



Work in Progress

The HSRG's work for 2005 will be to ensure that the set of scientific evaluation, management and monitoring tools developed during the Hatchery Reform Project are refined, completed and published in the scientific literature. The co-managers' work will be to incorporate the ecological and genetic principles outlined by the HSRG, refine the recommendations based on more comprehensive analyses, and implement them into salmon and steelhead management, strategic planning, and organizations to operate more effectively. The facilitation team's work will be to educate stakeholders and the general public on the scientific and conceptual frameworks that underlie this new approach to managing salmon and steelhead and the existing management frameworks of *United States v. Washington*, the Puget Sound Salmon Management Plan, and *Hoh v. Baldrige*; build support among these stakeholders for implementation; and assist the co-managers, as requested, in their efforts to resolve outstanding management issues. 2005 budgets and work plans are attached as Appendices D and E.

HSRG WORK IN PROGRESS

Now that the regional review phase of the project has been completed and the HSRG has delivered a report detailing its principles and recommendations, the HSRG has turned its attention to completing the set of scientific tools it has assembled for the managers' use into the future. Through full HSRG meetings, task team meetings and individual work, the HSRG intends to accomplish a series of tasks in 2005 that will wrap up its work on behalf of the Hatchery Reform Project.

The first of these will be publishing key findings in the peer-reviewed, scientific literature. The HSRG's work includes a great deal of new thinking about how hatchery management can be altered to increase benefits and reduce risks associated with hatchery programs for anadromous salmonids. It is vital to the cause of reform that these new ideas and concepts be subjected to the rigors of the peer review process and disseminated widely throughout the scientific community.

HSRG members will support these publications with presentations at symposia and conversations with influential thinkers. The HSRG will also conduct its annual research review and continue to fund a subset of its research grant projects. Another research-related task will be the development of an agenda to guide hatchery-related research in the future.

Another area of focus will be continuing technical discussions with key state and tribal scientists. Last year, these discussions resulted in a refining of the integrated/segregated concept (which led to the AHA management tool), furthered the conversation on when to start a conservation hatchery program, and created momentum for the effort to provide "managing for success and accountability" criteria. This year's discussions will be expanded to include a larger group of co-manager scientists and technical staff. Topics will include refining AHA, moving forward on "managing for success," and beginning a dialogue on steelhead management and/or wild salmonid management zones.

Perhaps the most important of these tasks to the future of salmon and steelhead management is the "managing for success and accountability" criteria. The HSRG sees monitoring and evaluation as



critical to determining if the reform process is achieving its intended results, citing accountability and adaptive management as two of the cornerstones of hatchery reform. These require collecting and using information that reveal: 1) if hatchery programs are meeting stock goals; and 2) if they are not, how they should change. The HSRG recommends monitoring and evaluation be perceived as a continuous effort, since the variety of components that require monitoring and evaluation do not all adhere well to a set timescale. Results will be reported through vehicles established by the managing tribe and/or agency.

Based on the scientific framework it developed in the project's first year, the HSRG created a set of draft monitoring and evaluation criteria to guide the managers in measuring the success and/or failure of hatchery programs. The HSRG is currently turning these criteria into a set of practical tools the co-managers can use to manage for success and accountability at hatcheries. Completing these tools and working with the managers to put them into use will be a major focus of the project in 2005.

The above deliverables will complete the "toolbox" the HSRG has created for managing hatcheries in the context of the watersheds in which they operate and the status of wild stocks. That toolbox will then be presented to state/tribal/federal staff, other scientists, legislators, stakeholders and the public at a workshop in the fall. The workshop will also provide the managers with the opportunity to discuss the challenges involved in implementing this new approach.

CO-MANAGERS WORK IN PROGRESS

Information below provided by the Washington State Department of Fish and Wildlife

WDFW has embarked on a multiyear effort to implement hatchery reform and transform hatcheries from an "all-H risk factor" to a productive tool for restoring salmon and enhancing fishing opportunities. The expected benefits are substantial—enhanced fishing opportunities, improved stock status, economic stimulation of rural communities, and a reduced risk of third party litigation. Building upon the broad consensus emerging from the independent reviews of hatchery programs conducted by the HSRG (Puget Sound and Washington coast) and Artificial Production Review and Evaluation (Columbia Basin) teams, WDFW has developed a strategic approach to implement hatchery reform. The approach, described in *Hatcheries 2020: A Clear Vision for the Future*, recognizes that a staged, prioritized, incremental approach to hatchery reform is necessitated by funding, logistical and environmental constraints. The objective remains, however, to build the foundation for scientifically defensible programs, implement priority actions to improve hatchery programs, and assure continued program modifications through results-oriented, performance-based management.

AHA is being used to develop precise integration and production rates for each hatchery program. Hatchery modifications are currently underway to implement integrated brood stock management at two facilities. In addition, a computerized data system for hatchery information is being developed that will integrate and provide ready access for all aspects of hatchery fish. Ongoing major hatchery renovations, as per HSRG recommendations, include Whitehorse Rearing Ponds and Samish and Skookumchuck hatcheries.



Information below provided by the Northwest Indian Fisheries Commission

The tribes' objective in the multiyear effort to implement hatchery reform is to build the foundation for scientifically defensible programs, implement priority actions to improve hatchery programs, and assure continued program modifications through results-oriented, performance-based management. To this end, the Tribes will continue to focus on scientific and policy approaches for using hatcheries to maintain fisheries, fishing communities and their cultures, and to restore natural runs of salmon to western Washington in the face of increasing loss of salmon habitat to development and the expected consequences of global warming.

Refitting existing hatchery facilities to be able to implement ecological and genetic principles of hatchery reform is critically important. Identifying and securing funding opportunities to do this needs to be a major focus of hatchery reform. The tribes will also continue to pursue program-specific research and monitoring to help resolve key uncertainties identified by scientific review and recommendations, such as how and when to begin new hatchery programs. New programs for Chinook and other species are expected to add an important safety net for existing populations.

Tribal scientists will also continue to develop the innovative adaptive management framework described in the Puget Sound Chinook Salmon Resource Management Plan (RMP), which combines passive adaptive management and evolutionary problem-solving strategies to guide decision making. As part of this, the tribes will continue to refine their tools for tracking hatchery reform implementation. Tribal scientists will also continue to develop quantitative risk/benefit tools, to aid decision-making assessment as part of the Risk Assessment Modeling Project (RAMP). In addition, the tribes will continue to develop better ways of disseminating information about what they have learned in managing hatchery programs for success.

USFWS WORK IN PROGRESS

Information below provided by US Fish and Wildlife Service

USFWS is committed to effectively incorporating individual hatchery programs into regional fish management strategies, in order to protect and restore native fish species, as well as to develop and maintain sustainable fisheries. USFWS is an active participant in the Hatchery Reform Project and will continue its role on the HSRG and in providing administrative support to the project. USFWS also intends to implement the following management, accountability, demonstration and science support projects in 2005:

- Water filtration, formalin delivery and flow metering improvements at Quinalt National Fish Hatchery (NFH)
- Isolation/quarantine facility operational support at Makah NFH
- Summer chum monitoring project support by western Washington (Lacey) field office
- Volitional release study by Abernathy Fish Technology Center
- Fish feed analysis, quality assistance/quality control at Olympic Peninsula hatcheries



USFWS believes that the review process developed and demonstrated in the Hatchery Reform Project has the potential for wide application outside of the western Washington area. The Service is now developing a similar review process for implementation at NFHs through the Northwest states. USFWS expect to begin implementing such reviews later this year. The Service is also advocating that other fishery managers engage in a similar cooperative review process.

FACILITATION TEAM WORK IN PROGRESS

As mentioned above, the Hatchery Reform Project facilitation team's challenge for 2005 is to educate stakeholders and the general public on the scientific and conceptual frameworks that underlie the new approach to managing salmon and steelhead; build support among these stakeholders for its implementation; and assist the co-managers, as requested, in their efforts to resolve outstanding management issues. One portion of this work involves using the team's facilitation, communications and project coordination skills to help the scientists and managers successfully complete the project in 2005. This will involve facilitating co-manager decision-making meetings and discussions (as requested); assisting the HSRG in completing a series of scientific publications; facilitating technical discussions between HSRG and co-manager scientists to refine AHA and develop a monitoring and evaluation/adaptive management system; helping the HSRG complete a hatchery research agenda; communicating project accomplishments and challenges; and helping the HSRG host a workshop to examine the latest science and address the challenges of institutionalizing hatchery reform.

A second portion of this work is to take advantage of the team's experience, independent perspective, imagination and communications skills to begin a discussion about what happens next for hatchery and salmonid management in and beyond Puget Sound and the coast. The Hatchery Reform Project has led to the development of innovative tools, knowledge bases and recommendations that could have significant application to and relevance for related natural resource challenges and processes. As the project's non-governmental participants, the facilitation team can tell the story, make the connections, and foster offshoots and outcomes that take full advantage of the investment to date in this new way of thinking about the role of hatcheries in meeting harvest and conservation goals for salmon and steelhead.