United States Department of Agriculture, Animal and Plant Health Inspection Service, Wildlife Services

Double-crested Cormorant Management Plan to Reduce Predation of Juvenile Salmonids in the Columbia River Estuary Final Environmental Impact Statement Record of Decision

The U.S. Army Corps of Engineers (Corps) has requested assistance from U.S. Department of Agriculture, Animal and Plant Health Inspection Service, Wildlife Services (USDA-WS) to implement non-lethal and lethal components of the preferred alternative (Alternative C-1) of the Corps' final environmental impact statement (FEIS) for the Double-crested Cormorant Management Plan to Reduce Predation of Juvenile Salmonids in the Columbia River Estuary. The Corps is the author of the FEIS; USDA-WS, the U.S. Fish and Wildlife Service (FWS), the Oregon Department of Fish and Wildlife, and the Washington Department of Fish and Wildlife all cooperated with the Corps in the preparation of the FEIS. The FEIS was prepared in compliance with the National Environmental Policy Act of 1969 (NEPA), as amended (42 U.S.C. 4321 et seq.), and its implementing regulations. USDA-WS provided subject matter expertise to the Corps during development of the FEIS and assisted in identifying appropriate methods to meet the management objectives while minimizing potential impacts.

USDA-WS responds to requests for assistance from individuals, organizations, and agencies experiencing damage caused by wildlife. USDA-WS is the Federal program authorized by law to reduce damage caused by wildlife (Act of March 2, 1931, as amended (46 Stat. 1468; 7 U.S.C. 426-426b), and the Act of December 22, 1987 (101 Stat. 1329-331; 7 U.S.C. 426c)).

This Record of Decision (ROD) documents USDA-WS' decision to assist the Corps in the implementation of Alternative C-1 of the FEIS. Alternative C-1 integrates an adaptive management framework with USDA-WS participating in hazing and temporary habitat modifications, assisting with monitoring, and implementing egg-oiling and culling as authorized under a migratory bird depredation permit issued by FWS. USDA-WS will provide technical assistance (advice, information, etc.), direct control assistance, and monitoring and research assistance to the Corps as needed to implement this plan.

This ROD: (a) states USDA-WS' decision; (b) identifies the alternatives considered by USDA-WS in reaching its decision, specifying the environmentally preferable alternative based on relevant factors, and identifying and discussing the factors which were balanced by USDA-WS in making its decision; and (c) states whether all practicable means to avoid or minimize environmental harm from implementation of the selected alternative have been adopted (40 C.F.R. 1505.2).

BACKGROUND

Over the past 15 years, double-crested cormorants (DCCOs) on East Sand Island have consumed approximately 11 million juvenile salmonids (salmon species and steelhead) per year, many of which are listed as threatened or endangered under the Endangered Species Act (ESA). This level of predation is considered a substantial source of fish mortality. East Sand Island's double-crested cormorant colony grew from approximately 100 nesting pairs in 1989 to approximately 15,000 nesting pairs in 2013. This breeding colony is likely the largest in North America and accounts for approximately 98 percent of the DCCO breeding population in the Columbia River Estuary.

Development of a management plan to reduce avian predation on juvenile salmonids in the Columbia River Estuary is required by the Corps' ESA consultation with the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries) for the operation of the multi-purpose dams that make up the Federal Columbia River Power System. Pursuant to the 2014 Supplemental Biological Opinion (2014 BiOp) issued by NOAA Fisheries on January 17, 2014, Reasonable and Prudent Alternative (RPA) Action 46 identifies a specific management objective of no more than 5,380-5,939 DCCO breeding pairs on East Sand Island. This objective was adopted by the Corps, as well as the analysis provided by NOAA Fisheries.

Provisions in the Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703 et seq.) make it illegal for anyone to take any migratory bird, or the parts, nests, or eggs of the listed birds, except under the terms of a valid permit. Under its authority, FWS issues permits to qualified applicants for a variety of activities, including take of depredating birds (50 C.F.R. 21.41). FWS issued an MBTA depredation permit to the Corps pursuant to FWS' April 13, 2015 ROD. The permit authorizes take as described under the FEIS preferred alternative and in accordance with other permit conditions, such as the authorization to use blinds to minimize disturbance to birds.

ENVIRONMENTAL IMPACT STATEMENT

On July 19, 2012, the Corps published in the Federal Register (77 FR 42487, Docket No. 2012-17598) their notice of intent to prepare an environmental impact statement (EIS) for the purpose of analyzing alternative methods to reduce predation of juvenile salmonids by DCCOs in the Columbia River Estuary. On October 25, 2012, the Corps issued a public notice announcing the scoping comment period and three public meetings. Public meetings were held in Olympia, Washington, Portland, Oregon, and Astoria, Oregon during November, 2012. On June 20, 2014, the U.S. Environmental Protection Agency (EPA) published in the Federal Register (79 FR 35346, Docket No. 2014-14480) a notice of the availability of the draft EIS. Two public meetings and four webinars were held during the summer of 2014 on the draft EIS. The official comment period on the draft EIS ended on August 20, 2014.

In February 2015, the Corps published and distributed the FEIS, which included discussion of over 152,000 public comments received on the draft EIS. Of the comments received, over 149,000 were submitted from two online petitions (CARE2 and the National Audubon Society). USDA-WS reviewed and is satisfied with the Corps' responses to public comments. USDA-WS

also reviewed correspondence from the EPA to the Corps (dated August 19, 2014) commenting on the draft EIS. The comment period on the FEIS ended on March 16, 2015. The Corps issued its ROD on March 19, 2015, adopting the DCCO management plan in Alternative C-1. On March 23, 2015, USDA-WS provided to the Corps a Wildlife Services Form 37 with a recommendation in support of the MBTA depredation permit application. FWS published its ROD on April 13, 2015, adopting the Corps' FEIS analyses and issuing the MBTA depredation permit. The FWS' ROD included appendices that summarized its analyses and documented additional responses to comments.

In accordance with the Council on Environmental Quality (CEQ) regulations (40 C.F.R. 1506.3), a cooperating agency may adopt the EIS of a lead agency without recirculating it when, after an independent review of the EIS, the cooperating agency concludes its comments and suggestions are satisfied. USDA-WS reviewed the FEIS and concluded the document fully analyzed the environmental effects of the proposed action, the issues covered by the draft EIS, as well as those issues and suggestions raised during the comment period. USDA-WS reviewed the Corps' ROD along with FWS' ROD, their appendices, and subsequent communications. USDA-WS reviewed correspondence between the Corps and the EPA (dated March 16, March 25, April 3 and April 6, 2015) regarding clarifications to the EPA about the adaptive management approach, and is satisfied the issues raised by the EPA are adequately addressed. Therefore, USDA-WS adopted and incorporates by reference the FEIS to support its decision (80 FR 24915, Docket 2015-10218).[1] USDA-WS also adopts and incorporates by reference the Corps' discussions included in its ROD as Appendix A (Comment Response Document), and FWS' discussions included in its ROD as Appendix A (Permit Analysis for Depredation Permit) and Appendix B (Responses to Comments).

DECISION

USDA-WS' decision is to respond to the Corps' request for assistance in implementing Alternative C-1 Phase I and non-terrain modification provisions in Phase II as requested. This decision is based on a thorough review of the alternatives set forth in the FEIS and their environmental consequences. This decision also is consistent with USDA-WS' mission to provide federal leadership and expertise to resolve wildlife conflicts to allow people and wildlife to coexist. Contingent upon adequate funding, and receipt of authority from FWS for implementing lethal take under MBTA depredation permits, USDA-WS will participate in implementing the DCCO damage management program in response to requests for assistance from the Corps on East Sand Island and in the Columbia River Estuary, including management actions and data collection.

[1] USDA-WS notes that the FEIS is subject to a pending legal action filed April 20, 2015 (Audubon Society of Portland et al. v. U.S. Army Corps of Engineers et al., Case No. 3:15-cv-00665-MO (D. Ore.)).

ALTERNATIVES

USDA-WS considered the five alternatives examined in the FEIS: (1) No action, wherein there would be no effort to manage the DCCO colony on East Sand Island (Alternative A); (2) Non-lethal management focus of DCCO with limited egg take (Alternative B) and subsequent habitat alterations (Phase II); (3) Culling of DCCO with integrated non-lethal methods (Alternative C) and subsequent habitat alterations (Phase II); (4) Culling with egg oiling and integrated non-lethal management of DCCO (Alternative C-1) and subsequent habitat alterations (Phase II); and (5) Exclusion and dispersal of remaining DCCO nesting on East Sand Island after culling of adults, egg oiling, and non-lethal methods (Alternative D) and subsequent habitat alterations (Phase II). All of the action alternatives incorporate an adaptive management strategy. All action alternatives include boat- and land-based hazing to discourage nesting and foraging throughout the Columbia River Estuary. All of the action alternatives require MBTA depredation permits, and are as described in Chapter 2 of the FEIS. Alternatives B, C, C-1, and D involve terrain / habitat modification on the west end of East Sand Island during Phase II. Even though USDA-WS would not conduct terrain modifications or permanent habitat modification under any of the alternatives, USDA-WS carefully considered the potential impact of these actions because of their influence on the effects of the alternatives, and their ability to help the Corps meet its objectives.

Alternative A (No Action)

Alternative A is the no action (no change or status quo) alternative. Under this alternative, USDA-WS would not assist the Corps to reduce predation-related losses of juvenile salmonids by managing the DCCO colony on East Sand Island. There would be no implementation of RPA Action 46. DCCO monitoring and management feasibility studies by the Corps on East Sand Island would cease.

Alternative B

This alternative would implement a primarily non-lethal management strategy consisting of habitat modification and hazing combined with limited egg take (500 eggs) to disperse approximately 7,300 breeding pairs from East Sand Island. Boat- and land-based hazing would be used to discourage dispersed DCCOs from nesting and foraging throughout the Columbia River Estuary, and USDA-WS would contribute to monitoring of the DCCO dispersal. Monitoring and hazing would continue until the colony size did not exceed 5,939 breeding pairs. USDA-WS would provide data to support an annual MBTA depredation permit application for up to 750 eggs per year (i.e., 500 on East Sand Island and 250 elsewhere in the Columbia River Estuary).

Alternative C

This alternative would implement a primarily lethal management strategy during Phase I (i.e., culling on-island and over-water within the typical foraging range of DCCOs on East Sand Island). The management objective would be to achieve the colony size in 4 years and minimize dispersal under an adaptive management approach. Under Alternative C, 24 percent of the DCCO colony would be culled each year, resulting in a total take of 18,185

DCCOs (6,202, 4,887, 3,881, and 3,214 DCCOs in years 1 to 4, respectively). USDA-WS would participate in data collection to support an annual depredation permit application to FWS for the proposed individual take levels and associated nest loss from take of those individuals. Through adaptive management, threshold take levels could change based upon observed abundance, as compared to the predicted abundance, for the East Sand Island colony and the western DCCO population. Any adjustment to take levels would be coordinated with the Adaptive Management Team (AMT) composed of the cooperating agencies, NOAA Fisheries, and Tribal entities. The same hazing methods would prevent expansion of the DCCOs to other areas on East Sand Island and deter DCCO nesting on Corps' dredge material islands in the Columbia River Estuary. By reducing the abundance of DCCOs, hazing and non-lethal management efforts are predicted to be less than those described in Alternative B.

Alternative C-1

Alternative C-1 was developed based on comments to Alternative C and would implement a primarily lethal management strategy to reduce the colony on East Sand Island. A lower percentage (i.e., 13.5 percent) of the colony would be culled each year, and egg oiling would be used as a targeted means of nest destruction. Non-lethal methods (hazing) supported with egg take would be used to prevent expansion of DCCOs to other areas on East Sand Island. Similar hazing and egg collection efforts would be implemented to deter nesting along the Columbia River Estuary. USDA-WS would collect data to support the annual MBTA depredation permit application made by the Corps to FWS, and follow the same process as Alternative C for adaptive management and monitoring of the western DCCO population.

Alternative D

This alternative would initially implement the same strategy as Alternative C-1, but then hazing efforts would continue to exclude all nesting by DCCOs. USDA-WS would continue egg take under MBTA depredation permits during the Corps' terrain / habitat modification efforts. Since a large number of DCCOs would be dispersed from East Sand Island, monitoring and hazing efforts in the Columbia River Estuary could continue.

ENVIRONMENTALLY PREFERABLE ALTERNATIVE

The environmentally preferable alternative for managing cormorant depredation is Alternative C-1 based upon the environmental impacts evaluated in the FEIS. Of the alternatives in the FEIS, Alternative C-1 best balances the competing needs of the biological resources. This alternative represents the widest range of benefits to ESA-listed juvenile salmonids while reducing long-term risks to the sustainability of the DCCO. Implementation will occur within a well-monitored and adaptive management framework, and requested take levels may be adjusted within that framework to ensure objectives, including not threatening the DCCO western population, are met. These take levels also would be reviewed annually by the AMT, who would provide recommendations for adjustments to management practices. I find the adaptive management provisions within Alternative C-1 to be capable of flexibly addressing the effects on the DCCO western population. The selection of the

environmentally preferable alternative for this management program is in keeping with ongoing USDA efforts to promote environmental quality through technically and economically feasible alternatives to fulfill regulatory mandates.

PREFERENCES AMONG THE ALTERNATIVES

Alternative C-1 balances the competing needs of the biological resources considered in the FEIS and maintains the historic, cultural, and natural aspects of the island. Implementation of Alternative C-1 reduces depredation of juvenile salmonid populations to the extent that risks to their survival are lowered; the reduction of DCCO colony size would impact the overall western population of DCCO but not to a level that risks their long-term sustainability. USDA-WS used FWS' definitions for assessing impacts to a sustainable population and recognized a sustainable population is defined as one that is able to maintain a long-term trend with numbers above a level that would not result in a major decline or cause a species to be threatened or endangered. The total amount of take of individual DCCOs under Alternative C-1 is approximately 40 percent less than Alternative C. Additionally, Alternative C-1 minimizes adverse impacts to other nesting birds on East Sand Island and the human environment likely to be affected by dispersal of large numbers of birds. Under the conditions in MBTA depredation permits, implementation of take activities by trained USDA-WS wildlife specialists is expected to reduce the likelihood of adverse impacts to other nesting birds by reducing the incidence of species misidentifications. Implementation of Alternative C-1 occurs within a monitored and adaptive management framework designed to minimize take levels through regular and annual reviews. This Alternative is the most feasible way to integrate USDA-WS' purpose to reduce wildlife damage while assisting the Corps given the large geographic scope of the Columbia River Estuary and timelines in RPA Action 46.

Alternative A serves as a baseline "no action alternative," but it does not meet the objective of reducing wildlife damage because predation rates on juvenile salmonids would not be reduced. Alternatives B and D rely on dispersal and reductions in nesting on East Sand Island, which are less certain to reduce juvenile salmonid predation than the egg oiling in Alternative C-1. Reductions in DCCO populations on East Sand Island under Alternatives C and C-1 mean less hazing, and less non-lethal management efforts would be needed than under Alternatives B and D. Alternative C-1 reduces lethal removal of adult cormorants in comparison to Alternative C. Reductions in culling and the use of egg oiling are considered more humane to individuals who place high value on adult bird existence. Operational costs related to Alternative C-1 are similar to those for Alternative C and are less than those for Alternatives B and D.

USDA-WS considered the full discussion of the detailed analyses of alternatives included in the FEIS in reaching its decision to adopt the preferred alternative.

RATIONALE FOR DECISION

USDA-WS' statutory authorities for its action and cooperation with other agencies in this wildlife management program are the Act of March 2, 1931, as amended (46 Stat. 1468; 7 U.S.C.

426-426b), and the Act of December 22, 1987 (101 Stat. 1329-331; 7 U.S.C. 426c). The mission of USDA-WS is to provide Federal leadership and expertise to resolve wildlife conflicts to allow people and wildlife to coexist. The agency's preferred alternative is the alternative which the agency believes would fulfill its statutory mission and responsibilities, giving consideration to economic, environmental, technical, and other factors.

The preferred alternative selected for implementation is based on consideration of a number of environmental, regulatory, and social factors. The primary factors in selecting Alternative C-1 were the technical feasibility in meeting RPA Action 46 while minimizing impacts to the western population of DCCO and other nesting birds on East Sand Island, and the ability to assess how other species and resources could be affected by the anticipated DCCO dispersion. Based on our analysis, the preferred alternative would be more effective at achieving the program's goals than Alternatives A and B; offers the opportunity to modify take levels based on data collected on an ongoing basis; is environmentally sound, cost effective, and sufficiently flexible to integrate USDA-WS' activities with other management needs; and does not threaten the long-term existence of western DCCO populations or populations of any other natural resource.

Under Alternative C-1, USDA-WS activities will be in compliance with the determinations made by FWS under an MBTA depredation permit, and in concurrence with the 2014 BiOp and the other cooperating agencies. USDA-WS' activities under Alternative C-1 Phase I do not implicate the Magnuson-Stevens Fishery Conservation and Management Act (FWS ROD). Nevertheless, the Corps received concurrence with NOAA Fisheries on the effects to essential fish habitat for Phase I actions, as included in the 2014 BiOp. Phase II consultation on the effects to essential fish habitat will be conducted concurrently with ESA Section 7 consultation (Corps ROD). USDA-WS' culling and egg oiling activities likewise do not require a Clean Water Act permit. However, the Corps followed all applicable substantive legal requirements per regulations under this act (33 C.F.R. 336.1(a)) (FWS ROD). To ensure compliance with Executive Order 13112 (Invasive Species), USDA-WS personnel will use best management practices to minimize the potential to spread non-indigenous plant species on the island from field personnel and their equipment as it is used. USDA-WS activities on East Sand Island under an MBTA depredation permit do not implicate the Coastal Zone Management Act because it is federal land excluded from the state coastal zone under Section 304(a) of the Act (FWS ROD). In Phase I there will be no effects off East Sand Island that would affect any coastal use or resource. In Phase II, however, certain activities associated with terrain modification will likely occur in state waters within the coastal zone. The Corps will submit a consistency determination to the Oregon Department of Land Conservation and Development for Phase II when off-federal land effects are known, such as quantities of fill and locations for disposal sites (Corps' ROD). USDA-WS activities will not extend to terrain modification.

USDA-WS finds the Corps and FWS gave adequate opportunity for Tribal involvement under Executive Order 13175. USDA-WS reviewed the input from Tribal entities, and USDA-WS finds additional outreach attempts do not appear to be needed at this time. USDA-WS activities associated with the implementation of the MBTA depredation permit would not have direct or indirect effects on registered national historic or cultural resources because there would be no ground disturbance or potential impacts to Section 106 historic resources. USDA-WS agrees

with the Corps and the FWS determinations that there are no foreseeable direct or indirect effects from any of the alternatives that create deleterious environmental justice effects. USDA-WS finds selection of Alternative C-1 would not create any disproportionately high or adverse effects to any community with environmental justice concerns.

Alternative C-1 was selected because it allows USDA-WS to provide assistance to the Corps to effectively reduce DCCO predation on juvenile salmonids and is in compliance with FWS migratory bird depredation permit requirements. As part of its considerations, USDA-WS selected this alternative because it will allow the Corps to implement their DCCO management plan, which includes provisions that will enable FWS and the Corps to minimize long-term impacts to DCCO, Brandt's Cormorant and Pelagic Cormorant populations during the tenure of this permit, and evaluate any impacts prior to any permit renewal application. In addition, this option will meet the Corps' stated purpose and need in the FEIS, to comply with RPA Action 46, which identified a management objective of no more than 5,380-5,939 breeding pairs of DCCOs on East Sand Island (2014 BiOp). USDA-WS will not implement terrain modification as discussed in the FEIS under Phase II. Therefore, USDA-WS will not permanently affect the habitat of East Sand Island associated with Phase II terrain modification effects. According to the Corps' ROD, the Corps will implement the Phase II terrain modification component of the Plan. USDA-WS finds permanent terrain modification may enhance the DCCO population reduction on East Sand Island and complement USDA-WS activities leading to a more rapid achievement of RPA Action 46.

The No Action Alternative (A) was not selected because it does not adequately address resource damages caused by DCCOs. USDA-WS also rejected the alternative of not assisting the Corps because it would be inconsistent with our mission to provide assistance to reduce wildlife damage, and USDA-WS believes our wildlife specialists are highly capable of implementing hazing and take activities while reducing impacts to other wildlife. Alternative (B) was not selected because it severely limits the scope of allowable control techniques and would not adequately address resource damages caused by DCCOs. Alternative (C) was not selected because of its potentially greater impact to the western DCCO population. Alternative (D) was not selected because it does not provide the best flexibility. Although Alternative (D) provides greater certainty in reducing predation of juvenile salmonids because DCCOs would no longer nest on East Sand Island, predation impacts could increase, at least in the short-term. Additionally Alternative D has the greatest overall adverse impact to the western population of DCCOs because it reduces abundance via lethal take and prevents all DCCO nesting on East Sand Island. In addition, USDA-WS could not implement an action alternative that would not be authorized under the federal migratory bird depredation permit.

Several other alternatives were considered, but eliminated from detailed study (Corps ROD). An alternative implementing a DCCO hunting season was rejected based on concerns related to inconsistency with the conventions governing the MBTA. Introducing predators was also rejected due to the potential to affect non-target species, and because there are other more efficient and humane methods for take. USDA-WS agreed that an alternative based on only egg oiling would not meet the objectives of the FEIS. Other variations based on use of only one method (e.g. various non-lethal harassment techniques) would not be

feasible or effective at the scale proposed for management.

AVOID OR MINIMIZE ENVIRONMENTAL HARM

The combined effort among the cooperating agencies preparing the FEIS incorporated all practical means to avoid or minimize adverse environmental effects in the alternatives. Dispersal of DCCO populations will be monitored following USDA-WS activities, and the Corps may decide to cease management activities temporarily based on advice from the AMT. Direct adverse impacts (i.e., "take" as defined by the MBTA) to other bird species during culling will be minimized by establishing a shooting protocol, training personnel, increasing the number of individuals in the field adequately trained in species identification, removing personnel unable to adequately perform duties, ceasing a particular lethal technique, or avoiding actions in mixed species areas. Disturbance to other species on the island will be minimized through the use of a network of privacy fences to partition areas, establish travel routes, and avoid high concentrations of non-target birds when possible. East Sand Island will be closed to the public during program implementation to minimize potential impacts to human safety. Personnel will adhere to all safety standards of firearm operation and training as described in the USDA-WS Policy Manual and Directive 2.615. USDA-WS will abide by all MBTA depredation permit conditions.

During program implementation, activities potentially affecting DCCO nesting on East Sand Island will be timed to minimize the loss of eggs in active nests from actions other than the planned oiling and culling actions. To the extent possible, effects to nesting birds and chicks will be minimized by reducing or avoiding actions during the chick-rearing time period. USDA-WS' efforts to minimize impacts through the timing of its actions also will include: (1) implementing actions frequently enough so nest destruction and hazing predominantly occur prior to egg laying; (2) reducing or ceasing hazing and habitat modification within sufficient proximity to avoid disturbance to an active nest (i.e., once an egg is laid); (3) removing nesting materials or destroying nests only if there are no eggs in the nest; and (4) reducing or ceasing hazing if subsequent predation might be expected to exceed normal levels.

USDA-WS intends to aid the Corps as it follows the protocol outlined in the Pacific Flyway Council Monitoring Strategy designed to minimize impacts to the western population of DCCO. USDA-WS technical assistance with program implementation will include portions of data collection. USDA-WS data will support the monitoring and enforcement programs, the needs of the AMT analyses as described in Chapter 5 of the FEIS, and as required by FWS procedures. USDA-WS will work with the AMT to appropriately advise the Corps on the feasibility of continuing actions and evaluating the best timing for future actions. Based on advice from the AMT, the Corps will make these determinations as it seeks to make adjustments to the operational level of take to achieve program objectives.

Alternative C-1 includes a 4-year lethal strategy scheduled to be completed at the end of 2018 if implementation begins in 2015. The anticipated effect is a loss of 13.5 percent of DCCOs from the colony annually, with up to 72.5 percent of the DCCO nests on the colony lost each year during years 1-3, including approximately 46 percent of nests that would be directly oiled. USDA-WS is likely to start activities in May 2015, which is later than anticipated in the

FEIS; however, specific dates were not provided in the FEIS because of the variable nature of the DCCO breeding season from year to year. USDA-WS has evaluated the environmental impact of initiating activities later than the earliest time that would facilitate maximum effects from egg oiling, and has determined that the overall impact on DCCOs and the environment is not likely to be greater than the overall impact as described in the FEIS. First, if egg oiling cannot be fully or even partially completed as proposed in the first year, DCCO culling after the chicks have fledged would still continue. USDA-WS would not exceed take levels authorized under the MBTA depredation permit. Secondly, as described in the FEIS, USDA-WS would use the same tools, methods, monitoring, and avoidance strategies to minimize adverse effects once chicks are in the nest as it would when working with an earlier start date. Finally, Alternative C-1 relies on an adaptive management strategy whereby the AMT considers various factors including the prior year's take levels to adjust recommendations for requesting take in a FWS depredation permit application in subsequent years. This would help to ensure that the objectives outlined in the FEIS would be met, and that overall impacts on DCCOs and salmonids are likely to be similar.

OTHER

A considerable amount of research and development of alternatives to ongoing program actions was done to balance the needs of the western population of DCCO with the needs of the salmonid populations in the Columbia River Estuary, and in selecting the preferred alternative. The adaptive management aspects will allow the program to continually refine actions to help meet management goals in a closely regulated and monitored manner. USDA-WS focused on cooperation with other agencies in this effort to more effectively manage the complex wildlife damage issues. This plan is consistent with other efforts to balance the human and wildlife needs when providing assistance to protect American agriculture and other resources.

I find USDA-WS wildlife specialists are well-trained and capable of reducing take of non-target birds during the implementation of Alternative C-1. I find it appropriate for USDA-WS to: (1) defer to the Corps' informed decision making for interpreting the population modeling in the FEIS; (2) defer to the triggers for action as determined by the AMT contingent on a MBTA depredation permit; and (3) implement specific lethal and non-lethal control methodologies because of our expertise in wildlife damage management. In summary, I find Alternative C-1 provides the course of action that, on balance, best serves the public interest. This Record of Decision is the USDA's final action under the NEPA process.

This Record of Decision was prepared in accordance with: (1) NEPA, (2) regulations of the Council on Environmental Quality for implementing the procedural provisions of NEPA (40 C.F.R. parts 1500-1508), (3) USDA regulations implementing NEPA (7 C.F.R. part 1), and (4) NEPA Implementing Procedures (7 C.F.R. part 372).

Done in Ft. Collins, CO, this 21st day of May, 2015.

for Jason Suckow, Western Regional Director
U.S. Department of Agriculture, Animal and Plant Health Inspection Service, Wildlife Services