

## **Finding of No Significant Impact Inland Avian Predation Management Plan**

### **BACKGROUND**

The U.S. Army Corps of Engineers, Walla Walla District (Corps) proposes to implement an Inland Avian Predation Management Plan (IAPMP) to reduce avian predation-related loss of federal Endangered Species Act (ESA)-listed juvenile salmonids in the inland Columbia River Basin above Bonneville Dam. The development of the IAPMP is a requirement of the National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS) 2008 Federal Columbia River Power System (FCRPS) Biological Opinion (BiOp), Reasonable and Prudent Alternative Action 47, as updated in the 2010 Supplemental BiOp (collectively, "FCRPS BiOp"). Research indicated that the greatest potential for increasing juvenile salmonid survival through the reduction in losses to avian predators on the Columbia River plateau (i.e., upstream of Bonneville Dam) would be gained by focusing management efforts on dissuading Caspian Terns (CATEs) from nesting at Goose Island (Bureau of Reclamation managed island at Potholes Reservoir in Grant County, WA) and Crescent Island (Corps managed island located within McNary Reservoir in the Columbia River in Walla Walla County, WA). The effectiveness of CATE dissuasion actions at Goose and Crescent Islands under the IAPMP would be enhanced by adaptive management actions to limit CATEs from forming new colonies and/or expanding existing colonies within the Columbia River Basin. The IAPMP also provides for the development of new nesting habitat to attract CATEs to areas outside the basin. The proposed action is described and evaluated in the IAPMP Environmental Assessment (EA) (Corps, January 2014), which is incorporated herein by reference.

### **PURPOSE AND NEED**

The purpose of the proposed action is to increase survival of ESA-listed juvenile salmonids by reducing predation-related losses from CATE colonies at Crescent and Goose Islands through the development of an IAPMP, in accordance with the FCRPS BiOp. Management actions are focused on dissuasion of CATEs at Goose and Crescent Islands, adaptive management actions to limit the formation and/or growth of other CATE colonies at other inland basin locations, and implementation of new nesting habitat to attract CATEs to areas outside the Columbia River Basin. In addition to providing substantial and achievable benefits to ESA-listed salmonids, the IAPMP actions are intended to minimize impacts to CATEs, which are protected under the Migratory Bird Treaty Act (MBTA), as well as impacts to other resources and species of concern. The need for action is based on the FCRPS Action Agencies' requirement to avoid jeopardizing the listed species pursuant to the FCRPS BiOp.

## **PROJECT ALTERNATIVES AND PREFERRED ALTERNATIVE**

The National Environmental Policy Act (NEPA) alternative development process is designed to allow consideration of the widest possible range of issues and potential management approaches. The Corps considered a broad range of potential avian predator management actions/measures in developing alternatives considered in the EA. The following four alternatives were identified and evaluated in the EA:

- Alternative A – No action.
- Alternative B – Passive hazing (habitat modification) to dissuade CATE nesting on Goose and Crescent Islands including: adaptive management actions to limit CATEs from forming new colonies and/or expanding existing colonies within the Columbia River Basin; development of new nesting improvement to existing CATE habitat (called “habitat enhancement”) to attract CATEs to areas outside the basin; and, a phased approach due to the uncertainty associated with how CATEs would respond to passive hazing.
- Alternative C – Passive hazing (Alternative B) combined with active hazing to prevent CATEs from nesting on Goose and Crescent Islands.
- Alternative D – Passive and active CATE hazing (Alternative C) combined with limited CATE egg removal in support of non-lethal measures (Preferred Alternative).

Due to the uncertainty associated with how CATEs would respond to habitat modifications and to facilitate an adaptive management framework, a phased approach was developed for the implementation of these actions where dissuasion efforts at Goose Island would be implemented prior to dissuasion efforts at Crescent Island. The identification of CATE habitat enhancement nesting sites outside the Columbia River Basin would occur during Phase 1, for implementation during Phase 2, pending supplemental/tiered NEPA analysis.

Alternative D was selected as the preferred alternative because it best meets the purpose and need. It provides the most comprehensive set of actions for CATE management with the highest probability of successful dissuasion at Goose and Crescent Islands, which would result in the largest reduction in avian predation losses of ESA-listed salmonids. The habitat modifications, combined with active hazing, would provide a high probability of success, while limited egg take would provide a contingency for unforeseen events. Alternative D would also minimize impacts to CATEs, species of concern, and other resources.

## **ENVIRONMENTAL EFFECTS**

The preferred alternative would be expected to reduce the number of CATEs nesting in the inland Columbia River Basin. CATEs 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 is anticipated that the proposed action would have no significant impact on the CATE metapopulation. The preferred alternative would identify one or more habitat enhancement sites outside the basin for development as part of Phase 2.

Some minor negative effects might occur on gull populations co-located with CATEs at Goose and Crescent Islands and at many of the at-risk islands. Due to gulls' variable habitat requirements and the presence of adequate habitat throughout the Columbia River Basin, no significant impacts to gulls are anticipated. Similarly, there may be small negative temporal impacts to other bird species located at Goose and Crescent Islands and at the at-risk islands. Habitat modifications at Goose and Crescent Islands, and at the at-risk islands, would typically be performed outside of the nesting season in a manner such that no significant negative impacts to bird species would occur.

The preferred alternative would have positive effects on federally ESA-listed fish species, especially populations of Upper Columbia River steelhead and Chinook salmon, as well as Snake River steelhead and sockeye salmon, which are impacted by CATE populations nesting on Goose and Crescent Islands.

Actions associated with the preferred alternative may have minor negative effects to non-ESA-listed salmonids and other fish. Due to dispersal of a relatively small number of CATEs across a wide geographic area, no significant impact to non-ESA-listed salmonids or other fish species would occur.

There may be minor effects to mammals, vegetation, and soils located at Goose and Crescent Islands and the at-risk islands from actions associated with the preferred alternative. These effects are expected to be minor and of a short duration such that no significant impacts to these resources would occur.

Positive socioeconomic impacts are expected, especially with regard to commercial, recreational and tribal fisheries, due to decreased salmonid consumption by CATEs and anticipated increased returns of adult salmon.

The preferred alternative would have no effect on ESA-listed wildlife or plants, floodplain/water elevation, water quality, greenhouse gas emissions, cultural resources, or the built environment.

The Corps consulted with the U.S. Fish and Wildlife Service (USFWS) with the determination that the proposed project may affect, but is not likely to adversely affect, bull trout and bull trout–designated critical habitat. The Corps received concurrence from the USFWS on that determination on January 6, 2014. NMFS concluded that the

proposed action would be covered under the existing FCRPS BiOp, as updated, and no further consultation would be necessary.

The Corps determined that actions proposed for Goose and Crescent Islands and possible active dissuasion at other islands throughout the inland Columbia Basin would not have any impacts on historic/cultural resources. Proposals to develop out-of-basin habitat, or to conduct dissuasion activities other than active dissuasion at any of the at-risk islands may have impacts to cultural resources, and any decisions made regarding these activities would be subject to additional reviews under Section 106 of the National Historic Preservation Act. The Corps prepared an archaeological report for the proposed project with a "no historic properties affected" determination and forwarded it to the Washington Department of Archaeology and Historic Preservation (DAHP), the Oregon State Historic Preservation Office (SHPO), and area Tribes in September 2013. The Corps received concurrence from the Washington DAHP on October 30, 2013, which covers dissuasion actions at Goose and Crescent islands in Washington, and from Oregon SHPO on January 16, 2014 which covers potential dissuasion actions on at-risk islands in Oregon. If necessary, separate consultation would be completed for proposed actions on the at-risk islands and habitat enhancement sites, once they are identified, prior to implementation.

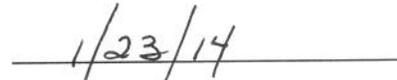
The draft Finding of No Significant Impact and EA have been made available to the interested public and federal, state and local agencies for a review and comment from October 30, 2013 through December 2, 2013. Responses have been prepared for all public comments received. The comments and responses are in Appendix C of the EA.

## FINDINGS

Having reviewed the EA and associated appendices, I find that the documents provide sufficient discussions on the purpose of and need for the proposed action, the alternatives, the environmental impacts of the alternatives, and a listing of agencies and persons consulted. Therefore, I believe these documents provide sufficient evidence and analysis to meet the Corps's requirements pursuant to NEPA I have taken into consideration the technical aspects of the project, best scientific information available and public comments received. 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. Therefore, an environmental impact statement is not required.



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



Date