

# Statement to the Oregon House Natural Resource Committee September 22, 2020

# by

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To: Representative Brad Witt, Chair, House Natural Resources Committee

Cc: House Natural Resource Committee members

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Re: Hatchery and Hatchery Fish Management and Evaluation in Oregon

Recent events present difficult issues regarding Oregon's hatchery and artificial production programs.

### Mass Marking and Tagging

Marking hatchery salmon and steelhead with a fin-clip or combination of fin-clips is one of the region's crucial management measures used to enable fishery managers and fishers to distinguish between hatchery-origin salmon and steelhead and natural-origin salmon and steelhead. In many fisheries, all unclipped adults must be released unharmed. The fin-marking of salmon and steelhead juveniles also allows field biologists to have a chance to determine the number of hatchery-origin adults on the natural-origin adult salmonid spawning beds. Fin-marked hatchery fish are the clearest tool with which anglers know they may be able to retain and harvest a fish they have caught. At fish passage stations, while observing migrating adults, a fin-mark enables managers to count and assess the passage of hatchery and wild populations of various species (particularly steelhead). Finally, for listed steelhead and Chinook, NOAA approval of commercial and recreational fisheries are predicated on differential marking of hatchery fish – without such differential marking, the NOAA ESA fisheries authorizations may be rescinded.

Fishery managers also insert various electronic devices (tags) inside (and sometimes outside) juvenile hatchery salmon and steelhead – known as a passive integrated transponders (PIT) tags or a coded wire tag (CWT). These electronic tags enable fisheries observers as far away as Alaska, British Columbia and into the far reaches of the Pacific to track the movement of fish and to analyze the catch of specific species within harvest fisheries.

Beginning with precautionary measures implemented by state and federal entities to address the COVID-19 pandemic beginning in March, state and federal hatchery managers were forced to make changes in their annual marking and tagging of hatchery salmon and steelhead. Because some fin-making and tagging activities take place within facilities not adaptable to COVID-19 practices, federal fisheries management controlled by the U.S. Fish and Wildlife Service (FWS) suspended their marking and tagging activities. This primarily affected FWS "National Fish Hatcheries" which are found in California (2), Oregon (2)<sup>1</sup>, Washington (7) and Idaho (2).

According to recent correspondence with state fisheries managers in Oregon and Idaho, both states indicated that they were able to meet their marking and tagging obligations during the spring and summer season with a combination of staff shifts, extra resources and plain hard work – very commendable under the circumstances.

However, Washington reported that they had not been able to meet their marking and tagging obligations due to various logistical and legal obstacles regarding their state restrictions imposed due to COVID-19 precautions.

The same issues arose for some Native American tribes who operate hatcheries in the Puget Sound and along the Washington Coast. It is unclear if FWS and Tribal hatcheries in Idaho were able to complete their marking and tagging obligations due to the precautions required by the COVID-19 pandemic. Inquiries to some state, federal and tribal entities regarding their fin-marking and tagging activities remain unanswered currently.

<sup>&</sup>lt;sup>1</sup> FWS National Fish Hatcheries are located on Eagle Creek in Clackamas County and on the Warm Springs River within the Warm Springs Reservation.

It is critical to raise this issue because when the unmarked or untagged fish return to Oregon, Washington and Idaho waters, fisheries encountering these fish will be required to release these hatchery-origin fish because fishers will not be able to distinguish these fish from natural-origin fish. Furthermore, fishery managers setting harvest limits on hatchery fish harvests will base those limits on specific abundance predictions for ESA-listed wild salmon and steelhead returning to Oregon, Washington, and Idaho waters. Depending on survival of the unmarked and untagged releases, there may appear to be abundant returns of wild fish – resulting in more fisheries and authorized harvest on the returning marked and tagged hatchery fish – which in fact - may result in over-harvest of both the unmarked, untagged hatchery fish (creating hatchery broodstock shortages) increased encounters of natural-origin salmon and steelhead in subsequently authorized fisheries – and higher numbers of unmarked, untagged hatchery-origin salmon and steelhead on natal spawning grounds.

The ability to estimate the return of wild salmon and steelhead at mainstem Columbia River dams and at Willamette Falls has been undermined since unmarked hatchery fish will be counted as wild fish, thus inflating their numbers and making evaluation of wild fish returns impossible. The abundance of wild fish including unmarked hatchery fish allows more fishing even though the true wild return may be low. <sup>2</sup>

Additionally, COVID – 19 precautions have affected the robustness of 2020 fishery observations in the ocean, marine and freshwater – so on top of everything, there is a drop in the confidence intervals behind the monitoring, observation and evaluations (MOE) that all fishery managers use to set seasons through the Pacific Fishery Management Council (PFMC) process. The MOE requirements were relaxed by NOAA Fisheries during the Spring PFMC Meetings at the request of all western states and commercial fishers.

These actions in response to COVID-19 are a "double whammy" to wild salmon and steelhead recovery efforts.

### Wildfires and Hatchery Practices

It will be interesting to see the final assessment of damage to hatcheries because of the fires. These assessments could affect existing mitigation agreements as well as ODFW's budget. The full effects of the fires will need to be in the forefront of the 2021 session. It is possible that the agency budgets now in the Governor Brown's hands will not have all the answers before she must submit her budget to the Legislature. Future emergency circumstances require protocols now.

The Legislature has a duty to oversee that the state's primary obligation to fish and wildlife – preventing the serious depletion of indigenous fish and wildlife – is met. Providing "use and enjoyment" is secondary – but provided for when native fish and wildlife are not seriously depleted. There is also a duty to provide the benefits of native fish and wildlife to future Oregonians – not just those currently with fish and hunting licenses – and not just those people carrying licenses to "use and enjoy" Oregon's bounty – but to all citizens who may enjoy simply knowing that native fish and wildlife are present in the field and stream and backyards across the state. In this case, the release of pre-smolt hatchery fish during an emergency ignores ODFW's Native Fish Conservation Policy because of the failure to assess the ecological impacts between wild native fish with hatchery fish due to competition for food, rearing space, and predator attraction.

There is an upside to this story. Over the years, more hatcheries have been brought online while at the same time wild fish populations continue to decline – dramatically proving that hatcheries have not been a good substitute for losing wild anadromous fish and their habitats. The current situation provides Oregon with a golden opportunity to reassess the use of hatcheries as a mitigation tool and perhaps find other mitigation methods that would be more effective and less costly at providing fish for tribal, commercial and recreational fisheries – the money saved on hatcheries can be used to improve habitat for wild fish and increase monitoring of wild fish abundance criteria. When a particular hatchery is no longer operable or cannot fulfill its obligations, the mitigation dollars could be spent on a host of other activities that would be more meaningful, cost-effective and long-lasting in terms of their benefit for native fish populations and Oregon citizens.

ODFW's actions regarding its hatchery investment made conservation a secondary consideration. Structural change is needed to protect native fish and wildlife – the agency priorities should be staff safety and protecting native fish and wildlife in compliance with the Commission's policies.

<sup>&</sup>lt;sup>2</sup> One further complicating practice in the Snake and Upper Columbia is that tribal hatchery programs are releasing hatchery-origin coho salmon, chinook salmon and summer steelhead without fin-marks. The result is a growing number of unmarked and untagged salmon and steelhead returning – being caught and released by sport anglers. These fish are returning to upriver hatcheries and to natal spawning areas contributing uncertainty to the monitoring the percent of hatchery fish on the native fish spawning beds.

#### **Ouestions for ODFW:**

- 1. When will a full assessment of the damage to hatchery facilities in Oregon be complete?
- 2. When will ODFW provide a full report on the disposition of the fish within each hatchery at the time of the evacuation or fire emergency?
- 3. What is ODFW's current protocol regarding actions taken by staff when a hatchery or its water source or power source is threatened by fire or another emergency?
- 4. Did ODFW staff follow agency or state protocols regarding their actions before, during and after evacuation?
- 5. Did ODFW hatchery Staff or ODFW headquarters managers consult or coordinate with federal regulatory officials regarding the marking, tagging or release of hatchery fish?
- 6. Hatchery fish are typically released at a time and in a manner as part of a federally approved Hatchery and Genetic Management Plan (HGMPs are an aspect of ESA Recovery for ESA-listed salmon and steelhead). Has ODFW reported deviations of the fire-related releases compared with the on-plan releases?
- 7. Were any hatchery disease control chemicals lost, spilled, burned, or released because of the fires?
- 8. How many of the released salmonids were released without fin-marks or detectable tags?
- 9. Were any non-native fish (Brown Trout, Brook Trout or Atlantic Salmon) released into watersheds with bull trout or anadromous salmonids?
- 10. Does ODFW have a tool to evaluate or assess the relative value of, or priority of all of Oregon's hatchery assets?
- 11. What process will ODFW and DAS use to determine which buildings or other facilities should be repaired verses replaced verses abandoned?
- 12. How will ODFW and DAS determine the public interest in repairing or replacing damaged hatchery facilities, or measure the public's return on investment that these hatchery facilities may provide?
- 13. Does ODFW have a post-event deconstruction process for hatchery operation decisions during the fires to determine if the agency had existing protocols, whether the protocols were followed, and whether other legal conditions and standard practices were followed?
- 14. Did ODFW hatchery facility and management staff consider and weigh the impacts that the premature release of hatchery salmon and steelhead would have on the wild or native fish already present in Oregon's rivers?
- 15. Can ODFW Staff describe the ecological and management impacts of releasing unmarked and pre-migrant hatchery fish on rearing and migrating wild fish?
- 16. Did ODFW follow its Native Fish Conservation Policy, 2003 (635-007-0502) to "ensure the conservation and recovery of native fish in Oregon...because naturally produced native fish are the primary basis for Endangered Species Act delisting decisions and the foundation for long-term sustainability of native species..." and "using hatcheries responsibly so that naturally produced native fish are sustainable (635-007-0503)?
- 17. Has ODFW prepared for the likely increasing frequency and intensity of multiple emergency situations arising within watersheds where Oregon has invested in hatcheries rather than conservation?