

MEMORANDUM FOR: Commander, Walla Walla District, LTC Andrew D. Kelly

SUBJECT: Transmittal of the US Army Corps of Engineers, Walla Walla District (Corps) Finding of No Significant Impact (FONSI) adopting US Department of Agriculture, Wildlife Services' (WS) Bird Damage Management Environmental Assessment (EA) for bird predation management at McNary Dam, Ice Harbor Dam, Lower Monumental Dam, Little Goose Dam, and Lower Granite Dam. File Number PM-EC-2013-0058

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1. BACKGROUND: In September 2011, WS released an EA analyzing the potential impacts of implementing their bird damage management program in the state of Washington that included lethal measures. This memorandum transmits the EA and the Corps' FONSI for adopting the subject action pursuant to the National Environmental Policy Act. The Corps proposes to implement limited lethal take methods of gulls and double-crested cormorants at Walla Walla District Dams on the Columbia and lower Snake Rivers. The purpose of the Corps' proposed action is to reduce piscivorous bird predation on downstream migrating juvenile salmonids. The proposed action is needed because predation on Endangered Species Act listed salmonids by large numbers of gulls and cormorants at the dams is detrimental to protected salmon populations and is a growing concern of regional fish agencies.

2. FINDINGS SUMMARY: The Corps' contractor for implementing certain piscivorous bird management actions is WS. Their EA analysis indicates that there would not be a significant impact on the quality of the human environment. WS signed a FONSI on 14 November 2011. In March 2013, the Corps reviewed the EA and determined the existing analysis of impacts could be adopted by the Corps with updated cumulative effects analysis; therefore WS's 2011 EA is incorporated herein by reference. This FONSI reiterates the findings of WS's November 2011 FONSI and includes updated cumulative effects analysis. The Corps identified Alternative 1 (Continue the Current WS Bird Damage Management Program, Nonlethal Preferred Over Lethal Control) as the preferred alternative, which includes limited lethal control measures.

3. ENVIRONMENTAL COMMITMENTS: WS, as the Corps' agent, is required to follow best management practices established under their EA/FONSI.

4. RECOMMENDATION: I recommend a Finding of No Significant Impact to the human environment and do not recommend the preparation of an Environmental Impact Statement for this project.

5. For questions or additional information, please contact Ms. Anneli Aston, Environmental Specialist, at Ext. 7245.

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- 1. FONSI
- 2. WS EA

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Chief, Environmental Compliance Section

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1. FONSI
2. WS EA

EVALUATION AND ADOPTION OF OTHER FEDERAL AGENCY'S ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT

Bird Predation Management at

McNary Dam, Ice Harbor Dam, Lower Monumental Dam, Little Goose Dam, and Lower Granite Dam

1. Introduction/Proposed Action

To further reduce predation by piscivorous birds on downstream migrating juvenile salmonids protected by the Endangered Species Act (ESA), the U.S. Army Corps of Engineers, Walla Walla District (Corps), proposes to expand its current efforts to include limited lethal take methods for gulls and, to a lesser extent, double-crested cormorants at McNary Dam on the Columbia River in Oregon, and at Ice Harbor, Lower Monumental, Little Goose, and Lower Granite Dams on the lower Snake River in Washington. Current efforts consist of a non-lethal piscivorous bird dissuasion program combining passive deterrent structures installed at the dams and active hazing techniques occurring over a maximum period of March 30 to August 2 each year. The proposed action is to integrate limited lethal take of up to a total of 1200 California gulls, 650 ring-billed gulls, and 150 double-crested cormorants per year into the current program as needed, starting in the spring of 2014.

2. Background Information

Throughout the 1990's, due to rapidly declining salmon and steelhead populations, the National Oceanic and Atmospheric Administration (NOAA Fisheries) listed several species of Pacific Northwest anadromous fish as either threatened or endangered under the ESA. Because the Corps operates and maintains eight hydroelectric dams on the lower Columbia and Snake Rivers, they are required (by the ESA) to consult with NOAA Fisheries on actions that may adversely affect a listed species of anadromous fish or its critical habitat. The product of this consultation is a Biological Opinion (BiOp).

In 2005, the Corps prepared the *"Avian Predation Deterrent Program, Lower Columbia and Lower Snake Rivers Environmental Assessment"* with the objective of being able to implement the most practical and effective solutions for reducing piscivorous bird usage in areas near the dams. Five alternatives were evaluated in that EA and Alternative Two; the Non-Lethal Tools Only Alternative was selected as the preferred alternative. After the FONSI was signed in September 2005, the Corps began implementing non-lethal measures. However, because bird predation continued and still is an issue at Corps dams, the Corps is now proposing to expand its nonlethal hazing control program to incorporate limited lethal take of problem birds (ring-billed gulls, California gulls and, to a lesser extent, double-crested cormorants).

In 2008, NOAA Fisheries issued a 10-year BiOp for the operation of the Federal Columbia River Power System (FCRPS) for salmon and steelhead listed under the ESA. This BiOp recommended a Reasonable and Prudent Alternative (RPA) to avoid jeopardy and adverse modification of critical habitat for 13 species of salmon and steelhead affected by FCRPS operation, including RPA Actions to reduce juvenile and adult salmonid losses from predation by birds, other fish and marine mammals¹ (FCRPS BiOp).

Specifically, RPA Action 48 directs the Corps to “continue to implement and improve avian deterrent programs at all lower Snake and Columbia River dams”. Specific management actions described in RPA Action 48, and currently being implemented, include active hazing and bird wires hung in high predation risk areas of the tailraces.

The Corps’ contractor implementing certain piscivorous bird management actions under RPA Action 48 is the U. S. Department of Agriculture (USDA), Animal and Plant Health Inspection Service, Wildlife Services (WS). In September 2011, WS released an Environmental Assessment (EA) entitled “*Bird Damage Management in Washington*” to facilitate planning, interagency coordination, streamline program management, evaluate and determine if any potentially significant or cumulative impacts could occur, and clearly communicate to the public the analysis of WS’ proposed and continued adaptive integrated bird damage management (BDM) program. The affected environment is within the geographic boundaries of Washington State and the Columbia River, including those areas of Oregon shoreline proximate to Corps’ operated dams. The analysis in the EA indicated that there would not be a significant impact, individually or cumulatively, on the quality of the human environment should WS implement BDM. Consequently, a Finding of No Significant Impact (FONSI) was signed by WS on 14 November 2011.

The process of deciding to initiate lethal take of piscivorous birds at Corps-operated dams is subject to review under the procedural provisions of the National Environmental Policy Act (NEPA). However, to streamline the NEPA process, and pursuant to 40 Code of Federal Regulations (CFR) Section 1506.3 and 33 CFR 230.21, the Corps reviewed WS’s 2011 BDM EA in March 2013 and determined the existing analysis of impacts could be sufficient with minor supplementation and could thereafter be adopted by the Corps without further analysis. WS’s 2011 EA is incorporated herein by reference and supplemented as described below. The WS’s EA and FONSI are available for review at the U.S. Army Corps of Engineers District Headquarters in Walla Walla, Washington or online at http://www.aphis.usda.gov/regulations/ws/ws_environmental_washington.shtml.

3. Purpose and Need

The proposed action is for the Corps to implement limited lethal take of gulls and cormorants at five Corps-operated dams on the Columbia and Snake Rivers. The

¹ The 2008 BiOp was supplemented in 2010 and just recently in January 2014, but relevant RPA Actions have not changed.

purpose of the proposed action is to reduce piscivorous bird predation on downstream migrating ESA-listed juvenile salmonids, as such predation is believed to be detrimental to fragile salmon populations. The proposed action is needed to expand efforts to comply with FCRPS BiOp RPA Action 48.

4. Alternatives Considered

Four alternatives, ranging from maintaining WS's current BDM program to eliminating the program entirely for Corps' lands and facilities, were analyzed in the EA. The following summary provides a brief description of each alternative evaluated in the EA and its applicability to the Corps' proposed action. It should be noted the alternatives summarized below are for a much larger BDM program by WS. How the alternatives apply to the Corps' proposed action are described in the summaries below.

Alternative 1 – Current WS Bird Damage Management Program, Nonlethal Preferred Over Lethal Control (Corps' Preferred Alternative)

Alternative 1 is WS's "No Action" alternative. The "No Action" alternative is a procedural NEPA requirement (40 CFR 1502.14(d)), and is a viable and reasonable alternative that could be selected. This alternative was used as a baseline for comparison with the other alternatives. Therefore, information and descriptions provided under this alternative and under the analysis of its possible environmental effects may be extended to the other alternatives.

This alternative consists of the WS's current statewide program of adaptive Integrated Wildlife Damage Management (IWDM) technical assistance (TA) and operational BDM on federal, state, county, city, and private lands under Cooperative Agreement, Agreement for Control, or other comparable documents. Preference is given to practical and effective nonlethal methods when determining the damage management strategy (WS Directive 2.101). However, not all nonlethal methods are practical and effective for every damage situation. The current program employs methods specific to the risk/level of damage being caused and species involved. Operations under this alternative are directed at alleviating damage and not intended to control populations of any native species.

WS uses the most effective and biologically sound damage management methods (i.e., IWDM) to resolve bird damage conflicts. In general terms, BDM is comprised of practical and effective methods to resolve a particular wildlife problem. The methods may include recommending the alteration of habitat and cultural practices, exclusion devices, harassment, auditory and visual deterrents, repellents, live trapping and translocation and/or lethal removal. Lethal removal methods could include egg addling/oiling/removal, euthanasia following live capture, pesticides, and shooting. Methods are implemented at the field level according to WS Directives 2.101 and 2.105, through the WS Decision Model (Slate et al, 1992), and guided by permits, laws and regulations, and consultations. WS BDM activities are coordinated, when appropriate,

with the U.S. Fish and Wildlife Service, NOAA Fisheries, and Washington Department of Fish and Wildlife to avoid adverse effects.

The Corps has focused primarily on non-lethal measures such as hazing and bird wires in an attempt to deter avian predation on salmonids. However, it is apparent that non-lethal methods do not suffice as the number of salmonids taken by piscivorous birds is believed to be increasing. Therefore, the Corps has determined that expanded measures such as limited lethal take now need to be implemented.

Alternative 2 – Implement All Nonlethal Methods Before Using Lethal Methods (Corps' No Action/No Change Alternative)

Alternative 2 would require that all nonlethal methods described in the EA be implemented before any lethal methods are used by WS, replacing the professional judgment applied under the WS Decision Model (Slate et al. 1992) used in Alternative 1. This alternative differs from Alternative 1 in that it would require WS and the Corps to use every nonlethal method described in the EA and find them to be inadequate/ineffective for each damage situation before lethal methods could be implemented. Even if nonlethal methods are determined to be inappropriate or ineffective, they would need to be implemented before lethal actions are used. The only exception when lethal control may be applied first, under this alternative, would be instances where it is necessary to resolve an immediate life threatening situation.

For the Corps, the "No Action" alternative would involve continuation (status quo) of current nonlethal management methods only. The Corps would not employ lethal take of piscivorous birds.

Alternative 3 – Technical Assistance BDM Program Only

Under this Alternative, WS could not conduct operational BDM activities in Washington. If requested, WS could only offer TA. Alternative 3 is a modification of Alternative 1, wherein no operational BDM would be provided by WS. However, WS could recommend operational BDM, but it would be implemented by the affected agency or resource owner (e.g., home or business owner). WS would use the WS Decision Model to determine recommendations.

This alternative is not applicable to the Corps' proposed action.

Alternative 4 – No WS BDM Program

Under this Alternative, WS' role in BDM in Washington would be terminated. Affected agencies and resource owners would need to contact other wildlife management agencies/service providers or would be left to their own devices to stop/reduce damage caused by birds.

The Corps would discontinue all bird predation management at the dams. This alternative, however, would clearly not satisfy the Corps' purpose and need of complying with the BiOp RPA Action 48 and would not be further evaluated under NEPA.

ALTERNATIVES ELIMINATED from DETAILED CONSIDERATION

- Lethal Methods Only Alternative
- Eradication of Native Bird Species Alternative
- Wildlife Damage Must Be an Accepted Loss Alternative

5. Environmental Consequences

The following environmental issues were identified as relevant to WS's EA and analyzed in detail in Section 4:

- Effect of methods on non-target and ESA-listed species
- Effect of methods on populations of target species
- Effectiveness of BDM Program in Washington
- Humaneness of methods
- Cumulative Effects

The outcome of the analysis in the EA determined that implementation of the Preferred Alternative; Alternative 1, "Continue the Current WS BDM Program, with Nonlethal Preferred Over Lethal Control" would not result in significant impacts as summarized below:

Effects on Non-Target Species:

The use of firearms is selective for target species since animals (birds) are identified prior to shooting; therefore no significant adverse impacts are anticipated from WS' use of this method on non-target species. Herring gulls would not be intentionally targeted, as there are not many of them at the dams, however there is always the possibility of incidental take of herring gulls due to miss-identification. There have been no measurable or significant adverse effects observed on non-target species using firearms as a lethal take method (USDA, 2011).

Effects on Target Species (gulls):

Data indicate that gull populations in North America are stable, and depending on the species, can number well into the millions (Winkler, 1996). Therefore, WS could remove several thousand gulls in Washington and not impact the distribution, abundance, or population trend of the species. The total maximum number of gulls allowed for lethal take using firearms at the five Corps dams specified would be 650 ring-billed gulls and 1200 California gulls, and such take would be less than significant.

Effects on Target Species (double-crested cormorants):

Double-crested cormorant populations throughout the Columbia Basin appear to be increasing, along with concerns about the impact of these birds to salmonid smolts (BRN online). The Breeding Bird Survey shows that double-crested cormorant populations in Washington have increased during the last several decades (Sauer et al. 2011). Therefore, WS could possibly remove up to 750 double-crested cormorants per year in Washington and not impact the distribution, abundance, or population trend of the species. At the five Corps dams specified, a maximum total of 150 double-crested cormorants could be lethally taken using firearms and such take would be less than significant.

Effectiveness of BDM Program in Washington:

Effectiveness of the WA BDM program is defined as the timely and successful application of safe and selective methods to prevent and alleviate damage caused by birds. Under the current program, all methods are as selective and effective as possible, in conformance with the WS Decision Model, WS Directives, and state and federal laws. Under Alternative 1, WS would have the fullest array of BDM methods at its professional discretion at all times and is expected to increase effectiveness with the application of limited lethal take at the Corps' Walla Walla District dams.

Humaneness of methods

Shooting is considered to be the most humane method of lethal removal as death usually comes immediately resulting in little or no suffering to the bird.

Cumulative Effects

WS evaluated the cumulative effect of the proposed action when added to other past, present, and reasonably foreseeable future actions, regardless of which other agency or persons might undertake the other actions. WS determined that their proposed program, when taken together with the actions of others, would have no significant impact, as the number of animals taken by WS, when added to the total known other take of all species and population estimates or trends falls well within the allowable harvest levels.

The Corps also evaluated the cumulative effect of their proposed action with other past, present, and reasonably foreseeable future actions as there are several existing and ongoing studies pertaining to avian predation management in the region. The Corps evaluated six NEPA documents dating from January 2005 to the present (March 2014). The majority of these studies focused on the management and relocation of Caspian terns and did not include lethal take of gulls or double-crested cormorants.

Included is the Walla Walla District Corps' *"Inland Avian Predation Management Plan EA"* completed in January 2014 that focused on dissuading Caspian terns from nesting

at Goose Island and Crescent Island, determining that some minor negative effects might occur on gull populations co-located with Caspian terns at these islands. However, due to gulls' variable habitat requirements and the presence of adequate habitat throughout the Columbia River Basin, no significant impacts to gulls were identified. Caspian terns displaced from Goose and Crescent Islands would have a high potential to find new nesting areas outside the basin due to their migratory life, history traits and known tendency to travel long distances. Therefore, it was determined that implementation of the preferred alternative would have no significant impacts to the tern metapopulation.

The "*Caspian Tern Nesting Habitat Reduction on East Sand Island, Clatsop Co., Oregon EA*" prepared by the Portland District Corps in January 2014, proposes to reduce nesting acreage at the East Sand Island Caspian tern colony in the Columbia River Estuary in order to lessen the number of nesting pairs on the island. The analysis in the EA indicated that implementation of the proposed action would not significantly impact tern populations and would not impact ring-billed gulls or hybrid gulls, except that fewer ring-billed gulls may nest within the confines of the prepared habitat. Reducing acreage would not impact nesting of double-crested cormorants as this species nests on the other side (west side) of East Sand Island and are separated from the Caspian tern colony by dense shrubbery.

One study, "*Adaptively Manage Predation on the Caspian Tern Colony in the Lower Columbia River Estuary EA*" prepared in April 2013 by the Portland District Corps, recommended lethal removal of up to 150 glaucous-winged/western gulls on East Sand Island. However, the alternative including lethal removal was not selected as the preferred alternative and lethal take did not and has not occurred.

The first of these related studies conducted by the Corps was the September 2005 "*Avian Predation Deterrent Program, Lower Columbia and Lower Snake Rivers EA*", mentioned above in the background section. Alternative 5, Lethal Tools Only, was eliminated from evaluation because it would not constructively manage damage to target species and wildlife agencies stated that lethal methods are only to be used as a supplement to non-lethal methods. Alternative 2, the Non-Lethal Tools Only Alternative, was selected and implemented as the preferred.

The Portland District Corps is currently in the very early stages of preparing the "*Columbia River Estuary Cormorants: Environmental Impact Statement*". The range of alternatives under consideration to reduce double-crested cormorant predation of juvenile salmonids will include implementing non-lethal and lethal actions to reduce the colony size on East Sand Island and limit their dispersal within the estuary. Although a potential 60 percent reduction in the current estuary colony size by lethal take is proposed in Portland's EIS, it was determined that limited lethal take of up to 150 cormorants per year in the locally proposed action would not create a significant impact, individually or cumulatively.

When viewed in the context of past, present, and reasonably foreseeable future activities, the current proposed action is not anticipated to result in significant cumulative adverse effects to ring-billed gull, California gull, or double-crested cormorant populations. The proposed action is further anticipated to have beneficial cumulative impacts to ESA-listed salmonids in the Columbia River Basin and consequently satisfy the purpose of and need for action.

6. Public Comment/Involvement

As part of a public review and comment process, the WS's EA was made available to the public for a 30-day comment period from October 5, 2011 to November 4, 2011. Three comment letters were received; however they were minor in nature and did not impact the outcome of the EA and the WS FONSI. As the WS's public review process is sufficient, no further public commentary has been sought by the Corps.

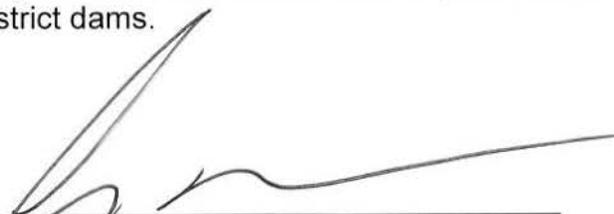
7. Compliance with Other Laws and Regulations

See Appendix B of the EA for a discussion of compliance with other laws and regulations. The proposed action complies with other federal laws and applicable regulations.

8. Conclusion/Finding

Having reviewed the WS's EA, FONSI and the supplemental cumulative effects analysis herein, I find that the documents provide sufficient discussions on the purpose of and need for the proposed action, alternatives, the environmental impacts of the proposed action and the alternatives, and a listing of agencies and persons consulted. I have taken into consideration the technical aspects of the project, best scientific information available and public comments received by the WS. These documents provide sufficient evidence and analysis to meet the Corps' requirements pursuant to the National Environmental Policy Act. Based on this information, I find that implementation of the preferred alternative would not result in significant impacts on the quality of the human environment and that an environmental impact statement is not required. I therefore adopt WS's 2011 EA, to specifically include limited lethal take of piscivorous birds at Corps of Engineers Walla Walla District dams.

DATE: 3/17/14



Andrew D. Kelly
Lieutenant Colonel, Corps of Engineers
District Commander