## Hatchery Scientific Review Group Pacific Salmon Hatchery Reform

www.hatcheryreform.us



Andy Appleby, Co-Chair Dr. Peter Paquet, Co-Chair Lee Blankenship, Vice-Chair Dr. Don Campton Dr. Ken Currens Dr. Trevor Evelyn HSRG - Washington
Dr. Dave Fast
Tom Flagg
Dr. Conrad Mahnken
Dr. Lars Mobrand
Brian Missildine
Dr. Lisa Seeb
Stephen Smith

December 23, 2015

William W. Stelle, Jr. Regional Administrator NMFS West Coast Region 7600 Sand Point Way NE Seattle, WA 98115

SUBJECT: Review of Draft Environmental Impact Statement to Analyze Impacts of NOAA's National Marine Fisheries Service Proposed 4(d) Determination under Limit 6 for Five Early Winter Steelhead Hatchery Programs in Puget Sound

Dear Mr. Stelle,

The Hatchery Scientific Review Group has reviewed the DEIS for Puget Sound Early winter Steelhead and would like to provide the following comments. We have limited our comments to the method of analysis and proposed standards for the genetic impacts of hatchery steelhead on native populations of steelhead found within those basins.

We believe the DEIS adequately identifies the general mechanisms through which hatchery programs can affect natural-origin salmon and steelhead populations (Table 6 page 44), Chapter 3, Affected Environment, and Appendix B, Genetic effects analysis of early winter steelhead programs proposed for the Nooksack, Stillaguamish, Dungeness, Skykomish, and Snoqualmie River Basins of Washington.

In addition the DEIS includes an accurate list of recent (last 5 years) risk reduction measures implemented by WDFW at hatcheries producing early winter steelhead in Puget Sound (Chapter 3 page 48).

The DEIS proposes a logical, scientifically based method for analysis and appropriate standards (pHOS/PEHC), for assessing the genetic risks from hatchery populations to affected natural populations (Sec 3.2.3.1). In addition the DEIS states: "Considering all the guidance, and empirical and theoretical information currently available, NMFS concludes that gene flow from EWS into Puget Sound steelhead populations may not pose significant risk to the Puget Sound

steelhead populations, provided the gene flow rate is low, that appropriate metrics are developed to estimate gene flow, that gene flow is estimated with a reasonably high level of certainty, and that adequate monitoring is in place to ensure that gene flow criteria are met". (Appendix B page 7). We strongly support this statement.

We hope you find these comments useful.

Sincerely,

**Andy Appleby** 

Co-Chair

Hatchery Scientific Review Group

Center Apply

Peter Paquet

Co-Chair

Hatchery Scientific Review Group

Hetry Vaguet

cc: Barry Thom, Deputy Regional Administrator West Coast Region, NOAA
Jim Unsworth, Director, Washington Department of Fish and Wildlife