Finding of No Significant Impact

Background

Proposed Action:

The National Marine Fisheries Service (NMFS) proposes to issue two determinations under our Endangered Species Act (ESA) 4(d) Rule for spring/summer Chinook salmon hatchery programs in the Yankee Fork and Panther Creek, which are tributaries to the upper Salmon River in Idaho. Details about the operation of these programs can be found in our Environmental Assessment (EA).

Alternatives Evaluated in the EA:

Alternative 1 – No Action: NMFS would not make a determination under the 4(d) Rule.

Alternative 2 – Proposed Action: NMFS would make a determination that the submitted Hatchery and Genetic Management Plans (HGMPs) meet the requirements of the 4(d) Rule.

Alternative 3 – Reduced Production: NMFS would make a determination that revised HGMPs with production levels 50 percent less than the currently submitted HGMPs meet the requirements of the 4(d) Rule

Alternative 4 – Program Termination/No Production: NMFS would make a determination that the submitted HGMPs would not meet the requirements of the 4(d) Rule, and production would cease.

Selected Alternative:

Alternative 2 – Proposed Action: NMFS would make a determination that the HGMPs meet the requirements of the 4(d) Rule. The Yankee Fork and Panther Creek salmon hatchery programs in the Salmon River Basin would be implemented as described in the submitted HGMPs.

Related Consultations:

Two formal ESA section 7 consultations and one Essential Fish Habitat (EFH) consultation under the Magnuson-Stevens Fishery Conservation and Management Act (MSA) have been completed for the Proposed Action

Analysis of the operation of the Yankee Fork and Panther Creek Chinook salmon hatchery programs were included in NMFS's biological opinion from 2017[1], which concluded that the program operations do not jeopardize the continued existence of Snake River Spring/Summer Chinook salmon or Snake River steelhead or destroy or adversely modify their designated critical habitat. The EFH consultation concluded that, because of the consequence of potential

[1] NMFS. 2017. Endangered Species Act Section 7 Consultation Biological Opinion. Four Salmon River Basin Spring/Summer Chinook Salmon Hatchery Programs in the Upper Salmon River Basin. NMFS Consultation No.: WCR 2017-7432.

genetic effects during spawning and the predation and competition effects during the juvenile outmigration stage, the Proposed Action would adversely affect EFH for Pacific salmon; however, the Proposed Action includes the best approaches to avoid or minimize those adverse effects.

NMFS also consulted with the U.S. Fish and Wildlife Service (USFWS) regarding the effects of operating these programs on bull trout. The consultation is documented in the USFWS 2017 biological opinion[2]. The USFWS determined that the level of anticipated take is not likely to result in jeopardy to the species or destruction or adverse modification of critical habitat.

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 any measures to reduce impacts 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: No. Eleven resource categories were analyzed in the EA. In the Environmental Consequences section (section 4) of the EA, impacts were categorized on a scale from "undetectable" to "high". Implementation of the program have both beneficial and adverse impacts. Below is a summary of the impact conclusions from each of the eleven resources analyzed. Detailed explanations of these conclusions are described in section 4 of the EA.

EA Section	Resource Analyzed	Effects Conclusion
4.1	Listed Species	Low-adverse
4.2	Non-listed Species	Low-adverse
4.3	Fish Habitat	Low-adverse
4.4	Tourism and Recreation	Medium-beneficial
4.5	Environmental Justice	Medium-beneficial
4.6	Cultural Resources	Medium-beneficial
4.7	Socioeconomics	Medium-beneficial
4.8	Human Health and Safety	Low-adverse
4.9	Water Quality, Water Quantity, and Hydrology	Low-adverse
4.10	Land Use and Ownership	Low-adverse
4.11	Transportation	Low-adverse

[2] Biological Opinion for the Authorizations and Funding of the Construction, Maintenance, Monitoring, and Evaluation of the Crystal Springs/Summer Chinook Salmon Hatchery Program. 01EIFW00-2018-F-0203

In the Cumulative Effects section (section 5) of the EA, the cumulative effects on the eleven resources analyzed, when including climate change, would likely be similar to the effects described for each resource, and do not collectively rise to an overall significant impact. Because of uncertainty in predicting the specific impacts of climate change, it is likely that magnitude of the impact would change slightly from that described in each of the resource sections; however, the overall effect is expected to remain low. Therefore, the overall impacts will be insignificant.

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

   Response: No. Though there may be minor safety risks for human health for two activities outlined below:

   - Employees installing the weir for collecting broodstock will have a risk of injury or drowning; however, those risks are mitigated by safety precautions and not extended to the general public.
   - Risk of encountering chemicals used for cleaning facilities or fish disease therapeutics; however, these risks are also mitigated by storage and use precaution protocols that protect water quality and human health.

Based on the safety precautions included in the Proposed Action, the effects to public health or safety are not expected to rise to a level of significance.

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: No. The hatchery programs, including weirs, would result in no change in land ownership, nor the existing designation as a Wild and Scenic River or the values described in the designation, and would have only minor impact on 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?***

   Response: No. Though NMFS recognizes that the use of hatcheries, in general, can be controversial to some members of the public, these hatcheries are small in scale, and operate in a region with ongoing hatchery supplementation. The resources analyzed that may affect the quality of the human environment outlined in the table below. All had low- adverse or medium-beneficial impact, and are unlikely to be highly controversial.

EA Section	Resource Analyzed	Effects Conclusion
4.4	Tourism and Recreation	Medium-beneficial
4.5	Environmental Justice	Medium-beneficial

4.6	Cultural Resources	Medium-beneficial
4.7	Socioeconomics	Medium-beneficial
4.8	Human Health and Safety	Low-adverse
4.9	Water Quality, Water Quantity, and Hydrology	Low-adverse
4.10	Land Use and Ownership	Low-adverse
4.11	Transportation	Low-adverse

In addition, during the public comment period, there were no comments received. Therefore, NMFS does not expect the effects of the action to be highly controversial.

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

   Response: No. Hatcheries programs similar to the two proposed in this EA have been operating in the region for decades, with information from those operations showing that they have resulted in low impacts on the human environment. The programs include ongoing monitoring and evaluation of the effectiveness of the program as well as the impact on the natural-origin population. Monitoring and evaluation results will inform managers and NMFS of the impact of the programs, and NMFS retains the ability through its regulations to require changes if the programs are determined to be ineffective, particularly with respect to the control of genetic effects on salmon. Therefore, while there is always some uncertainty involved, the risks are generally known, common to hatchery programs, and unlikely to result in effects which are highly uncertain.

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: No. Hatchery programs like these have been operating in the region (and around the country) for decades. By nature, they are typically isolated from other hatchery programs, and not linked to future development. In addition, programs in this area must be authorized by both Federal and state agencies that regulate impacts to fish, wildlife, and water resources. Like other existing hatchery actions in the Snake River basin, these programs are designed to meet a specific purpose, recovery and harvest supplementation, and, therefore, this action does not set a precedent that would carry over into other determinations in the Snake River basin. Allowing the operation of these hatchery programs is unlikely to establish a precedent that leads to any future actions with significant effects.

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

   Response: Yes, though not beyond the impacts previously considered in recent NMFS Environmental Impact Statements (EISs). NMFS is aware of the possibility that hatchery practices in a single basin may not be likely to raise significant impacts on their own, but

that the totality of hatchery operations in the Columbia River Basin in total could give rise to cumulatively significant impacts. While not directly linked, the effects of the programs included in this EA are similar to those that were included in the 2014 Mitchell Act FEIS[3] as part of 49 hatchery programs in the Snake River Basin and 117 hatchery programs in the Columbia River Basin. In this respect, they are "related" because they are similar; however, it is important to note that the Yankee Fork and Panther Creek programs are neither included as part of those actions, nor are they linked directly in how they are funded, operated, or managed.

To address the cumulative impacts, the EA relied on the cumulative impacts considerations in the Mitchell Act Final EIS[4] 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.

The completed EIS on Mitchell Act hatchery[3] operations across the basin relied upon to both the impacts of hatcheries on a broad scale as well as whether the Proposed Action itself could give rise to cumulatively significant impacts when added to the impacts of other hatcheries across the region. For the analysis specific to Yankee Fork and Panther Creek, NMFS has incorporated the 2014 Mitchell Act Final EIS[3] into the analysis, and cumulative impacts of the Proposed Action have been considered in the EA and in the associated ESA section 7 consultation biological opinion[5].

NMFS has specifically incorporated the Mitchell Act EIS into the analysis in the EA; therefore, we conclude that the potential cumulative impacts related to the operation of these two programs has been sufficiently analyzed in the Mitchell Act EIS, which is incorporated into this EA.. The increment of impacts to the human environment from the Proposed Action, added to the cumulative impacts of hatcheries and other actions across the region, does not represent a significant level of impact beyond that previously considered.

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: No. By nature, these programs are operated in areas that are secluded, and away from other infrastructure. Access to the sites is provided by existing roads. A

[3] 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.
[4] 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.
[5] NMFS. 2017. Endangered Species Act Section 7 Consultation Biological Opinion. Four Salmon River Basin Spring/Summer Chinook Salmon Hatchery Programs in the Upper Salmon River Basin. NMFS Consultation No.: WCR 2017-7432.

historical gold dredge is located on Yankee Fork, however, it is several miles upstream of the activities proposed in the Yankee Fork Chinook salmon hatchery production. No other historical sites are near the activities described in the EA.

Implementation of the Proposed Action is expected to provide medium positive cultural resource benefits by increasing the potential for ceremonial and subsistence harvest of salmon by the Shoshone-Bannock Tribes, which has been limited under current conditions.

These programs have little or no impact on historical resources or other infrastructure, and may have a medium beneficial impact to cultural resources (tribal fishing).

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: No. As part of the review process, two ESA section 7 consultations were completed to analyze the effects of the action on threatened species. The species, effects, and conclusions are included below. As discussed above, the EA determined that the impacts to resources, which included ESA-listed species, ranged from low-adverse to medium-beneficial, and therefore would not result in significant impacts to endangered or threatened species or their designated critical habitats.

Species	Consultation Number	Effects Determination	Conclusion
Snake River Spring/Summer Chinook Salmon	WCR 2017-7432	Likely to Adversely Affect	Will not jeopardize the continued existence (no jeopardy)
Snake River Basin Steelhead	WCR 2017-7432	Likely to Adversely Affect	Will not jeopardize the continued existence (no jeopardy)
Coterminous United States population Bull Trout	01EIFW00-2018-F-0203	Likely to Adversely Affect	Will not jeopardize the continued existence (no jeopardy)

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: No. The project complies with ESA and MSA requirements, and during project scoping, no other laws were identified in the resources impacted.

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: No. The Proposed Action would increase the availability of Chinook salmon for marine mammals to prey on; however, the increase would be difficult or impossible to measure because of the small size of the programs. If any effect was measurable, it would be low positive. Therefore, the action will not significantly adversely affect marine mammals.

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

Response: No. The Proposed Action is not expected to affect managed fish species beyond what NMFS identifies as low-adverse in the EA. The impacts of the Proposed Action on managed fish species, specifically salmon, steelhead, and bull trout, within the Salmon River 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' 2017 biological opinion and MSA consultation[6] as well as the USFWS' biological opinion[7]. See the biological opinions 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: No. A separate consultation was conducted to evaluate adverse effects to essential fish habitat for Chinook salmon[6]. Though adverse effects are expected, implementing construction best management practices, monitoring and addressing passage concerns at existing facilities, and reporting program compliance will avoid or minimize adverse effects to critical habitat. Because the effects are avoided or minimized, they will not rise to the level of significance.

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: No. Though Chinook salmon produced as part of the programs will migrate to the marine ecosystem, the number produced represent only a small proportion of the total Chinook salmon population. They are not expected to affect vulnerable marine or coastal ecosystems or deep coral. Therefore impacts (if any) will not rise to the level of significance.

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[6] NMFS. 2017. Endangered Species Act Section 7 Consultation Biological Opinion. Four Salmon River Basin Spring/Summer Chinook Salmon Hatchery Programs in the Upper Salmon River Basin. NMFS Consultation No.: WCR 2017-7432.

[7] Biological Opinion for the Authorizations and Funding of the Construction, Maintenance, Monitoring, and Evaluation of the Crystal Springs/Summer Chinook Salmon Hatchery Program. 01EIFW00-2018-F-0203

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

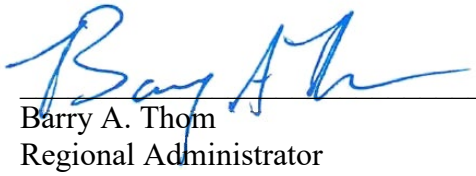
Response: No. The Proposed Action is expected to have no more than a low-adverse effect on biodiversity or ecosystem functions within the affected environment. The hatchery programs may result in small improvements to benthic productivity through increased deposits of marine-derived nutrients from decomposing carcasses of returning hatchery-origin adult Chinook salmon after they spawning. Although Chinook salmon produced in the hatchery program are expected to compete with other fish species in the project area, predation is not expected to have more than a low-adverse level of impact since juvenile hatchery-origin salmon generally migrate through the action area quickly after being released (see subsection 4.4.3, Competition and Predation in the EA). Hatchery-origin 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 in the EA), a low-positive impact, though 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: No. The Chinook salmon produced by the programs are native to the basin, and will contribute to the natural-origin populations already present. The fish produced are indigenous, and are not expected to attract or support any known invasive species.

Determination

In view of the information presented in this document and the analysis contained in the supporting EA prepared for the Yankee Fork and Panther Creek Chinook Salmon hatchery programs, and the associated ESA Section 7(a)(2) biological opinions and MSA Essential Fish Habitat Consultation, it is hereby determined that NMFS' determinations under our ESA 4(d) rule for the Yankee Fork and Panther Creek spring/summer Chinook Salmon hatchery programs will not significantly impact the quality of the human environment as described above and in the supporting EA. 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 EIS for this action is not necessary.



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September 14, 2020
Date