UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
West Coast Region
1201 NE Lloyd Boulevard, Suite 1100
PORTLAND, OR 97232-1274

March 7, 2022

MEMORANDUM FOR: Barry Thom
Regional Administrator

FROM: Allyson Purcell, Branch Chief
Anadromous Production and Inland Fisheries Branch
Sustainable Fisheries Division

SUBJECT: New Hatchery and Genetic Management Plans for Enetai Fall-Run Chum Salmon, Hoodsport Fall Chinook Salmon, Hoodsport Fall-Run Chum Salmon, Hood Canal Steelhead Supplementation, and Port Gamble Coho Salmon Net Pen Programs Under Limit 6 of the Endangered Species Act 4(d) Ru1e (50 CFR 223.203(6)) (65 FR 42422, July 10, 2000)—DECISION MEMORANDUM

Issue

The Port Gamble S'Klallam Tribe (PGST), Skokomish Tribe (ST), and the Washington Department of Fish and Wildlife (WDFW) (hereafter referred to as the co-managers) submitted five new Hatchery and Genetic Management Plans (HGMPs) as resource management plans to enact changes to existing hatchery programs that support breeding and propagation of salmon populations in the Hood Canal Basin. The co-managers submitted the HGMPs to the National Marine Fisheries Service (NMFS) on the following dates:

- On July 23, 2019 the Skokomish Tribe sent a letter requesting release of an additional 400,000 fall chum salmon at the fry life stage from the Enetai Hatchery.
- On March 12, 2020 the Washington Department of Fish and Wildlife requested modifications to the Hoodsport fall Chinook salmon program and the Hood Canal steelhead supplementation program.
- On May 18, 2020 the WDFW requested modifications to the Hoodsport fall chum salmon program.
- On June 23, 2020 the Port Gamble S'Klallam Tribe requested modifications to the Port Gamble coho net pen program. The PGST submitted an updated HGMP on August 11, 2020. NMFS initiated consultation at this time after having reviewed all requests for modifications and/or new HMGPs.

The HGMPs serve as the proposed frameworks through which the co-managers will manage salmon hatchery programs in the Basin, while meeting requirements specified under the ESA. The revised plans were submitted for review and determination by National Marine Fisheries

Service (NMFS) under Limit 6 of the ESA 4(d) Rule, 50 CFR 223.203(b)(6) (July 10, 2000; 65 FR 42422, as amended June 28, 2012, 70 FR 37160).

Recommendation

The NMFS Sustainable Fisheries Division (SFD) has evaluated the new HGMPs (Table 1) and finds the plans meet all of the requirements specified in Limit 6 of the ESA 4(d) Rule and the criteria for HGMPs as outlined in Limit 5 of the Rule. The SFD recommends that these HGMPs be approved and NMFS West Coast Region (WCR) issue its written determination on the HGMPs to the Port Gamble S'Klallam Tribe, the Skokomish Tribe, and WDFW, provided that the plans are implemented in accordance with the section on implementation terms and reporting requirements in the biological opinion (Attachment 1).

Table 1. Hatchery and Genetic Management Plans Salmon Hatchery Programs proposed for approval.

Hatchery and Genetics Management Plan	Operator	Funding	Program Type
Enetai Hatchery Fall Chum Salmon	ST	BIA	Isolated/Segregated
Hoodsport Fall Chinook Salmon	WDFW	WDFW/DJ/PSRFE	Isolated/Segregated
Hoodsport Fall Chum Salmon	WDFW	WDFW/DJ/PSRFE	Isolated/Segregated
Port Gamble Coho net pen	PGST	BIA	Isolated/Segregated
Hood Canal Steelhead Supplementation	NWFSC, WDFW, LLTK	WDFW/LLTK/NMFS	Conservation/ Integrated Recovery

LLTK = Long Live the Kings; HCSEG = PGST = Port Gamble S'Klallam Tribe; ST = Skokomish Tribe; BIA = Bureau of Indian Affairs; DJ = Dingell-Johnson Sportfishing Restoration Act; PSREF = Puget Sound Recreational Enhancement Fund.

Background

NMFS issued a final ESA 4(d) Rule adopting regulations necessary and advisable to conserve salmon and steelhead listed under the ESA under Limit 6 of the ESA 4(d) Rule, 50 CFR 223.203(b)(6) (July 10, 2000; 65 FR 42422, as amended June 28, 2012, 70 FR 37160). The ESA 4(d) Rule applies the prohibitions enumerated in section 9(a)(l) of the ESA, and also prescribes specific circumstances when the prohibitions would not apply, which are known as 4(d) limits. As discussed above, these five HGMPs have since been resubmitted to NMFS with changes which are proposed to be adopted through a re-evaluation of the HGMPs.

The Hood Canal Supplementation Program is an integrated recovery program (Table 1) that is described in detail in the HGMP (WDFW and LLTK 2012). Although the hatchery supplementation component of this program was discontinued, the research, monitoring, and evaluation (RM&E) component of this program is still underway. The co-managers requested additional RM&E of Puget Sound steelhead in a non-supplemented tributary (e.g., Dosewallips River) to determine the extent to which the program affected genetic diversity in an adjacent watershed.

The remaining four programs are currently operating according to limits as described in NMFS 2016 biological opinion (NMFS 2016). As part of the proposed changes, the co-managers are seeking to expand the release timing of fall Chinook salmon at the Hoodsport Hatchery and production increases at three hatchery facilities for the Enetai fall chum salmon, Hoodsport fall chum salmon, and the Port Gamble coho net pen programs.

Additionally, under the revised HGMPs, monitoring and evaluation would be implemented to assess their performance in meeting population conservation or harvest augmentation objectives, and their effects on ESA-listed Puget Sound Chinook salmon and Puget Sound steelhead. Information gained through monitoring and evaluation would be used to assess whether the impacts of the programs on listed fish are as expected. Review of the HGMPs by NMFS and the co-managers will continue to occur annually to evaluate whether assumptions regarding HGMP effects and analysis remained valid, and whether the objectives of the HGMPs were being accomplished.

Discussion

Controversial Issues

The salmon hatchery programs described in the new HGMPs are not controversial, and none are the subject of on-going or pending litigation. The Hood Canal Steelhead Supplementation Program, which is operated for the purposes of conservation, no longer releases fish and is only operational for research, monitoring, and evaluation purposes. The other programs have been operated for a number of years, ranging from 15 years (Hood Canal Steelhead Supplementation Program) to decades (e.g., programs at the Port Gamble Bay and Hoodsport Hatchery). The HGMPs describing these programs incorporate best management practices and hatchery reforms considered necessary to provide for program operation while minimizing potential risks to ESA-listed species.

Public Review and Comment

On November 10, 2021, NMFS published in the Federal Register notification of the availability of its ESA 4(d) Rule proposed evaluation and pending determination (PEPD) for modifications to the five HGMPs for public review and comment (86 FR 62516, November 10, 2021). The public comment period was open for 30 days, closing on December 10, 2021. NMFS received no comments during the public comment period. Therefore, NMFS did not further clarify, correct, or refine the proposed action description or effects evaluation sections.

Evaluation of Federal Actions under the ESA Section 7 and the Magnuson-Stevens Act Essential Fish Habitat

The SFD prepared an ESA section 7 biological opinion to evaluate the effects of the action on listed salmonids (Attachment 1). As described in SFD's biological opinion, the approval of the HGMPs is not likely to jeopardize the continued existence of ESA-listed Hood Canal summer chum salmon, Puget Sound Chinook salmon, or Puget Sound steelhead, nor result in the destruction or adverse modification of their designated critical habitats.

The reinitiated biological opinion describes in detail genetic effects that revisions to the hatchery programs might have on natural populations of Chinook salmon, chum salmon, and steelhead (Sections 2.5.2.1 and 2.5.2.2 of the opinion). The opinion also describes ecological effects of juvenile and adult hatchery-origin fish on natural-origin fish in Section 2.5.2.3 of the opinion. Predation by adult hatchery salmon on juvenile natural-origin salmon and steelhead is unlikely due to timing differences and because adult salmon typically stop feeding by the time they reach spawning areas. Predation and competition by juvenile hatchery Chinook salmon on juvenile natural-origin Chinook salmon is unlikely because hatchery fish are at sizes that limit these types of interactions and released into marine waters immediately or within minutes of leaving the hatchery.

The SFD also analyzed the effects of the actions on Essential Fish Habitat (EFH) under the Magnuson-Stevens Act; the EFH analysis is included within the biological opinion (Attachment 1). The Proposed Action has minor effects on EFH

due to the fact that the requested modifications are to existing programs and will result in minor changes in water quality. As described in the Section 3.2 of the EFH analysis within the biological opinion, NMFS found no adverse effects on EFH species are expected as a result of water use or effluent discharge. Similarly, effects from additional release of effluent will not increase due to use of best management practices at the hatchery facilities and because none of the tributaries are used by EFH species for breeding, feeding, or spawning.

A separate informal consultation with the United States Fish and Wildlife Service (USFWS) was conducted for program effects on ESA-listed species under USFWS' jurisdiction. The USFWS concurred with NMFS that the Proposed Action will not adversely effect species under USFWS jurisdiction or result in jeopardy or destruction or adverse modification of their critical habitats (USFWS 2021).

Evaluation of HGMPs under the ESA 4(d) Rule

The SFD determined that the HGMPs provided by the co-managers meet all of the requirements in Limit 6 of the ESA 4(d) Rule as described in our Evaluation and Recommended Determination (Attachment 2).

Evaluation of NMFS' Proposed Determination under NEPA

The SFD, for purposes of complying with NEPA, evaluated whether NMFS' proposed determination would result in significant environmental impacts and necessitate an environmental impact statement (EIS). SFD drafted a supplemental information report (SIR) that considered the effects of the proposed action on the human environment (Attachment 3). The SIR concluded that no further review under NEPA was necessary.

Implementation Terms

The five HGMPs include performance standards and indicators designed to identify, monitor, and evaluate the effects of the salmon hatchery actions on listed fish. Monitoring actions proposed to evaluate the performance indicators are identified in sections 1.0 and 11.0 of the HGMPs. These actions include, but are not limited to:

- Estimates of survival and contribution to fisheries for each brood year released. Use current monitoring data and/or conduct new monitoring as necessary to assess juvenile carrying capacity for the action area based on current habitat conditions.
- Estimates of the number of hatchery-origin juvenile salmonids released from each hatchery and the mass-marking rates for each release group.
- Estimates of survival and contribution to fisheries for each brood year released. Agencies will use monitor harvests and hatchery returns to provide up-to-date annual estimates.
- Estimates of fish numbers and size, fish mortalities, water flows, fish loading, water quality measurements (temperature and oxygen), in hatchery transfers, feeding and growth rates.
- Record date, time, tide and general environmental conditions at release. Also, estimates of fish numbers and size, and assessment of fish condition at release. The release date after April 15 is an aversion measure for releasing fall chum salmon at a date to preclude competition and behavioral interactions with Hood Canal summer chum salmon.
- Ensure that fish health monitoring and reporting is in compliance with fish health policies.

Consistent with subparagraph 5(vi) of Limit 5 of the ESA 4(d) Rule, it is NMFS' intent to regularly communicate with the Port Gamble S'Klallam Tribe, the Skokomish Tribe, and WDFW regarding the effectiveness of the HGMPs in meeting performance standards, including the programs' effects on listed salmon and steelhead population viability. All reports, as well as all other notifications required through the 4(d) determination, should be submitted to NMFS SFD.

Summary

NMFS SFD concludes that the HGMPs provided by the Port Gamble S'Klallam Tribe, the Skokomish Tribe, and the WDFW for the Fall Chinook salmon, Fall Chum salmon, Port Gamble Coho net pen, and Hood Canal Steelhead Supplementation programs meet the requirements under Limit 6 of the ESA 4(d) Rule. If the Regional Administrator concurs with this determination, take prohibitions for listed steelhead and salmon populations will not apply to activities implemented in accordance with the five HGMPs, provided they are operated in accordance with the implementation terms and reporting requirements described in NMFS' associated biological opinion.

Concurrence

I concur with your recommendation.

FOR _____ March 8,2022

Barry A. Thom Date
Regional Administrator

I do not concur with your recommended determination.

_____ _____

Barry A. Thom Date
Regional Administrator

Attachment 1: Section 7 Biological Opinion, including EFH

Attachment 2: 4(d) Rule Limit 6 Evaluation and Recommended Determination

Attachment 3: Supplemental Information Report

Literature Cited

NMFS. 2016. Endangered Species Act Section 7(a)(2) Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat (EFH) Consultation. National Marine Fisheries Service (NMFS) Evaluation of Ten Hatchery and Genetic Management Plans for Salmon and Steelhead in Hood Canal under Limit 6 of the Endangered Species Act Section 4(d) Rule. September 30, 2016. NMFS Consultation No.: WCR-2014-1688. 91p.

USFWS. 2021. Changes to Five Hatchery Genetic Management Plans in the Hood Canal Region. Pages 1-7 *in* Allyson Purcell, Chief, NOAA Fisheries, editor.

WDFW, and LLTK. 2012. Hood Canal Steelhead (*Oncorhynchus mykiss*) Supplementation Project HGMP. November 28, 2012. WDFW, Montesano Washington. 102p.