establishing an aquaculture depredation order (50 CFR 21.47) and through issuance of Migratory Bird

Depredation Permits (50 CFR 21.41) for CDM at aquaculture facilities has determined that this action may be conducted in accordance with the MBTA and associated Treaties. Wildlife Services is the Federal program authorized by law to reduce damage caused by wildlife (the Act of March 2, 1931 (46 Stat. 1468; 7 U.S.C. 426-426b) as amended, and the Act of December 22, 1987 (101 Stat. 1329-331, 7 U.S.C. 426c)). Assisting with the reduction of damage at aquaculture facilities is consistent with WS program authorizations.

The EA addresses all CDM actions which may be conducted in the state of Ohio including those actions which are relatively limited in scope. Although DCCO damage can be a substantial problem for the individual producers experiencing damage, it is not a common occurrence in Ohio. For example, in 2013, only 6 of the 246 licensed aquaculture facilities in the state requested USFWS permits to address DCCO damage (A. Montoney, Ohio-WS pers. comm., September 23, 2013; R. Ollis, ODW Law Enforcement and Permitting, pers. comm., September 25, 2013). At this scale, CDM at aquaculture facilities in Ohio is not of sufficient magnitude to be a determining factor in the existence of the aquaculture industry in Ohio. The presence or absence of federal involvement in CDM, although important to the individual producers experiencing damage, will not substantively impact the existence of commercial aquaculture in the state or the potential for any associated environmental impacts as discussed by commenter.

9. The EA needs to consider the impact of climate change on DCCO. See discussion of cormorants and climate change by White et al. (2013). The article referenced by the commenter refers to the ability of visually guided predators to take advantage of additional northern habitat that may become available as a result of Arctic warming. It does not refer to a threat to the species resulting from Arctic warming. The impact of climate change on DCCOs and on DCCO conflicts in Ohio is difficult to predict. Global warming could lead to an increase in breeding habitat at the northern end of the species' range. However, as noted by White et al (2013) an increase in available habitat does not necessarily guarantee an increase in the population because DCCO populations are impacted by a number of factors including environmental contaminants, the abundance and quality of food on summer and winter habitats, hazards encountered during migration and availability of winter habitat. Even if the breeding population in Canada increases, the implications for the breeding populations on the Great Lakes and DCCO conflicts in Ohio are unclear. The breeding population could increase in Canada without a concurrent or proportionate increase on the Great Lakes. Although some citizens have expressed concerns about congregations of DCCOs during migration, the majority of DCCO conflicts in Ohio currently relate to the impacts of birds breeding in the state.

Under the preferred alternative, the agencies use an adaptive management approach to address DCCO conflicts. Cormorant damage, DCCO populations and impacts of CDM are monitored by the lead and cooperating agencies through population surveys and indices, reporting required by the PRDO, AQDO and migratory bird depredation permits, and monitoring of the EA and supplements. Management actions are adjusted as needed within the scope of the EA and EIS to accommodate changes resulting from a variety of environmental factors with the EA and EIS replaced or supplemented as needed in accordance with agency and national requirements for implementation of the NEPA.