The Fish Committee met on Thursday, July 30 via webinar to review the July 15, 2020 draft policy language. The Fish Committee considered the policy level comments from a meeting with Tribal Co-Managers on July 28, written public comment received in advance of the meeting, and public testimony provided during the meeting.

Based on the discussion at that time, the Fish Committee recommends the following policy language be adopted by the full Commission as the public review draft released for this stage of the policy review process. Changes from the July 15, 2020 draft are shown in red font or strikeout with yellow highlight. These changes are a result of considering the Tribal Co-Manager consultation results. In addition to the policy language changes, the Fish Committee recommends the detail staff will provide for the two appendices be included in the public review draft.

FISH AND WILDLIFE COMMISSION
POLICY DECISION

POLICY TITLE: Anadromous Salmon and Steelhead Hatchery Policy

POLICY NUMBER: C-3619

Effective Date: TBD, 2020

Supersedes: Policy C-3619 Adopted November 5, 2009

See Also:

Approved by:
Washington Fish and Wildlife Commission

Purpose

The purpose of the Anadromous Salmon and Steelhead Hatchery Policy (Policy) is to guide hatcheries and their individual rearing programs[1] to advance the conservation and recovery of wild salmon and steelhead by continuing to implement hatchery reform measures; to perpetuate salmon and steelhead in accordance with existing mitigation programs and agreements for permanently lost habitat; and to provide sustainable economic and stability benefits to recreational, commercial and tribal fisheries in Washington State as appropriate.

Authority Definition and Intent

This Policy is applicable to hatcheries operated by the Washington Department of Fish and Wildlife (Department) for programs that include anadromous salmon and steelhead.

1 For the purposes of this Policy, a hatchery program is the rearing and release of a single species or race of anadromous salmon or steelhead in a hatchery or hatchery complex.

The intent of this Policy is to provide direction, goals, objectives, and actions to improve hatchery effectiveness and ensure compatibility between hatchery salmon and steelhead production and wild salmon and steelhead conservation in a manner that optimally achieves the stated purposes of this Policy.

General Policy Statement

The Department shall operate salmon hatchery facilities in a manner that optimizes achieving the multiple purposes of this Policy. The highest priority policy commitment shall be the conservation of natural resources, including the conservation and recovery of depressed coincident wild salmon and steelhead populations, the maintenance of wild populations currently in a healthy condition, the conservation of genetic resources found in hatchery populations, and providing critical ecological benefits such as prey to endangered Southern Resident Killer Whales and marine nutrient re-cycling. Hatchery programs shall also have the policy directive to safely perpetuate salmon and steelhead resources to support sustainable fisheries that are managed to achieve conservation goals for wild stocks, and to support reintroduction of salmon and steelhead above currently blocked habitat where feasible thereby providing important socio-cultural benefits and satisfying legal obligations. The purposes, obligations, and policy directives of this Policy shall be accomplished by establishing clear goals for each state hatchery, conducting scientifically defensible-operations, and using well-informed and adaptive decision making in a manner that balances the associated risks and benefits of hatchery programs.

Hatchery programs are to be implemented as part of an "all-H" strategy that integrates hatchery, harvest, hydropower and habitat actions in a manner that allows for the recovery of depressed wild populations in a manner consistent with the federal Endangered Species Act (ESA). Although this Policy focuses on hatchery operations, in no way does it diminish the significance of habitat protection and restoration, nor does it replace or reduce the need for full restoration of currently damaged or impaired habitat. Hatchery programs should not detract from efforts to protect and rehabilitate currently damaged salmon or steelhead habitat capable of being improved for the benefit of both wild and hatchery salmon and steelhead ~~production~~. This Policy is also not intended to alter current harvest management policies, goals or strategies to pursue and implement mark-selective fishing focused on hatchery propagated salmon and steelhead.

Hatchery programs will be designated as one of the following in accordance with its primary purpose:

- Conservation Programs. Conservation hatchery programs are implemented with a conservation objective to achieve a net aggregate benefit for the diversity, spatial structure, productivity, and abundance of one or more depressed target wild salmon or steelhead populations that are in need of rebuilding or recovery to carrying capacity abundance.
- Mitigation Programs. Mitigation hatchery programs are implemented in accordance with existing agreements and programs to produce salmon or steelhead to offset adverse impacts from projects or events associated with permanently lost or impaired salmon or steelhead habitat.

- Fishery Supplementation Programs. Fishery supplementation hatchery programs are implemented with an objective to provide supplemental fishery benefits while allowing watershed-specific goals for the diversity, spatial structure, productivity, and abundance of coincident wild populations to be met.

It is recognized that there may be hatchery programs ~~s~~ initiatives that may serve more than one designation category. A hatchery program with a primary conservation purpose of providing additional prey to endangered Southern Resident Killer Whales and a secondary purpose of providing incidental fishery benefits to existing fisheries is an example of such a hatchery program initiative; another example is hatchery production supporting successful reintroduction to salmon and steelhead to their historic habitat currently blocked by impassable manmade barriers. Nothing in this designation section or other provisions of this Policy shall impede the consideration of such special initiatives.

Salmon and steelhead released into the wild from many state operated hatcheries are subject to Treaty-reserved Indian fishing rights. The Department shall manage hatchery programs in a manner that is consistent with *U.S. v. Washington, U.S. v. Oregon*, and other applicable state or federal laws or State-Tribal fishery management agreements. The Department shall maintain a strong Co-Manager working relationship with affected Tribes that ~~ensures~~ is characterized by open and frequent communication, full consideration of scientific and policy perspectives, and a cooperative approach to decision-making on salmon and steelhead hatchery program matters that directly affect Treaty-reserved fishing rights.

Upon adoption of this Policy by the Commission, the Director is tasked to begin development of a joint policy agreement on salmon and steelhead hatchery programs with Tribal Co-Managers that has similar development and joint commitment provisions to those in the current joint policy on hatchery disease protocols.

Policy Guidelines

The Department shall apply the following policy guidelines, goals and positions in managing salmon and steelhead hatcheries to promote achievement of the purposes of this Policy.

1. It is recognized that there can be significant genetic risks to wild salmon and steelhead populations that accompany the operation of a salmon or steelhead hatchery program. Genetic risks can include direct effects from the interbreeding of hatchery propagated salmon and steelhead with wild salmon and steelhead, such as reduction in genetic diversity and reduction in survival fitness, and indirect effects from disease transmission, competition, or predation that result in genetic selection. Genetic risks shall be minimized in accordance with the provisions of Hatchery Genetic Management Plans as shown in Policy Guideline 3.
2. It is recognized that there can be significant ecological risks to wild salmon and steelhead populations that accompany the operation of a salmon or steelhead

hatchery program. Ecological risks include juvenile predation, competition, disease transmission, and hatchery facility effects. Ecological risks shall be minimized in accordance with the provisions of Hatchery Genetic Management Plans as shown in Policy Guideline 3.

3. It is recognized there can be many benefits from well-managed hatchery programs that propagate salmon or steelhead. Hatcheries can boost the recovery of very depressed wild populations; maintain important genetic traits of salmon and steelhead; aid in reintroducing and re-establishing natural production above blocked habitat; provide a multitude of ecosystem services such as marine nutrient provision and Southern Resident Killer Whale support; and support sustainable fisheries. Hatchery Genetic Management Plan provisions should reflect a balance between the need to minimize genetic and ecological risks to coincident wild populations and providing for the ecological and societal benefits of hatchery propagated salmon and steelhead.
4. A Hatchery Genetic Management Plan shall be developed for every anadromous salmon and steelhead hatchery program operated under the authority of this Policy, and each hatchery program shall operate in accordance with the provisions of its Hatchery Genetic Management Plan. Each Hatchery Genetic Management Plan shall be based on the best available and evolving sound science on the effects of hatchery-wild interactions and the watershed specific wild salmon and steelhead population conditions. For each hatchery program that may potentially affect a species listed under the ESA, the Hatchery Genetic Management Plan shall describe operations that are consistent with the National Marine Fisheries Service policy judgements on compliance with the provisions of the ESA. For hatchery programs not subject to federal review under the ESA, the Hatchery Genetic Management Plan shall describe operations consistent with the provisions of this Policy to balance the need to minimize genetic and ecological risks to coincident wild populations while providing for the ecological and societal benefits of hatchery propagated salmon and steelhead. At a minimum, Hatchery Genetic Management Plan provisions should:
    a. be consistent with this Policy;
    b. address Policy guidelines 1 and 2 and 3 above;
    c. provide descriptions and plans for the normal content found in contemporary HGMPs in place in 2020, including sections on broodstock collection and mating protocols; juvenile rearing and release specifics; inter-breeding with coincident wild populations; stray rates and interbreeding with adjacent wild populations; and monitoring, evaluation, and research provisions. (See Appendix 1 to this Policy document with a prototype HGMP table of contents as a contemporary example); and
    d. provide for special initiatives such as the Southern Resident Killer Whale prey enhancement initiative.

    Appendix 2 to this Policy shows an implementation schedule listing which facilities currently have an HGMP in place, a target date for updates appropriate to implement the provisions of this Policy, and a target date for the completion of a Hatchery Genetic Management Plan if there is not one currently in place.

5. All chinook, coho and steelhead propagated in hatcheries shall be externally marked, except:
    a. as modified by state-tribal agreements*;*
    b. for conservation or other management purposes; or
    c. to fulfill other research needs.
6. The Department shall strive to secure necessary funding to ensure that Department-operated hatchery facilities:
    a. comply with environmental regulations for hatchery operations, including passage facilities, water intake screening, and pollutant control systems; and
    b. achieve the administrative necessities of this Policy, including those described in the Policy Guidelines and Adaptive Management sections.
7. In considering questions of balance between the risks of possible deleterious impacts to wild salmon and steelhead populations from hatchery programs conducted in accordance with this Policy, the highest level of protection from possible negative effects of hatchery programs to wild populations shall be provided to those wild populations that have not had substantial genetic modification from past hatchery practices or are now in a healthy condition with little or no same species/run hatchery influence. A process for identifying such populations shall begin soon after the adoption of this Policy and the Commission shall consider approving a list of such populations on or before the first annual update report on the implementation of this Policy.
8. The Department shall plan for and implement an expanded use of methods to separate hatchery and natural origin salmon and steelhead below natural spawning grounds where scientifically justified, logistically feasible, and agreed to with area-specific Tribal Co-Managers. These methods shall include various weir designs, alternative methods that are less intrusive than weirs, and emerging technology. Expanded use of such methods are to be included in the annual update to the Commission described below.

Adaptive Management

The Commission recognizes that there is considerable uncertainty in the how and when the implementation of the policy guidelines will secure the benefits from achieving the stated purposes of this Policy. In addition to the uncertainty of various scientific estimates of the effects of genetic and ecological risks and management implementation processes, it is also recognized that there are likely to be unpredictable near term fluctuations in environmental factors that affect fluctuations in salmon and steelhead abundance, including changes in short-term environmental patterns, long-term climate change, and possible environmental disasters. Therefore, the Commission acknowledges that adaptive management procedures will be essential to achieve the purpose of this Policy and are expected to occur after proper evaluation and as appropriate to achieve the purposes of this Policy.

The Department will track policy implementation and provide the Commission with annual written reports updating progress. If the policy purposes, guidelines and directives are not

being achieved, efforts will be made to determine why and to identify actions necessary to correct course. Department staff are expected to implement actions necessary to manage adaptively to achieve the purposes of this Policy. In the event significant new information arises or there are significant changes in relevant key factors, the Commission shall be notified and a process to consider policy adjustments will be scheduled in a manner that is coordinated with Co-Managers and involves an open and transparent public input process. The Department shall provide a written qualitative review in 2024 of policy performance over the previous 15 years and a comprehensive written review in 2030.

Within one year of adoption of this Policy, the Department shall provide written proposals for overarching regional or state-wide short or long-term assessment purposes monitoring, or for evaluation or research that is more extensive than described in an individual Hatchery Genetic Management Plan. The Department shall seek funding for these proposals as a high priority matter consistent with the purpose of short- and long-term adaptive management needs.

Appendices

Appendix 1. Prototype Example of a Table of Contents to a Hatchery Genetic Management Plan for a Washington State Hatchery Program. (Draft TBC by July 30, 2020).

Appendix 2. Status and Schedule for Completion of Hatchery Genetic Management Plans for Washington State Hatcheries Applicable to revised Policy. (Draft TBC by July 30, 2020).