Finding of No Significant Impact for Issuance of an Endangered Species Act Section 10(a)(1)(A) Permit to the United States Army Corps of Engineers for Operation of the Russian River Coho Salmon Captive Broodstock Program at the Don Clausen Fish Hatchery

National Marine Fisheries Service (NMFS)

Background

Proposed Action:

Issuance of an Endangered Species Act (ESA) section 10(a)(1)(A) permit to the United States Army Corps of Engineers (Corps) for operation of the Russian River Coho Salmon Captive Broodstock Program (Program) at Don Clausen Fish Hatchery (DCFH) in accordance with the submitted Hatchery Genetic Management Plan (HGMP). A detailed evaluation on the effects of the proposed HGMP are described in the Environmental Assessment (EA).

Alternatives Evaluated in the Environmental Assessment:

Alternative 1 (No-Action) - NMFS does not issue the ESA Section 10(a)(1)(A) permit.

Alternative 2 (Proposed Action) - NMFS issues the ESA Section 10(a)(1)(A) permit for the submitted HGMP, including expanded production and additional Program streams.

Alternative 3 (Current Production Alternative) - NMFS issues the ESA Section 10(a)(1)(A) permit for revised HGMP with current hatchery production and Program streams.

Selected Alternative:

Alternative 2 (Proposed Action) - NMFS issues the ESA Section 10(a)(1)(A) permit for the proposed HGMP, including expanded production and additional Program streams.

Related Consultations:

NMFS completed consultations under ESA section 7 and the Magnuson-Stevens Act regarding essential fish habitat (EFH) for the proposed HGMP to examine the impacts of the proposed action on ESA-listed and MSA-managed species and their habitat. The ESA section 7 concluded that the proposed action is not likely to jeopardize the existence of any of these species nor result in the adverse modification of their critical habitat. NMFS determined the Pacific salmon EFH would be adversely affected, but offered no conservation recommendations in addition to the terms and conditions of the biological opinion.

Significance Review

The Council on Environmental Quality (CEQ) Regulations state that the determination of significance using an analysis of effects requires examination of both context and intensity, and lists ten criteria for intensity (40 C.F.R. § 1508.27). In addition, the Companion Manual for National Oceanic and Atmospheric Administration Administrative Order 216-6A provides sixteen criteria, the same ten as the CEQ Regulations and six additional, for determining whether the impacts of a proposed action are
significant. Each criterion is discussed below with respect to the proposed action and considered individually as well as in combination with the others.

1. **Can the proposed action reasonably be expected to cause both beneficial and adverse impacts that overall may result in a significant effect, even if the effect will be beneficial?**

The proposed HGMP is not expected to result in any significant adverse or beneficial effects. All resources listed in the EA are expected to experience effects below the threshold of significance.

The HGMP is a conservation captive broodstock program that intends to collect, propagate, rear, and release Central California Coast (CCC) coho salmon annually using standard fish capture and culturing techniques. The overall goal of the HGMP is to conserve CCC coho salmon populations and facilitate species recovery. The CCC coho salmon evolutionary significant unit (ESU) is native to the region and were listed as endangered under the ESA in 2005.

NMFS expects impacts from the proposed action will be insignificant because HGMP proposes a genetically integrated approach by incorporating natural-origin fish in the broodstock and evaluating relatedness during mate selection. This approach is expected to reduce the effects of inbreeding and conserve CCC coho salmon’s genetic diversity. In addition, release locations and numbers are adjusted each year to reduce impacts on natural origin runs. The HGMP proposes to release 500,000 juvenile and 500 adult coho salmon annually into regional streams. The numbers of fish collected, produced, and released are considerably less than production hatcheries. Release locations and numbers are adjusted each year to reduce impacts on natural origin runs. The submitted HGMP includes monitoring, evaluation, and reporting to assess potential effects and adaptively manage to minimize any unforeseen impacts as necessary.

2. **Can the proposed action reasonably be expected to significantly affect public health or safety?**

The proposed action is not expected to have a substantial impact on public health or safety. The hatchery complies with all federal (OSHA) and state requirements for public and worker safety. Discharge from the hatchery will follow regulations associated with the National Pollutant Discharge Elimination System (permit #CA0024350/I.D. No. 1B84034050N) granted to the Hatchery. See the HGMP (Sec. 4) and EA for details.

3. **Can the proposed action reasonably be expected to result in significant impacts to unique characteristics of the geographic area, such as proximity to historic or cultural resources, parklands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas?**

While the Program fish are released in parklands, and into streams along farmlands, the species already exist within these locations. The proposed action is not reasonably expected to have any impact on the unique characteristics of the geographic area.

4. **Are the proposed action’s effects on the quality of the human environment likely to be highly controversial?**

The use of hatcheries can be controversial; however, NMFS has thoroughly considered the activities in the proposed HGMP and their potential adverse effects on the human environment.
The HGMP has gone through internal and public review and addressed any controversial issues as part of completing this process.

5. Are the proposed action’s effects on the human environment likely to be highly uncertain or involve unique or unknown risks?

There are no actions of high uncertainty or unique or unknown risks being pursued in the proposed HGMP. Hatchery programs have been raising and rearing salmon for over a century. This proposed HGMP follows standard guidelines and protocols developed for west coast salmon hatcheries.

6. Can the proposed action reasonably be expected to establish a precedent for future actions with significant effects or represent a decision in principle about a future consideration?

The proposed action does not establish a precedent for future actions or considerations with significant effects as the program has been in operation since 2001. Many programs use captive broodstock as a tool to protect endangered species from extinction.

7. Is the proposed action related to other actions that when considered together will have individually insignificant but cumulatively significant impacts?

The EA evaluated the cumulative impacts of the proposed HGMP, and past, present, and future actions on natural resources. These actions included: marijuana cultivation, timber harvest, water diversions, watershed restoration, human-induced climate change, and the hatchery steelhead program. The EA determined that the effects of the proposed action would not be significant, and in combination with past, present, and reasonable future actions, the program will not significantly impact the affected resources.

8. Can the proposed action reasonably be expected to adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources?

The hatchery utilizes existing highways, infrastructure, etc., and these are not currently listed in or eligible for listing in the National Register of Historic Places. The HGMP does not include any major construction plans or alterations of any resources. Therefore, we do not expect any associated impacts with the proposed action.

9. Can the proposed action reasonably be expected to have a significant impact on endangered or threatened species, or their critical habitat as defined under the Endangered Species Act of 1973?

The proposed HGMP is unlikely to have a significant impact on ESA-listed species and their critical habitat. The Biological Opinion evaluated impacts to the following ESA-listed species: CCC coho salmon, California Coastal Chinook salmon, Northern California steelhead, CCC steelhead, and Southern Resident killer whales. NMFS determined no adverse effects on Southern Resident killer whales or any of the ESA-listed species’ designated critical habitat.

NMFS anticipates small and temporary minor adverse effects to ESA-listed salmon and steelhead; however, the benefits are expected to outweigh the risks. CCC coho salmon are likely to benefit from hatchery fish which survive to spawning age and return to priority recovery streams to integrate and increase natural populations. The HGMP proposes to monitor effects on ESA-listed species to evaluate, report, and adaptively manage for any unforeseen impacts.
10. Can the proposed action reasonably be expected to threaten a violation of Federal, state, or local law or requirements imposed for environmental protection?

The EA evaluated the proposed HGMP and determined it will not violate federal, state or local laws or requirements imposed for environmental protection. NMFS reviewed the proposed HGMP to ensure ESA compliance pursuant to the ESA section 10(a)(1)(A) permit.

11. Can the proposed action reasonably be expected to significantly adversely affect stocks of marine mammals as defined in the Marine Mammal Protection Act?

The proposed action is not reasonably be expected to significantly adversely affect marine mammals. There are no recreational or commercial fisheries associated with the proposed action; therefore, the action will not influence the bycatch or take of marine mammals. Additionally, marine mammals may prey on coho salmon and increasing their food base may provide small benefits to marine mammal populations.

12. Can the proposed action reasonably be expected to significantly adversely affect managed fish species?

No. There are no managed recreational or commercial fisheries associated with the proposed action, and no managed fish species are expected to be significantly adversely affected by the action.

13. Can the proposed action reasonably be expected to significantly adversely affect essential fish habitat as defined under the Magnuson-Stevens Fishery Conservation and Management Act?

The proposed action is not expected to have significant effects on essential fish habitat (EFH). NMFS evaluated the potential impacts of the proposed action on Pacific coast salmon EFH pursuant to Section 305(b)(2) of the Magnuson-Stevens Act. During hatchery releases, competition for habitat between hatchery and wild origin fish may occur and will be minimized by adaptively managing releases to account for natural abundances and habitat capacity. Additionally, installing egg incubators and fish traps each spring will require small and temporary vegetation removal and substrate alterations by hand. The proposed action may benefit EFH by increasing marine nutrients subsidies from returning adults and nutrient blocks and supplementing stream food webs.

14. Can the proposed action reasonably be expected to significantly adversely affect vulnerable marine or coastal ecosystems, including but not limited to, deep coral ecosystems?

The proposed action will not significantly impact vulnerable marine or coastal ecosystems. Program fish released may transit or forage in marine or coastal ecosystems.

15. Can the proposed action reasonably be expected to significantly adversely affect biodiversity or ecosystem functioning (e.g., benthic productivity, predator-prey relationships, etc.)?

The proposed action may adversely affect the biodiversity or ecosystem functions, but not significantly. CCC coho salmon are native fish that naturally contribute to the biodiversity and functions of the affected ecosystems. Hatchery-origin fish may interact with natural salmon runs via predation, competition, or disease transmission. The HGMP proposed to minimize species interactions by adaptively managing releases. Over time, ecosystem processes and biodiversity may benefit from the proposed HGMP by increasing CCC coho salmon’s natural runs.
16. Can the proposed action reasonably be expected to result in the introduction or spread of a nonindigenous species?

The introduction or spread of nonindigenous species is not reasonably expected. The program will follow published state disinfection and decontamination protocols to avoid the spread of aquatic invasive species. Spreading of non-native microorganisms will be prevented by a state pathology screening before release.

Determination

In view of the information presented in this document and the analysis contained in the supporting Environmental Assessment prepared for NMFS’ issuance of an ESA section 10(a)(1)(A) permit to the U.S. Army Corps of Engineers for the operation of the Russian River Coho Salmon Captive Broodstock Program at Don Clausen National Fish Hatchery in accordance with the Program’s HGMP, it is hereby determined that NMFS’ issuance of this ESA section 10(a)(1)(A) permit, including expanded production and additional Program streams, will not significantly impact the quality of the human environment as described above and in the supporting Environmental Assessment. In addition, all beneficial and adverse impacts of the proposed action have been addressed to reach the conclusion of no significant impacts. Accordingly, preparation of an environmental impact statement for this action is not necessary.

Barry A. Thom
Regional Administrator
West Coast Region
National Marine Fisheries Service

December 21, 2020
Date