

1. FINDING OF NO SIGNIFICANT IMPACT

1.1. Background

1.1.1. Proposed Action:

The Proposed Action is for the National Marine Fisheries Service (NMFS) to make an Endangered Species Act (ESA) determination under limit 5 of the 4(d) Rule for Washington Department of Fish and Wildlife (WDFW) and Douglas Public Utility District's (PUD) Wells Summer Chinook Salmon Hatchery Program for Southern Resident killer whales (SRKW). See the attached Supplemental Environmental Assessment (Supplemental EA) on the Proposed Action for more details (Attachment A).

1.1.2. Alternatives Evaluated in the Environmental Assessment:

There were four alternatives considered in the Supplemental EA:

- **Alternative 1:** Under the “No Action Alternative,” NMFS would not make a determination under the ESA 4(d) Rule; however, NMFS assumes the new hatchery program would, nonetheless, be operated.¹
- **Alternative 2:** Under the “Proposed Action Alternative” (Preferred Alternative), NMFS would make a determination that the submitted Hatchery Genetic and Management Plan (HGMP) meets the criteria of limit 5 of the 4(d) Rule, and the proposed hatchery program would produce up to 1,000,000 summer Chinook salmon smolts annually.
- **Alternative 3:** Under the “Reduced Production Alternative,” the hatchery operators would submit a revised HGMP proposing the production of 500,000 summer Chinook salmon smolts (i.e., a 50 percent reduction), and NMFS would make a determination that the revised HGMP meets the criteria of limit 5 of the 4(d) Rule.
- **Alternative 4:** Under the “No Production Alternative,” the proposed hatchery program would not be implemented.

1.1.3. Selected Alternative:

NMFS is choosing Alternative 2 (Proposed Action/Preferred Alternative), under which NMFS will make a determination that the submitted HGMP meets the criteria of limit 5 of the 4(d) Rule, and the proposed hatchery program will produce up to 1,000,000 summer Chinook salmon smolts annually.

1.2. Related Consultations:

Past ESA and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat (EFH) consultations related to the Proposed Action are described in NMFS' 2019 EA (NMFS 2019) and Supplemental EA (Attachment A). In addition, two new ESA consultations were completed on the Proposed Action in 2020:

¹ The operators have indicated that this new program may not operate if they do not have ESA 4(d) authorization. However, we describe this scenario under Alternative 4.

- NMFS determined that the proposed HGMP is not likely to jeopardize the continued existence or recovery of ESA-listed salmon and steelhead in the Columbia River Basin (NMFS 2020).
- NMFS determined that the proposed HGMP would not adversely affect ESA-listed bull trout, and the United States Fish and Wildlife Service (USFWS) concurred (USFWS 2020).

1.3. 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?

Response: NMFS' determination for ESA coverage for the Wells summer Chinook salmon hatchery program for SRKW analyzed in the attached Supplemental EA is not reasonably expected to cause beneficial or adverse impacts that overall may result in a significant effect. This conclusion pertains to both the overall impacts of the action as well as to the specific impacts to various resources considered. The Supplemental EA identified nine resources that the Proposed Action may impact and categorized the magnitude of the potential impact from low (adverse) to medium (beneficial). Impacts that were determined to be no more than low-adverse include: hatchery operations on water quality and quantity, predation and competition through the interaction of hatchery-origin and natural-origin Upper Columbia River (UCR) spring Chinook salmon juveniles throughout the analysis area, and the impacts to human health and safety. The other identified resource impacts fall to the lower end of the relative magnitude spectrum, within the negligible to undetectable ranges.

The Proposed Action is expected to benefit the recovery and sustainability efforts for the SRKW distinct population segment (DPS) by way of increasing adult Chinook salmon returns and potentially providing a cultural and local economic benefit to fisheries in the UCR Basin by augmenting available catchable fish for recreational and tribal fisheries. In addition, these activities are monitored and controlled by regulations that minimize negative impacts on the biological and physical components of the environment while promoting benefits to the human component. See Section 4 of the Supplemental EA, for detailed information of the potential impacts.

2. Can the Proposed Action reasonably be expected to significantly affect public health or safety?

Response: The Proposed Action is expected to have a low-adverse impact to public health or safety, directly or indirectly. Hatchery facility operations associated with the Proposed Action

are implemented in compliance with state and Federal safety regulations and environmental laws, thus reducing potential risks to public health. The public will have limited exposure to hatchery facility operations. Any known potential impacts to public health as a result of the Proposed Action is limited to the willful consumption of hatchery-origin fish, which is directly associated with the frequency of consuming fish regardless of whether fish are of hatchery or natural-origin.

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, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas?*

Response: The Proposed Action is not expected to induce more than low-adverse impacts on unique geographic areas, such as proximity to historic or cultural resources, park land, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas because no new infrastructure is proposed through the action.

NMFS and USFWS found that the Proposed Action is not likely to destroy or adversely modify any ESA-designated critical habitats for ESA-listed UCR spring Chinook salmon, UCR steelhead, and bull trout within the analysis area (USFWS 2020). The habitat impacts analyzed in the Supplemental EA are determined to be no more than low-adverse under the Proposed Action. For more information, see the Supplemental EA, subsection 4.1, Salmon and Steelhead.

4. *Are the Proposed Action's effects on the quality of the human environment likely to be highly controversial?*

Response: The Proposed Action's effects on the quality of the human environment are not likely to be highly controversial because the impacts of these hatchery programs, as identified in the Supplemental EA, are similar to the implementation of hatchery programs over prior years, for which NMFS reached the same conclusion (NMFS 2019). Moreover, NMFS has provided an opportunity for public comment on the HGMP. In response, NMFS received one set of comments raising general concerns about threats to the Columbia River ecosystem and did not identify any aspects of the Proposed Action as highly controversial. The impacts associated with the Proposed Action are well-studied and well-understood, and no significant opposition has been raised.

5. *Are the Proposed Action's effects on the human environment likely to be highly uncertain or involve unique or unknown risks?*

Response: The Proposed Action's effects on the human environment are not likely to be highly uncertain or involve unique or unknown risks. No unique or substantially unknown risks have been identified. Numerous scientific studies on hatchery risks have identified what NMFS considers an accurate list of potential concerns. As with most hatchery programs there is some degree of uncertainty as to how well the hatchery programs would be able to achieve goals stated in the HGMPs. However, from past experience NMFS can determine an approximate risk level associated with the Proposed Action and steps to further contain that risk. The Proposed Action includes explicit steps to monitor and evaluate uncertainties in a manner that allows timely

adjustment to risks that might arise. NMFS retains the ability, through its regulations, to require changes if the program is determined to be ineffective, particularly with respect to the control of genetic effects on salmon and steelhead. Finally, numerous actions described in the hatchery program are already in place and have demonstrated their effectiveness, at least initially, reducing the level of uncertainty.

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?

Response: The Proposed Action is not likely to establish a precedent for future actions with significant effects or to represent a decision in principle about a future consideration. Other hatchery operations in the UCR Basin have been analyzed through similar ESA analyses and National Environmental Policy Review (NEPA) reviews, so this action and the analysis thereof is not unique. Moreover, we do not consider any hatchery program a precedent for another one as each program has unique characteristics and risks involved.

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

Response: NMFS is well aware of the possibility that hatchery practices in one basin may not be likely to raise significant impacts on their own, but that the totality of hatchery operations in the UCR Basin could give rise to cumulatively significant impacts. Therefore, NMFS has completed environmental impact statements (EISs) on hatchery operations across the Basin (NMFS 2014; NMFS 2017) which can be relied upon to both disclose the significant impacts of hatcheries on a broad scale and to consider whether the Proposed Action itself could give rise to cumulatively significant impacts when added to the impacts of other hatcheries across the region. For this analysis, NMFS has incorporated the Mitchell Act Final EIS (NMFS 2014) into the analysis, and cumulative impacts of the Proposed Action have been considered in the Supplemental EA (Attachment A) and in the associated ESA section 7 consultation biological opinion (NMFS 2020). The take of ESA-listed salmon and steelhead is small enough to result in a no-jeopardy ESA determination when considering all existing conditions, all other permits, and other actions in the area affecting these conditions and permits. These hatchery programs are coordinated with monitoring so that hatchery managers can respond to changes in the status of affected listed species. If the cumulative impacts of salmon management efforts fail to provide for recovery of listed species, then discussions would occur and potential adjustments to the hatchery production levels may be proposed through consultations between the program operators and NMFS.

The Proposed Action is related to other hatchery production programs in that many are guided by the same legal agreements, mitigation responsibilities, and managed by the same agencies. While direct and indirect impacts of the Proposed Action are not expected to be measurable outside the project area, it is also important to consider how impacts of certain activities outside the project area may or may not interact with the Proposed Action in such a way that impacts on resources are exacerbated.

The 2019 EA relied on the cumulative impacts considerations in the Mitchell Act Final EIS for overall guidance, and then compared the potential cumulative effects of the Proposed Action

(section 5) added to the cumulative effects of the operation of all the hatchery programs in the Columbia River Basin (NMFS 2014; NMFS 2017).

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?*

Response: The Proposed Action does not include any new construction and is, therefore, unlikely to adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places. Accordingly, it is equally unlikely that the Proposed Action may cause loss or destruction of significant scientific, cultural, or historic resources because of the limited geographic scope of the project area, which includes none of the aforementioned structures or resources. In addition, the Proposed Action would produce salmon, which are culturally important to the tribes.

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?*

Response: The degree to which the Proposed Action adversely impacts endangered or threatened species, or their critical habitat, as described in the Supplemental EA, will be no more than low-adverse. In the Supplemental EA, NMFS took into account the analysis performed in ESA biological opinion completed on the proposed hatchery program that determined that the program will not reduce appreciably the likelihood of survival and recovery of the two ESA-listed species within the action area, and therefore concluded the UCR Spring Chinook Salmon Evolutionarily Significant Unit (ESU) and the UCR Steelhead DPS will not be jeopardized (NMFS 2020).

The Supplemental EA (Attachment A) and biological opinion (NMFS 2020) also summarize the impacts of the Proposed Action on ESA-designated critical habitat. Both concluded that the expected impacts on critical habitat for endangered or threatened species from the activities associated with the hatchery program (such as maintenance of facilities and instream structures) are unlikely to adversely modify or destroy critical habitat elements.

The Supplemental EA also analyzed impacts on bull trout. An ESA section 7 informal consultation was completed by USFWS on incidental impacts of the proposed hatchery programs on ESA-listed bull trout. The USFWS concurred with NMFS and concluded that the effects of the proposed hatchery programs may affect, but not likely to adversely affect bull trout and its designated critical habitat (USFWS 2020).

10. *Can the Proposed Action reasonably be expected to threaten a violation of Federal, state, or local law or requirements imposed for environmental protection?*

Response: The Proposed Action is not expected to threaten any violations of Federal, state, or local laws or requirements imposed for environmental protection. No regulatory violations or other significant environmental impacts are expected to result from the Proposed Action. The

Proposed Action is also specifically designed to comply with the ESA and is part of the purpose of the action.

Hatchery operations are required to comply with the Clean Water Act, including obtaining and operating within the limit of National Pollutant Discharge Elimination System (NPDES) permits for discharge from hatchery facilities. Acclimation facilities without NPDES permit requirements discharge at a minimal level, as to not need a NPDES 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?

Response: The Proposed Action is not expected to adversely affect stocks of marine mammals as defined in the Marine Mammal Protection Act. Direct impacts on marine mammals are not likely because marine mammals are not present in the UCR Basin. Minimal indirect impacts on marine mammals may occur, as the hatchery-origin Chinook salmon from the UCR Basin released into the Columbia River provide a potential food source benefits for the marine mammals inhabiting the pelagic zones off the coast of Washington and Oregon along with pinniped populations located in the lower portions of the Lower Columbia River Basin and Columbia River Estuary. The Proposed Action affects marine mammal prey availability in two ways: by producing fish that marine mammals can feed on and by reducing the number of natural-origin fish that would ultimately be available to the whales as prey. However, we believe this adverse effect is minimal on natural-origin fish and do not expect the Proposed Action to significantly adversely affect stocks of marine mammals as defined under the Marine Mammal Protection Act.

12. Can the Proposed Action reasonably be expected to significantly adversely affect managed fish species?

Response: The Proposed Action is not expected to affect managed fish species beyond what NMFS identifies as low-adverse. The impacts of the Proposed Action on managed fish species, specifically salmon, steelhead, and bull trout, within the UCR Basin are limited to the ecological impacts of intra and inter-species competition and predation related to the release of juveniles and the direct effects on target and non-target species due to broodstock collection activities. Any and all effects to managed fish within the project area related to the Proposed Action have been analyzed in NMFS' biological opinion (NMFS 2020) and USFWS' Letter of Concurrence (USFWS 2020). See the biological opinion and Letter of Concurrence for further details on the impacts of the Proposed Action to managed species.

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?

Response: The Proposed Action was found to have no adverse effects on EFH, as defined under the Magnuson-Stevens Fishery Conservation and Management Act (NMFS 2020). The activities described in the HGMPs, such as maintenance of intake structures, are unlikely to remove or destroy habitat elements. These activities do not include any construction or habitat modification and, therefore, do not affect EFH necessary for these species to carry out spawning, breeding, feeding, or growth to maturity.

The return of hatchery-origin UCR summer Chinook salmon produced by the hatchery program is likely to have a positive effect on water quality related to marine-derived nutrients because the additional returns from hatchery production will result in a net increase of marine-derived nutrients in the project area.

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?

Response: The Proposed Action is not expected to have an adverse effect on vulnerable marine or coastal ecosystems, including but not limited to, deep coral ecosystem because any meaningful or discernible effects would be limited to the affected environment (i.e., the UCR Basin) which does not extend to the marine environment. The Proposed Action is expected to have a low-adverse impact to Pacific salmon EFH, but the associated impacts due to the Proposed Action are anticipated to only take place within the Columbia River Basin and, therefore, will not affect vulnerable 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.)?

Response: The Proposed Action is expected to have no more than a low-adverse effect on biodiversity or ecosystem functions within the affected environment. The hatchery programs may result in small improvements to benthic productivity through increased deposits of marine-derived nutrients resulting from returning hatchery-origin adult carcasses to the watersheds post-spawning. Although summer Chinook salmon produced in the hatchery program is expected to compete with other fish species in the project area, predation is not expected in large quantities since juvenile hatchery-origin salmon generally migrate through the action area quickly after being released (see subsection 4.4.3, Competition and Predation). Hatchery-origin summer Chinook salmon produced in the hatchery program may also provide a prey base for other predatory species (see subsection 4.4.3, Competition and Predation), but the program represents only a small portion of the total amount of food available to predator species. Therefore, the Proposed Action is not expected to have significant impacts on biodiversity and ecosystem function.

16. Can the Proposed Action reasonably be expected to result in the introduction or spread of a nonindigenous species?

Response: The Proposed Action is not reasonably expected to result in the introduction or spread of nonindigenous species because the Proposed Action has no potential to cause the transport, release, propagation, or spread of non-indigenous species. The Proposed Action involves the operation of hatchery facilities for the purpose of artificial propagation of salmonids in the UCR Basin for the recovery and sustainability of SRKW. The artificial propagation program uses returning hatchery UCR summer Chinook salmon adults as broodstock and, therefore, will not introduce nonindigenous species to the project area.

1.4. Determination

In view of the information presented in this document, the analysis contained in NMFS' 2019 EA (NMFS 2019), and the analysis in the attached Supplemental EA, it is hereby determined that NMFS' determination that the Wells Summer Chinook Salmon HGMP meets the criteria of limit 5 of the 4(d) Rule will not significantly impact the quality of the human environment. 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.



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NMFS West Coast Region

May 14, 2020
Date

2. REFERENCES CITED

- NMFS. 2014. Final Environmental Impact Statement to inform Columbia River Basin Hatchery Operations and the Funding of Mitchell Act Hatchery Programs. West Coast Region. National Marine Fisheries Service. Portland, Oregon.
- NMFS. 2017. Final Environmental Impact Statement and record of decision for *U.S. v. Oregon*. November 6, 2017. NMFS, Portland, Oregon. 420p.
- NMFS. 2019. Environmental Assessment for Endangered Species Act Section 4(d) Approval and Section 10(a)(1)(A) Permit Issuance for Steelhead Hatchery Programs and Section 10(a)(1)(B) Permits Issuance for Summer/Fall and Fall Chinook Salmon Hatchery Programs in Upper Columbia River Basin Final Environmental Assessment. June 2019. 134p.
- NMFS. 2020. Endangered Species Act (ESA) Section 7(a)(2) Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat (EFH) Consultation Wells Summer Chinook Hatchery Program for Southern Resident Killer Whales NMFS Consultation No.: WCR0-2020-00825. May 11, 2020. 112p.
- USFWS. 2020. Letter to Allyson Purcell (NMFS) from Brad Thompson (USFWS). Letter of Concurrence. March 31, 2020. 7p.