

Proposed Process for U.S. Fish and Wildlife Service

Review of National Fish Hatcheries in the Columbia River Basin

Report Summary

In the past 150 years, habitat alterations, hydroelectric development, and consumptive fisheries have impacted the productivity of most salmon and steelhead populations in the Pacific Northwest. To mitigate for those impacts, hatcheries have been used to increase the number of fish available for harvest. However, long-term conservation needs of natural populations and their inherent genetic resources require a reexamination of the role of hatcheries in basin-wide management and conservation strategies.

Over the past five years, a systematic review of state, tribal and federal salmon and steelhead hatchery programs in western Washington has been underway in an attempt to address these harvest and conservation issues. Our internal U.S. Fish and Wildlife Service (Service) *Hatchery Review Working Group* (HRWG) was created to provide recommendations for developing a counterpart process for Service owned and operated hatchery programs in the Columbia River Basin. Our principal task was to propose a process for reviewing existing Service programs to meet the current and future fishery and conservation needs of salmonid resources in the Columbia River Basin. We first convened as a group in early January, 2005.

We first adopted the *principles* and *goals* statements from the western Washington review process, with slight modifications. Principles: (1) Every hatchery stock and program must have well-defined goals in terms of desired benefits and purpose; (2) Hatchery programs must be scientifically defensible; (3) Hatchery programs must respond adaptively to new information. Goals: (1) Establish the scientific foundations for National Fish Hatcheries and cooperative programs; (2) Conserve genetic resources for salmonid species; (3) Assist with the recovery of naturally spawning populations; (4) Provide for sustainable fisheries; (5) Conduct scientific research; (6) Improve quality and cost effectiveness of hatchery programs.

We believe the hatchery review process in western Washington provides both a solid template and operational tools (e.g. software spreadsheets, population dynamic models) for reviewing Service hatcheries in the Columbia River Basin. We also believe that much of the background information necessary for reviewing Service hatcheries in the Columbia River Basin has already been compiled in *Hatchery and Genetic Management Plans* (HGMPs), *Comprehensive Hatchery Management Plans* (CHMPs), and the *Artificial Propagation Review and Evaluation* (APRE) database developed by the Northwest Planning and Conservation Council (NWPPCC).

We propose that this review process be conducted in coordination with fisheries co-managers in the Columbia River Basin and with ongoing management processes including the US vs OR proceeding, the protection and mitigation activities of the

Northwest Power Planning and Conservation Council (NPCC), and the ESA processes of NOAA Fisheries. We believe this proposed review process will better prepare and position our hatchery programs for integration into NPCC subbasin and regional strategies and the salmon recovery plans under preparation by NOAA Fisheries.

Our specific recommendations represent two tiers of priorities.

First tier recommendations

1. We recommend the Assistant Regional Director for Fisheries appoint a *Hatchery Review Team* (HRT) consisting of a minimum seven members.
2. We recommend that individuals with the following expertises and experiences be included on the HRT: (1) production hatchery manager with extensive culture experience, perhaps a former Service hatchery manager who is now retired; (2) at least one, perhaps two Service hatchery evaluation fishery biologists; (3) geneticist; (4) fish health biologist; (5) physiologist; (6) salmon ecologist; (7) Portland Regional Office (RO) policy person with fisheries management and hatchery experience.
3. We further recommend that the HRT review of Service hatcheries in the Columbia River Basin be conducted primarily as a Service process utilizing Service expertise and resources, with involvement and opportunity for participation by co-managers.
4. The Hatchery Evaluation Team (HET) for each hatchery will need to be an integral component of the review process with primary responsibility for collecting and collating all relevant data and information for the HRT (e.g., in the form of a *briefing book*). Initial co-manager input by the states, tribes, and other federal agencies would occur primarily through their direct participation in meetings between the HRT and the HETs. Stakeholder input could also occur at this time.
5. We recommend that internal review of hatchery programs in the Snake River sub-basin not be restricted to Service-operated facilities but should include all Service-owned hatcheries that are coordinated by the Lower Snake River Compensation Plan (LSRCP) office.
6. Internal reviews of Service hatcheries and programs need to examine short-term and long-term programmatic goals, including future alternative options at each hatchery.¹

¹ The western Washington review process did not specifically address or review programmatic goals of each hatchery. In that review, programmatic goals were established by the state and tribal co-managers with input from federal agencies. The HSRG then reviewed each hatchery program for its scientific consistency to achieve those programmatic goals relative to biological risks. The HSRG did not review or question the co-manager goals themselves.

7. Reviews of Service hatcheries will need to examine conservation and harvest needs for salmon and steelhead resources in the Columbia River Basin over the next 10 and 50 years as a foundation for developing a long term, basin-wide, programmatic approach for achieving future management goals and objectives.
8. The HRT reviews will need to examine all operational components of each hatchery facility and each hatchery program.
9. We recommend that the HRT conduct a “pilot review” of one National Fish Hatchery to serve as a template for their subsequent Basin-wide reviews. This pilot review would occur as soon as possible after the HRT is formed and develops an internal schedule. We further recommend that the Warm Springs National Fish Hatchery be used for this pilot review
10. We recommend engaging a professional *facilitator* who could lead the discussions and provide administrative support for the review process. Facilitation was a key element to the success of the western Washington hatchery reform effort.

Second tier recommendations

11. After the “pilot” review of the Warm Springs National Fish Hatchery is completed, we recommend that reviews within the Columbia River Basin be conducted independently in three distinct regions in the following order: (1) Mid-Columbia hatcheries (Leavenworth Complex) funded by the U.S. Bureau of Reclamation; (2) Lower Columbia and Columbia River Gorge hatcheries funded by the Mitchell Act and Army Corps of Engineers; and (3) Snake River hatcheries coordinated by the LSRCF and funded by BPA and the Service. This schedule and phasing of reviews should be further discussed with our cooperators.
12. We propose forming a small Hatchery Oversight Team (HOT) to succeed the HRWG as the primary internal mechanism to oversee the review process, monitor its progress, and transmit communications and reports from the HRT to the Fisheries ARD and project leaders within the Fisheries Program. This team would include, and be coordinated by, the Regional Office Hatchery/Science Team Leader.
13. We suggest the ARD consider convening a “stakeholder’s group” for outside evaluation and comment on the HRT’s reports and recommendations.
14. Following completion of each regional group of HRT reports, formal coordination and consultation with co-managers and other stakeholders will need to occur prior to final decision-making and implementation of specific program improvements and modifications. The review process needs to incorporate this important step.
15. The final step in the review process would be implementation of approved recommendations that lead to modifications in operating procedures, physical facilities, program objectives, or even new programs. Such adjustments to Service

hatchery programs would be documented in Comprehensive Hatchery Management Plans (CHMPs) and in revisions to Section 4(d) Hatchery Genetic Management Plans (HGMPs) for each program, where appropriate.

We estimate that two years will be required to complete the reviews exclusive of the Snake River, requiring approximately 2.5 person-years of time by Service employees.

We recognize that direct input by state and tribal co-managers to the programmatic goals and operations of Service-hatcheries is critically important for developing a basin-wide approach that meets their immediate needs of the co-managers and the long-term needs of salmon and steelhead resources in the Columbia River Basin. Any changes in hatchery operations must be consistent with several legislative and legal constraints including the Mitchell Act, the U.S. vs. Oregon court case, treaty trust responsibilities, the U.S. Endangered Species Act, the U.S.-Canada Pacific Salmon Treaty, etc. As proposed, state and tribal co-managers of salmon and steelhead resources in the Columbia River Basin will participate in the review process at two points: (1) as participants of the HETs for each hatchery where they can provide direct input to the HRT regarding their needs, interests, and recommendations, and (2) during review and discussions of the HRT's reports and recommendations where the states and tribes can provide their comments and responses. We envision much discussion and feedback from the tribes and states in response to the HRT's reports for each hatchery program.

Finally, we envision strong Service "inreach" and "outreach" components to this proposed review process. The Fisheries ARD will need to provide details of the review process to all Fishery Project Leaders and Program Supervisors. A "white paper" describing the review process will need to be developed for co-managers, stakeholders, and partners, and the general public. We recommend that an internet web site, similar to the one developed by "Long-Live-the-Kings" for the western Washington review process (www.hatcheryreform.org), be developed. All draft HRT reports would be provided to all co-managers and partners, and finalized reports posted on the web site.