

WDFW Response to SEPA Public Comments – Co-Manager’s Hatchery Policy

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On May 1, 2023 the Washington Department of Fish and Wildlife (WDFW) issued a [SEPA Determination of Non-Significance \(DNS\)](#) for the environmental effects of the [Co-Manager’s Draft Hatchery Policy](#) (draft policy). WDFW held a public comment period for the SEPA determination from May 1 through May 26, 2023, and received a total 13 public comments – 8 comments from individuals and 5 comments from organizations. [These comments](#) were presented to and summarized for the Washington Fish and Wildlife Commission (FWC) at a Special Fish Committee meeting on June 16, 2023. Among the individual comments, two people supported the DNS, two were opposed, and two had ambiguous or non-responsive comments. The five organizations were united in their opposition to the DNS and provided similar sets of comments. In what follows we provide concise responses to the collective main themes of the public comments that were part of the arguments against the DNS.

General statement about the draft policy

The overarching purpose of the draft policy is to reaffirm WDFW and Tribal shared commitment for the co-management of anadromous salmon and steelhead hatcheries in Washington State, where applicable. The foundation for this shared commitment is our recognition that legacy and ongoing habitat loss and climate change impede natural production of salmon and steelhead sufficient to achieve recovery, as defined in the draft policy, and to support Treaty Right fishing obligations. As such, the Co-Managers consider hatchery production necessary to recover at-risk populations and to preserve Tribal culture and legal rights.

SEPA phased environmental review

Several commenters stated that WDFW’s use of a phased environmental review for this draft policy is a violation of SEPA because (1) it deliberately avoids discussion of the cumulative impacts of hatchery operations (WAC 197-11-060(5)(d)(ii), and (2) WDFW cannot be trusted to conduct the subsequent more specific environmental review. Often these two arguments are intertwined. One set of comments considered that a cumulative impacts analysis should include “historic, ongoing, and future hatchery impacts on wild salmon and steelhead, as well as the impacts of commercial, recreational, and tribal fisheries on ESA-listed species and other impacts¹.”

A phased environmental review is appropriate for this draft policy, and it does not violate SEPA. The draft policy is a nonproject action that governs the development of a series of connected actions (see definition of nonproject actions in WAC 197-11-704(2)(b)(iii)). A phased environmental review is appropriate when “[t]he sequence is from a nonproject document to a document of narrower scope such as a *site specific* [sic] *analysis*” (WAC 197-11-060(5)(c)(i), emphasis added). The hatchery program plans (e.g., Hatchery Genetic Management Plans (HGMPs)) are the series of connected actions and are directives as to how each *site-specific hatchery program* should be operated. The plans are connected actions since each are guided by the draft policy, and the plans themselves are connected as jointly

¹ Joint comments by The Conservation Angler and Wild Fish Conservancy

developed regional or watershed “bundles.” Under this draft policy most hatchery program plans will be or have been developed as HGMPs. Each HGMP bundle will be or has been subjected to a federal environmental review (NEPA and ESA (Section 7) consultation). The federal process is a robust environmental review, equal to the requirements of SEPA, and can be relied upon by SEPA (WAC 197-11-610). The federal review process and the subsequent reliance by SEPA serves as the second environmental review and completes the phased process. To date, there are 121 WDFW hatchery programs that require federal consultation. HGMPs have been submitted for each of those 121 programs, and the federal environmental review has been completed for 77 (64%) of those programs. Additionally, there are 51 WDFW hatchery programs that do not require federal consultation. WDFW will prepare bundled hatchery program plans and subject each bundle to a comprehensive SEPA analysis, completing the phased process for those hatcheries.

WDFW is not using the phased process to avoid an analysis of cumulative impacts. Cumulative impact analyses can be part of the environmental review of HGMP or hatchery program plan bundles. For example, NOAA Fisheries prepared a 437-page EIS for a bundle of 10 HGMPs in the Duwamish-Green River Basin² that included a 16-page Cumulative Effects chapter. Past actions, present conditions, future actions and conditions, climate change, habitat restoration, and fisheries were discussed as part of this cumulative effects chapter.

WDFW is not avoiding comprehensive environmental reviews of our hatchery plans, including the HGMPs. FWC’s original hatchery policy, C-3619, called for the development of Hatchery Action Implementation Plans (HAIPs). Although SEPA for C-3619 was not a phased analysis, WDFW committed to conducting SEPA on the HAIPs. Eventually, WDFW ended the HAIP process, instead prioritizing the development and submission of HGMPs. HGMPs have been submitted to NOAA for environmental analyses for all hatchery programs that would have produced HAIPs. Therefore, WDFW’s termination of the HAIP process did not circumvent environmental reviews of our hatchery programs. The FWC’s new hatchery policy, C-3624, called for the development of Hatchery Management Plans (HMPs) based on the processes outlined in a Technical Procedures Document (TPD), with a phased environmental review. The development of the TPD has been on temporary hold for the past two years while WDFW worked with Tribal Co-Managers to complete the Co-Manager Hatchery Policy. After the final status of the draft policy is determined, WDFW will resume work on the FTP. At which time, the TPD or bundled HMPs will undergo a federal environmental review (HMPs as HGMP), or SEPA, as appropriate.

Federal review process (NEPA/Section 7) is insufficient and not a replacement for SEPA

Commenters’ concerns here focused on three arguments: (1) The federal consultation process is inadequate since the threshold for a significant environmental effect is the likelihood that the hatchery action will “jeopardize the continued existence” rather than recovery; (2) there is no guarantee that the NEPA process will adequately address cumulative impacts of the draft policy; and (3) WDFW operates hatcheries prior to the completion of the federal process.

The federal environmental review process is robust and at least as adequate as a SEPA review process conducted by WDFW. The federal review process consists of two components: NEPA and ESA (Section 7) consultation. As one of the commenters stated, the Section 7 consultation is indeed focused on jeopardy. However, it is informative to understand how the federal process defines “jeopardize the

² Final Environmental Impact Statement for 10 Salmon and Steelhead Hatchery Programs in the Duwamish-Green River Basin. NOAA Fisheries. July 2019. Includes HGMPs for five WDFW programs, four Muckleshoot Indian Tribes programs, and one Muckleshoot Indian Tribe and Suquamish Tribe program (see Table 1 in FEIS).

continued existence.” The phrase means “to engage in an action that **reasonably** would be expected, directly or indirectly, to reduce appreciably the **likelihood** of both the survival and recovery of a listed species in the wild by reducing the reproduction, **numbers**, or distribution of that species” (50 CFR Part 402.02; emphasis added). Indeed, recovery is a concern for the Section 7 consultation. Furthermore, the federal definition of “jeopardize the continued existence” is concordant with SEPA. First, as it relates to HGMPs, environmental impacts concern at least “[h]abitat for and **numbers** or diversity of species of plants, fish, or other wildlife” (WAC 197-11-444(d)(i); emphasis added). Second, a SEPA threshold determination is made based on if a “proposal is likely to have a probable significant adverse environmental impact” (WAC 197-11-330(1)(b)). Finally, SEPA defines significant as “a **reasonable likelihood** of more than a moderate adverse impact on environmental quality” (WAC 197-11-794; emphasis added). Therefore, the federal concept of “jeopardize the continued existence” is quite similar to the SEPA threshold determination definitions.

NEPA and SEPA are nearly identical in their processes. In SEPA a threshold determination of nonsignificance (DNS), mitigated nonsignificance (MDNS), or significance (DS) is made. If the determination is a DS then an environmental impact statement (EIS) is required. In NEPA an environmental assessment (EA) is conducted to determine environmental effects. The EA includes a public review process. The EA results in either a Finding of No Significant Impact (FONSI) or a requirement to develop an EIS. The entire federal process spanning both the NEPA and ESA consultation, which includes an EA, possible EIS, Evaluation and Recommended Determinations (Section 4(d) Limit 6 – concerns take), and Biological Opinions (Section 7) is extensive and is often hundreds of pages in length. WDFW considers this process, including the opportunity for public comment, to be more than adequate environmental review and prioritizes the federal process rather than SEPA. The NEPA environmental analysis can be relied upon for SEPA compliance (WAC 197-11-610).

One commenter was concerned that the NEPA process will not adequately address cumulative impacts of the draft policy. There are no cumulative effects of the draft policy because the draft policy does not dictate any specific outcomes of future hatchery production goals. Any cumulative effects would be the property of hatcheries within a particular region or watershed. As we discussed in the [SEPA phased environmental review](#) section, since the HGMPs are now bundled based on region or watershed, the federal process can include, and has included, meaningful cumulative impacts analyses.

Finally, the issue as to whether WDFW operates its hatcheries lawfully with respect to ESA is a subject of current litigation and not within the scope of this review.

The draft policy does not prioritize recovery and does not align hatchery programs with adopted recovery and rebuilding plans

Many commenters noted that compared with WDFW’s current hatchery policy (C-3624) the draft policy has a decided absence of priorities or principles related to the recovery of at-risk natural-origin populations. These concerns take two forms: (1) the absence of conservation³ and recovery as a priority of the draft policy, and (2) no statement affirming the alignment of the draft policy with recovery and rebuilding programs. One commenter⁴ stated that since the draft policy is “silent on these issues [conservation and recovery]” the draft policy “terminates” or “eliminates” conservation and recovery as policy priorities.

³ The conservation priority will be discussed separately in the following set of comments.

⁴ Joint comments by The Conservation Angler and Wild Fish Conservancy

The commenters are correct in that the draft policy, unlike C-3624, does not explicitly state that recovery of natural-origin populations or their life history diversity are among the highest priorities of the policy. Nor does the draft policy reference adopted recovery and rebuilding plans. However, the draft policy is also silent on other management actions, such as harvest plans, the North of Falcon harvest allocation process, and harvest associated with the Pacific Salmon Treaty. But this silence does not mean that WDFW and Tribes have eliminated harvest agreements, for example. We disagree that the “silence” or rather the lack of emphasis on recovery and recovery plans means that the draft policy has eliminated recovery as a priority or that the co-managers are walking away from existing recovery and rebuilding plans. The draft policy could have been clearer as to how the policy promotes recovery and could have explicitly stated that hatchery program plans and HGMPs shall be aligned with regional or watershed recovery and rebuilding plans.

The draft policy approaches recovery differently than does WDFW’s current hatchery policy (C-3624). Recovery is defined in the draft policy as “the rebuilding of populations to levels that support healthy ecosystem functions and services, including robust harvest, where applicable.” As stated above in the General statement about the draft policy section and in the draft policy’s Purpose statement, the Co-Managers recognize that there is legacy and ongoing habitat loss, and changing environmental conditions and ecosystem functions. These changes to salmon and steelhead environments preclude sufficient production to meet recovery needs, including harvest in support of Tribal Treaty Rights. Therefore, the draft policy emphasizes that hatcheries are a necessary and primary management tool for the recovery of natural-origin populations.

Conservation of natural-origin populations is not a priority in the draft policy.

Most commenters stated in one form or another that the draft policy insufficiently protects natural-origin (“wild”) populations. Included in this concern are comments that the draft policy:

- *must state explicitly that conservation is the highest priority,*
- *represents a shift from conservation and recovery to Tribal Treaty Rights,*
- *emphasizes benefits without adequately acknowledging risks to natural-origin populations,*
- *minimizes scientific evidence concerning hatchery risks to natural-origin populations.*

The draft policy is not an edited version of C-3624; rather, it was written anew from the ground up. Policies reflect the values of the policymakers, and the primary objective of the draft policy is a reaffirmation of WDFW and Tribal shared commitment for the co-management of anadromous salmon and steelhead hatcheries in Washington State. The contents of the draft policy reflect this shared commitment. Tribes did not participate in the development of C-3624 and therefore C-3624 fails to acknowledge Tribal Co-Manager roles and their values in making hatchery management decisions. Therefore, C-3624 and the draft policy emphasize different objectives in the management of hatcheries. C-3624 emphasizes conservation and recovery, while the draft policy acknowledges the State’s commitment to Tribal Treaty Rights and the role that Treaty Tribes have in hatchery management decisions, and recognizes the benefits of hatcheries toward recovery. The draft policy does not reject conservation as a high value, it expresses additional values that are important to the Treaty Tribes.

Regardless of the high-level policy differences between C-3624 and the draft policy, both policies require the development of hatchery management plans of which most are HGMPs. Both policies will generate HGMPs through the same process: Co-management development and submission, and then a federal environmental review. Both policies will result in bundled HGMPs developed at the regional or

watershed level, and both policies have an adaptive management component to continuously re-evaluate and adjust hatchery actions and objectives. Since both policies will result in the same federal environmental review process, with respect to HGMP development and implementation, and conservation, both policies are the same from the perspective of potential impacts to the environment.

To be clear and complete, C-3624 provides a long list of “highest priority policy commitments,” in addition to the “conservation and recovery of wild salmon.” Also included as a highest priority is the “conservation of genetic resources found in hatchery populations.” The Purpose statement in C-3624 includes both “conservation and recovery of wild salmon and steelhead” and “provide sustainable economic and stability benefits to recreational, commercial and tribal fisheries.” C-3624 does a good job highlighting the need for conservation and harvest objectives. The draft policy attempts to highlight both conservation and harvest objectives in Principle 4. Conservation of natural-origin populations is the emphasis in the second and third bullet of Principle 4, where the policy highlights the need to size hatchery programs appropriately, and that natural-spawning populations should be locally adaptive and diverse genetically. The draft policy allows for different methods to achieve these directives, depending on regional and watershed conditions and the status of the natural-origin populations.

In response to the four bullets listed above in italicized typeface:

- The most prominent language in the draft policy is the reaffirmation of the WDFW and Tribal shared commitment for the co-management of anadromous salmon and steelhead hatcheries in Washington State.
- The draft policy explicitly highlights the importance of WDFW acknowledging Tribal Treaty Rights and the co-management of hatcheries. Expressly committing to the value that co-management serves Tribal Treaty interests doesn’t mean that the policy is deemphasizing conservation. The draft policy does place hatchery production as a principal contributor to the recovery of natural-origin population; hatchery production is also a key element of C-3624.
- We agree the draft policy emphasizes hatchery benefits over the potential risks that hatcheries may impose on natural-origin populations. The draft policy does acknowledge the existence of risks, but the policy does not provide guidance as to how (or if) those risks should be mitigated. The policymakers consider risk mitigation to be a property of the hatchery program plans, including the HGMPs, and are evaluated at the regional or watershed level.
- The comments are replete with statements such as “overwhelming weight of scientific evidence documenting the harm that hatcheries cause to wild salmon and steelhead⁵” or “the well documented risks that hatchery production poses to wild populations⁶.” We appreciate the commenters’ science-based discussion of hatchery effects on natural-origin populations. Indeed, this is an important discussion. The WDFW technical staff that participated in the discussions during the development of the draft policy are familiar with the literature. We acknowledge that the literature consists of many examples of genetic and ecological hazards to natural-origin populations from hatchery production. We also acknowledge that it is rare for a study to be published that presents results without uncertainty – not only statistical uncertainty, but also ontological and epistemic uncertainty – uncertainties associated with inherent variability within a system (e.g., year to year differences in relative reproductive success) or uncertainties associated with our limits of knowledge (e.g., can results for one species from a particular watershed be applicable to another species in a different watershed?). We may be confident that a particular hazard is occurring (e.g., lower relative reproductive success for hatchery-origin spawners compared with natural-origin spawners), but there is uncertainty as to

⁵ Joint comments by The Conservation Angler and Wild Fish Conservancy

⁶ Comments by Trout Unlimited

what's being harmed – individual fish, a cohort, populations – and uncertainty concerning the consequence of the hazard when it does occur – no long-term effect to productivity, small/large reduction population size, maladaptation, extinction. And can the consequences be mitigated through appropriate hatchery management? In a recent paper on the genetic effects of hatchery supplementation on wild Atlantic salmon populations in Norway, the authors found that supplementation decreased genetic diversity within the natural-spawning populations in 11 of 19 cohorts. That's a documented hazard. However, the authors note that “[f]rom these data, it is evident that supplementation affects various populations differently and that there is large between-cohort variation, also within populations. The effect of supplementation can thus not be extrapolated between populations: each programme must be evaluated separately, preferably involving several cohorts to avoid biased outcomes due to stochasticity in the complex ecological systems⁷.” As more studies are conducted our epistemic uncertainty will decrease, providing us with more confidence in our understanding of the effects of hatchery production on natural-origin populations. At this time, we are cautious about making definitive conclusions about risks of hatchery production on natural-origin populations.

The draft policy constrains the use of best available science

This issue first emerged in April 2023 when F&W Commissioners were concerned with the language in the draft policy's Principle 5 stating that “[h]atcheries are to be designed and operated in a scientifically-sound and defensible manner” (emphasis added). Commissioners' concerns then, and the commenters' concerns now, are that “scientifically sound and defensible” is a downgrade from “best available science.”

The State of Washington defines “best available science” in WAC 365-195-905, which is a Department of Commerce WAC governing local land use planning under the Growth Management Act. There are many other definitions of best available science, and the FWC is presently working to develop their own definition and policy. There may be no material difference between “scientifically sound and defensible” and best available science. However, we recognize the commenters' concerns. Perhaps if the draft policy defines what is meant by scientifically sound and defensible, the commenters' concerns may be relieved.

The draft doesn't consider climate change

Several commenters stated that the draft policy ignores or does not emphasize climate as a factor affecting or will affect hatchery management and natural-origin populations.

We agree that environmental change, including climate change needs to be considered in the management of hatchery and natural-origin populations. We disagree that the draft policy ignores or does not adequately include climate change. The draft policy's Purpose statement includes “changing environmental conditions” as a primary factor that precludes sufficient production to meet recovery needs. Climate conditions are considered twice in Principle 4. Principle 6 calls for increased funding to plan for and implement management actions to address the negative effects of climate change. And Footnote 3 considers hatcheries as potential mitigation for the “worsening effects of climate change.”

⁷ Hagen et al. 2020. Evaluation of genetic effects on wild salmon populations from stock enhancement. ICES Journal of Marine Science 78(3):900-909.

No coordination with stakeholders – no transparent decision-making process

Some commenters were concerned that the draft policy did not specifically mention coordination with stakeholders as a requirement or needed process. In addition, there were concerns that the draft policy lacked a transparent decision-making process.

Stakeholders and other public entities can participate in the development of hatchery program plans including HGMPs through the FWC public process, and by providing NEPA and SEPA comments. WDFW will continue to coordinate with stakeholders for ongoing activities such as those involved with the development and implementation of recovery plans (e.g., Washington Lower Columbia Salmon Recovery and Fish & Wildlife Subbasin Plan).

C-3624 call for an explicit and transparent decision-making process that will be described in the Technical Procedures Document. The draft policy does not include such a process, but decision-making by the FWC is a public process.

The determination on non-significance (DNS) is illegal

Several commenters stated directly or implied that the DNS is illegal.

The legality of the DNS is an issue for attorneys and the legal system and will not be addressed in this document.