



NORTH COAST

The regional implementation progress report for North Coast was authored by WDFW, with separate reports provided to the HSRG by the Quinault Indian Nation and the Hoh and Makah tribes. WDFW states that the report is based upon technical discussions, but not policy review or agreement. This region was reviewed by the HSRG in 2003.

HSRG Synopsis and Response

General Description of Region and Hatchery Programs/Issues:

This region includes the coastal drainages west of—and including—the Hoko River and north of Grays Harbor. Most of the land base within this region consists of public and private timberlands, Indian reservations and Olympic National Park. The region is sparsely inhabited, with the City of Forks representing the largest population center. This report covers implementation progress made by the co-managers in response to the HSRG's recommendations with respect to 15 hatchery programs (five Chinook, seven coho, two sockeye, and one chum) reviewed by the HSRG in 2003. An additional 12 hatchery programs were also reviewed in the region in 2003, but, for the reasons described below, the comments that follow do not apply to them.

General Overall Comment about the Co-Manager Report:

In general, the co-managers have considered the HSRG's recommendations carefully and have indicated, with few exceptions, a willingness to implement them. Indeed, many of the recommendations are already being implemented. However, full implementation will take time because of the funding that will be required. To this end, the co-managers need to develop a prioritized implementation plan and attach timelines to it. The comments below do not pertain to eleven steelhead programs. As discussed elsewhere, the co-managers are reviewing the HSRG system-wide recommendations regarding steelhead and will address them in a forthcoming white paper. Operational recommendations for steelhead have generally been met for all programs in the region, and some of the programs are already being operated according to the HSRG's system-wide recommendations for steelhead. The comments also do not apply to the Hoko River fall Chinook program, for which there was no response to the HSRG's request for an implementation update.

1. Stock goals and the role of hatcheries.

- a) Are short- and long-term management goals/premises for habitat and conservation and harvest of all regional hatchery- and naturally-spawning salmonid stocks clearly stated? Have specific questions raised in the regional review been adequately addressed?**

The co-managers have reviewed the goals for all stocks in the region and confirmed the goals that formed the premise for the HSRG recommendations. Most of the HSRG's recommendations have been accepted by the co-managers.



- b) Is the purpose (harvest, conservation, education, etc.) of each hatchery program stated? Have specific questions raised in the regional review been adequately addressed?**

The co-managers have explicitly stated the purpose of all hatchery programs in the region. The HSRG questioned the need for a conservation program to supplement a seemingly healthy coho population (Queets River Coho). This program was subsequently suspended.

- c) Is the program type (integrated vs. segregated) identified and explained for each hatchery program? Have specific questions raised in the regional review been adequately addressed?**

The intent for every hatchery program in the region is clearly identified as either integrated or segregated. The co-managers have indicated, however, that the costs entailed in ensuring that hatchery programs are properly integrated or segregated are a major hindrance to immediate implementation of the intended strategy. The HSRG strongly supports requests for funding in support of the marking, monitoring and infrastructure needed to ensure that hatchery programs are properly integrated or segregated, because hatchery programs must be operated in one or other of these modes if hatchery reform is to be successful.

2. Steps taken (decisions made and actions taken) towards meeting short -and long-term expectations

- a) Has significant progress been made to achieve desired hatchery- and naturally-spawning proportions in the hatchery broodstock and on the spawning grounds for integrated and segregated programs?**

The HSRG guidelines for integration and segregation are already being met for some of the programs (e.g., Lake Ozette sockeye and Quinault River fall Chinook). For others, the degree of marking and/or monitoring will have to be intensified, to ensure that proper integration or segregation is being achieved. As mentioned above, the co-managers report that effective broodstock management will be accelerated if additional state and federal funding is made available for implementing these strategies.

- b) Have steps been taken to size programs consistent with goals for all hatchery- and naturally-spawning stocks? Have specific questions raised in the regional review been adequately addressed?**

The co-managers have reviewed and resized some hatchery programs to be consistent with stock goals and intend to evaluate the programs on an ongoing basis through adaptive management. Questions about proper sizing of some programs to avoid recent surplus hatchery returns have been resolved by either intensifying harvest, reducing the size of programs, or both (e.g., Educket Creek Hatchery coho and Queets/Salmon River coho). However, the managers in this region have generally not developed goals for harvest



contribution of hatchery programs explicit enough to specifically size the programs to meet these needs in the future. The HSRG recommended discontinuing the Quillayute system hatchery spring Chinook program due to negative genetic interactions with native summer Chinook. While the co-managers have begun collecting DNA samples on these stocks, the program is continuing.

c) Have steps been taken to better meet hatchery operational guidelines, from broodstock collection through release? Have specific questions raised in the regional review been adequately addressed?

With few exceptions, the co-managers are committed to implementing HSRG recommendations to meet operational guidelines. One exception is the Quillayute summer chinook program, where recommendations regarding flow, density and rearing/release protocols have not been addressed. The co-managers have addressed all recommendations, to the extent available funds have allowed. Recommendations pertaining to operational aspects of hatchery programs (e.g., use of proper spawning protocols, proper disposal of hatchery mortalities, reductions in program size, suspension of programs, etc.) are being met, but full implementation of recommendations that are more costly to put into effect will require time and continued funding. Non-acceptance of recommendations has been rare, and the basis has usually been reasonable. For example, the reluctance to go to the expense of monitoring stray rates of Quinault River Hatchery chum was because the biological significance of the wild stock in the neighboring watershed was considered low, and there were no management goals for the natural stock.

Since the HSRG regional review was conducted, the facility built by the Quinault Indian Nation on the Queets River was partially closed, due to budget limitations. This led the Quinaults to return to their prior practice of rearing these fish in their Lake Quinault facility, necessitating the inter-watershed movements of fish and eggs between watersheds. Despite the precautions they plan to take, these fish transfers will still carry with them a risk of disease transfers. In light of these risks, the HSRG believes that obtaining the funding necessary to return to in-basin rearing should be a priority.

Some facility improvements have been made in this region, but much remains to be done if HSRG recommendations are to be effectively carried out. Stable funding for facilities and operations to sustain hatchery reform over time must therefore be a high priority. For example, funds are needed to modify facilities at Sol Duc Hatchery and Makah National Fish Hatchery to permit volitional fish releases.

3. Steps taken to track progress toward expected outcomes

Please see general HSRG comments about managing for success. The co-managers in this region recognize the need for having monitoring plan to ensure continued success of their hatchery programs through adaptive management.

a) Will status of major stock goals (e.g. harvest and escapement) be monitored over time?



Catch contributions and spawning escapement estimates for stocks in the region are made annually.

b) Will contributions of each hatchery program towards its purpose be monitored over time (e.g. contributions toward harvest and escapement)?

The co-managers have made the most of their available resources in this region, however the potential need to expand spawning ground surveys and stock identification sampling programs, in particular, should be reviewed as a part of the development of a comprehensive monitoring plan for the region. Stable funding is needed for long-term monitoring of stock composition on the spawning grounds. The monitoring of hatchery contributions to harvest and natural spawning escapement is critical for tracking the success of both integrated and segregated programs.

c) Will contributions of hatchery origin fish to broodstock and natural escapement be estimated with sufficient accuracy and precision over time?

Extensive stock identification programs have been developed and implemented that meet statistical standards for precision and accuracy, using a range of marking methods to track the performance of hatchery stocks over time. As the needs associated with the implementation of new hatchery integration policies are evaluated, the need for additional marking and mark sampling will be revisited. It is likely that additional spawning surveys and biosampling will be needed in this region, as in others, in order for adequate accuracy and precision to be achieved.