



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
West Coast Region
Sustainable Fisheries Division
510 Desmond Drive SE, Suite 103
Lacey WA, 98503

April 15, 2016

Dr. Jim Unsworth, Director
Washington Department of Fish and Wildlife
600 Capitol Way N.
Olympia, WA 98501

Dear Director Unsworth:

NOAA's National Marine Fisheries Service (NMFS) has evaluated three Hatchery and Genetic Management Plans (HGMPs) for early winter steelhead provided by the Washington Department of Fish and Wildlife (WDFW), with the Jamestown S'Klallam Tribe, Lummi Nation, Nooksack Tribe, Stillaguamish Tribe, and Tulalip Tribes as co-managers of the fisheries resource under *United States v. Washington* (1974) (hereafter also referred to as "the co-managers"). The HGMPs that NMFS evaluated describe early winter steelhead rearing and release programs in the Dungeness River, Nooksack River, and Stillaguamish river watersheds of Washington State. The HGMPs were submitted for NMFS' determination under Limit 6 of the Endangered Species Act (ESA) 4(d) Rule for salmon and steelhead, 50 CFR 223.203 (July 10, 2000; 65 FR 42422, amended June 28, 2005, 70 FR 37160). Our evaluation of your programs is attached.

The three co-manager early winter steelhead hatchery programs, based at Dungeness River Hatchery, Kendall Creek Hatchery, and Whitehorse Ponds Hatchery, are designed to produce adult steelhead for isolated harvest purposes, benefiting recreational fisheries, and tribal commercial and ceremonial and subsistence fisheries, in the Dungeness River, Nooksack River and Stillaguamish River watersheds.

The three joint HGMPs include performance standards and indicators designed to identify, monitor, and evaluate the effects of the salmon hatchery actions on listed fish, and performance of the hatchery programs in meeting EWS fisheries harvest augmentation objectives. Of particular importance are monitoring and evaluation actions addressing the genetic effects of the EWS hatchery programs on natural-origin steelhead populations in the Dungeness River, Nooksack River, and Stillaguamish River watersheds. These monitoring and evaluation actions include, but are not limited to:

- Monitoring steelhead escapement to the Dungeness River, Nooksack River, and Stillaguamish River watersheds to estimate the total number of hatchery-origin and natural-origin fish escaping to natural spawning areas and the hatchery release sites each year. This monitoring will allow for assessment of the status of the natural steelhead populations affected by the hatchery actions, the incidence of EWS spawning in areas used by natural steelhead, and the success of the EWS programs in achieving smolt to adult return survival objectives.



- Monitoring the level of gene flow between naturally spawning EWS and the associated natural-origin steelhead populations in the Dungeness, Nooksack, and Stillaguamish river watersheds through analyses of natural and EWS steelhead demographic (natural spawning abundance, spatial and temporal spawn timing), and mark/tag data, and genetic (DNA) data collected from juvenile fish and/or adult returns.
- Monitoring and evaluating competition and predation risks to natural-origin steelhead and/or Chinook salmon juveniles by annually monitoring, through ongoing State and tribal juvenile salmonid outmigrant trapping programs, the statistical week incidence of EWS hatchery-origin smolts in downstream areas relative to the total number of EWS smolts released for at least one month after smolt release. Data regarding the abundances, emigration timings, and individual fish sizes for hatchery-origin steelhead smolts, and natural-origin juvenile steelhead and Chinook salmon, encountered through juvenile outmigrant trapping in the lower Dungeness, Nooksack, and Stillaguamish rivers will also be collected. The effects of the juvenile out-migrant trapping program on listed fish have been reviewed and authorized through separate ESA consultations (NMFS 2009; NMFS 2015).
- Monitoring all incidences of juvenile natural-origin Chinook salmon and steelhead entrainment and mortality associated with screening at all EWS hatchery facilities.
- Monitoring the total number, individual size, and release timings of EWS smolts released at each hatchery location each year.

Information gained through monitoring and evaluation of these and other indicators will be used to confirm whether the effects of the programs on listed fish are within the limits anticipated in the three joint HGMPs.

After evaluation of the plans with respect to the criteria specified for Limit 6, NMFS has determined that the three early winter steelhead HGMPs provided by the co-managers meet all of the requirements for HGMPs under Limit 6 of the ESA 4(d) Rule. ESA take prohibitions under the 4(d) Rule therefore do not apply to the hatchery activities specified in the three HGMPs. In particular, the following general aspects of the plans are critical to the effective implementation of the programs:

- (1) Monitor the annual abundance, diversity, spatial structure, and productivity status of the natural steelhead populations that may be affected by the EWS hatchery programs relative to NMFS Puget Sound Steelhead DPS population viability objectives (Hard et al. 2015) to guide decisions regarding adjustment or continuation of the EWS hatchery programs.
- (2) Monitor the level of gene flow between naturally spawning EWS and the associated natural-origin steelhead populations in the Dungeness, Nooksack, and Stillaguamish river watersheds through analyses of natural and EWS steelhead demographic (natural spawning abundance, spatial and temporal spawn timing), and mark/tag data, and genetic (DNA) data collected from juvenile fish and/or adult returns.

(3) Monitor the weekly incidence of EWS hatchery-origin smolts in downstream areas relative to the total number of EWS smolts released, and the emigration timings and individual fish sizes for EWS smolts, and natural-origin juvenile steelhead and Chinook salmon encountered through juvenile outmigrant trapping in the lower Dungeness, Nooksack, and Stillaguamish rivers to determine the level of listed juvenile fish competition and predation risks posed by EWS smolt releases.

(4) Mark and/or tag all EWS smolts released each year through the hatchery programs as described in the HGMPs to allow for the differentiation of hatchery- and natural-origin juvenile and adult steelhead in the natural environment, assessment of hatchery program effects on listed fish, and monitoring and evaluation of program performance in meeting stated conservation or fisheries harvest augmentation objectives.

(5) Maintain annual releases of EWS smolts consistent with the maximum abundance levels described in the proposed HGMPs.

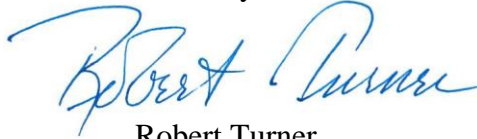
(6) Annually report numbers, pounds, dates, tag/mark information, locations of EWS smolt releases, results of monitoring and evaluation activities that occur within the hatchery environment, and adult return numbers by fish origin to any naturally spawning area and to the hatchery programs. Reports shall also include: analyses of any scientific research data collected in direct association with the hatchery programs; documentation of any problems that may have arisen during conduct of the authorized activities; a statement as to whether or not the activities had any unforeseen effects; and steps that have been and that will be taken to coordinate research or monitoring activities with those of other researchers.

Consistent with subparagraph 5(vi) of Limit 5 of the ESA 4(d) Rule, it is NMFS' intent to regularly communicate with the co-managers regarding the effectiveness of the HGMPs in meeting performance standards, including the programs' effects on listed steelhead and salmon population viability. All reports, as well as all other notifications required through the 4(d) determination, should be submitted to NMFS, attention to:

Tim Tynan
Anadromous Production and Inland Fisheries Branch
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NOAA Fisheries – West Coast Region
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Thank you for the time your staff has invested in developing the HGMPs for the Dungeness River Hatchery, Kendall Creek Hatchery, and Whitehorse Ponds Hatchery programs. NMFS looks forward to working with the co-managers on the implementation of these early winter steelhead hatchery programs.

Sincerely,



Robert Turner
Assistant Regional Administrator
Sustainable Fisheries Division

Attachment

cc: Ron Allen, Jamestown S’Klallam Tribe
Steven Toby, Lummi Nation
Bob Kelly, Nooksack Tribe
Shawn Yanity, Stillaguamish Tribe
Jason Gobin, Tulalip Tribes
Lorraine Loomis, NWIFC
Jim Scott, WDFW