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Conserving biological diversity of native fish and protecting their habitats

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RE: COMMENTS ON THE WDFW DRAFT 2 HATCHERY POLICY

The following is a copy of the WDFW Draft Hatchery Policy and I have added language to this policy and deleted some original language in the process. The purpose is to develop a policy that is more specific while being consistent with the intent of the policy to serve a conservation purpose. All of my additions are in red type.

Definition and Intent

Hatchery reform is the scientific and systematic redesign of hatchery programs to help recover wild salmon and support sustainable fisheries. The **primary purpose** of hatchery reform is to **establish objectives for each hatchery that protects native wild salmonid reproductive fitness, controls ecological impacts, and maintains their reproductive success. Consistent with this primary purpose, improve** hatchery effectiveness, ensure compatibility between hatchery production and salmon rebuilding programs, and support **cost effective** fisheries.

Note: By cost effective I am referring to the cost to produce a fish in the harvest. The Independent Economic Advisory Board for the Power Planning Council evaluated selected hatcheries in the Columbia River from the lower river to the upper river. I add this because the public pays for hatchery production yet there is seldom a transparent cost to catch accounting provided to show the effectiveness of the public funds used to subsidize the various fisheries. This report can be found at: http://www.nwcouncil.org/library/ieab/ieab2002-1_part2.pdf

General Policy Statement

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

Conservation Programs. All artificial production shall provide each wild salmonid population in each watershed the necessary diversity, spatial structure, productivity, and abundance of the target wild population.

Harvest Programs. Artificial production programs implemented to enhance harvest opportunities shall provide cost effective fishery benefits while ensuring watershed specific goals for the diversity, spatial structure, productivity, and abundance of wild populations to be met annually.

Commercial and recreational fisheries shall harvest abundant hatchery fish. The Department shall implement mark selective salmon and steelhead fisheries, unless the wild populations affected by the fishery are meeting spawner and broodstock objectives. Compliance monitoring shall be conducted annually and adjustments made in the next year for any deficits in achieving 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.

2) Use the principles, standards, and recommendations of the Hatchery Scientific Review Group (HSRG) as the standard by which the management of hatcheries by the Department shall be operated consistent with the ESA, and protective of other wild native salmonids

3) The Department shall prioritize improved broodstock management to reduce the impacts of hatchery fish to specific levels for each affected wild population and achieve specific fitness and viability objectives for each wild natural population.

4) The Department shall designate streams for the exclusive management for wild salmonids in each region. These watersheds and species shall be managed to protect the abundance, productivity, spatial diversity and biological diversity of wild native salmonids. In rivers where hatchery fish of one species is released does not preclude the management of other species under the wild salmonid policy. For example Wind River summer steelhead are managed as a genetic reserve even though hatchery spring chinook are released into this river.

Develop an action plan that systematically implements hatchery reform as part of a comprehensive, integrated (All-H) plan for meeting recovery, conservation and harvest objectives at the population, (a population is an indigenous species locally adapted to the watershed) watershed and Evolutionarily Significant Unit (ESU) levels, including an action plan that systematically implements hatchery reform. For programs affecting the wild populations and recovery, the plan will include goals with the following elements:

a) Integrated programs implemented to enhance harvest opportunities (i.e.,

integrated harvest program) (what is an integrated harvest program?) will achieve a proportionate natural influence (PNI) equal to or greater than 0.70 (explain the conservation value of this metric) on average, use hatchery practices that reduce the risks of domestication that meet specific criteria, and use broodstock that is indigenous to the watershed.

Note: spawner abundance for each wild population reported annually against spawner abundance objectives is the best way to determine whether the agency policy is being achieved. The ratio of hatchery to wild spawners in natural production areas must be determined annually so that the public and others can determine whether the objective of naturally spawning hatchery fish has been achieved. According to recent research, the proportion of naturally spawning hatchery fish is equal to the reduction in wild spawner reproductive success (Mark Chilcote, ODFW, personal communication). The goal should be zero naturally spawning hatchery fish. If there are naturally spawning hatchery fish the agency shall prevent naturally spawning hatchery fish in the next year. The HSRG views PNI as a way to reduce impacts if there are naturally spawning hatchery fish with wild fish. It is not the intent of HSRG to manage for a specific fraction of naturally spawning hatchery fish. The Department should adopt specific criteria for allowing a hatchery fraction to spawn naturally with wild fish. The effect shall be evaluated and based on findings adaptive management used to make management adjustments.

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.

Note: The agency cannot measure gene flow in a timely manner so this rule provides no conservation advantage. The rule should read that segregated harvest programs shall prevent naturally spawning hatchery fish in target and non-target rivers with the purpose of allowing no hatchery fish to spawn naturally with wild fish.

Both sections (a) and (b) place the burden of risk from the hatchery program on the wild populations. It is time that the burden of risk not be placed on wild salmonids but on the artificial production program to verify it is reducing the reproductive success and productivity of wild native salmonids.

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). (Delete the escape clause:) 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.

Note: Again let me state the purpose of HSRG is to minimize impacts on wild populations from naturally spawning hatchery fish not to allow a certain fraction

of the naturally spawning fish to be of hatchery origin. The purpose of PNI is to make sure that if hatchery fish do spawn naturally, they will do less harm. The purpose is to prevent naturally spawning hatchery fish and harm to wild native salmonids.

5) Externally mark all artificial salmon and steelhead production that is intended to be used for harvest unless the production is explicitly excluded through state tribal agreements signed by the Director and the appropriate tribal government(s). Federal law passed by Norm Dicks instructs fish raised in federal hatcheries to clip all hatchery fish even when those hatcheries are operated by WDFW. How is this in compliance with federal law?