

**FISH AND WILDLIFE COMMISSION**  
**PROPOSED POLICY DECISION**  
**DRAFT<sub>3</sub>**

05/12/07/06/2009

**POLICY TITLE: Hatchery and Fishery Reform**

**POLICY NUMBER: C-3619**

Effective Date: \_\_\_\_\_ 2009

Supersedes: N/A

Termination Date: December 31, 2012

See Also:

Approved by: \_\_\_\_\_  
Washington Fish and Wildlife Commission

**Purpose**

The purpose of this policy is to advance the conservation and recovery of wild salmon and steelhead by promoting and guiding the implementation of hatchery reform.

**Definition and Intent**

Hatchery reform is the scientific and systematic redesign of hatchery programs to help recover wild salmon and support sustainable fisheries. The intent of hatchery reform is to improve hatchery effectiveness, ensure compatibility between hatchery production and salmon recovery plans and rebuilding programs, and support sustainable fisheries.

**General Policy Statement**

The Washington Department of Fish and Wildlife (Department) shall promote the conservation and recovery of wild salmon and steelhead and provide fishery-related benefits by implementing artificial production programs with the following characteristics:

- Conservation Programs. Artificial production programs implemented with a conservation objective shall have a net aggregate benefit for the diversity, spatial structure, productivity, and abundance of the target wild population.
- Harvest Programs. Artificial production programs implemented to enhance harvest opportunities shall provide fishery benefits while allowing watershed-specific goals for the diversity, spatial structure, productivity, and abundance of wild populations to be met.

Commercial and recreational fisheries will need to increasingly focus on the harvest of abundant hatchery fish. As a general policy, the Department shall implement mark-selective salmon and steelhead fisheries, unless the wild populations substantially affected by the fishery are meeting spawner and broodstock management objectives.

In addition, the Department may consider other management approaches provided they are as or more effective than a mark selective fishery in achieving spawner and broodstock management objectives.

## **Policy Guidelines**

The Department shall:

- 1) Work with the tribes in implementing hatchery reform and selective fisheries including acting in a manner that is consistent with U.S. v. Washington and U.S. v. Oregon and other applicable state or federal law.
- 2) Use the principles, standards, and recommendations of the Hatchery Scientific Review Group (HSRG) to guide the management of hatcheries operated by the Department.
- 3) The Department will prioritize improved broodstock management to reduce the impacts of hatchery fish and improve the fitness and viability of natural production.
- 4) Develop an action plan that systematically implements hatchery reform as part of a comprehensive, integrated (All-H) plan for meeting conservation and harvest goals at the watershed and Evolutionarily Significant Unit (ESU)/Distinct Population Segment (DPS) levels. Action Plans will include development of stock (watershed) specific population designations and application of appropriate PNI and pHOS levels to their management. In addition, plans will include a timeline for implementation, strategies for funding, estimated costs included updates to cost figures each biennium.~~including an action plan that systematically implements hatchery reform. For programs affecting the wild populations of importance for conservation and recovery, the plan will include goals with the following elements:~~
  - a) ~~Integrated programs implemented to enhance harvest opportunities (i.e., integrated harvest program) will achieve a proportionate natural influence (PNI) equal to or greater than 0.70 on average, use hatchery practices that reduce the risks of domestication, and use broodstock that is indigenous to the watershed.~~
  - b) ~~Segregated programs implemented to enhance harvest opportunities (i.e., segregated harvest program) will result in an average gene flow of less than 2% from the hatchery to the wild population.~~
  - c) ~~Integrated conservation programs will be implemented to minimize genetic divergence between the hatchery broodstock and the wild population and to maximize PNI (ideally at least 0.70). However, PNI in the initial stages of the program will depend on the degree extinction risk and logistical challenges with the goal of the PNI being as high as practical.~~
- 5) Externally mark all artificial salmon and steelhead production that is intended to be used for harvest ~~unless the production is explicitly excluded through~~ except as modified by state-tribal agreements or for conservation or research needs signed by the Director and the appropriate tribal government(s).
- 6) Ensure that Department-operated hatchery facilities are “wild fish friendly” with passage facilities, water intake screening, and pollutant control systems that comply with environmental regulations.

- 7) Implement hatchery reform actions on a schedule that meets or exceeds the benchmarks identified in the 21<sup>st</sup> Century Salmon and Steelhead Framework.
- 8) Provide an annual report to the Fish and Wildlife Commission on progress of implementation.
- 9) Develop, ~~and promote~~ and implement alternative techniques that allow non-target fish to be released with minimal mortality. ~~the use of fishing gear to maximize catch of hatchery-origin fish with minimal mortality to native salmon and steelhead.~~
- 10) Seek funding from all potential sources to implement hatchery reform and selective fisheries.
- 11) Define “full implementation” of mark selective fisheries and develop an implementation schedule.
- 12) Work with tribal co-managers to establish a network of wild stock gene banks. Establish a network of wild stock gene banks across the state where wild stocks are largely protected from the effects of same species hatchery programs. Establish at least one wild stock gene bank for each species in each major population group (bio-geographical region, strata) in each ESU/DPS. Single population strata, ESU or DPS may be excluded from this requirement based on the need for conservation hatchery programs. A candidate for wild stock gene bank must meet criteria below:
  - a) Each stock selected for inclusion in the gene bank must be sufficiently abundant and productive to be self-sustaining in the future.
  - b) No release of same species hatchery fish will occur in streams where spawning of the stock occurs, or in streams used exclusively by that stock for rearing.
  - c) Fisheries can be conducted in wild stock gene banks if wild stock management objectives are met as well as any necessary federal ESA determinations are received.