



Native Fish Society

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Fighting for the Future of Native Fish

Conserving biological diversity of native fish and protecting their habitats

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Dear Sirs,

I am opposed to the wild coho retention fishery proposed by the Oregon Department of Fish and Wildlife. There are several reasons the proposed fishery should not be approved: the current ESA-threatened status of the ESU; ODFW's questionable interpretation of the ESU's sustainability; likely further deterioration of habitat on the North Coast due to recent decisions by the Oregon Board of Forestry; and potential side effects of a North Coast fishery on weak coho sub-populations and on seriously depleted fall chinook populations. My first concern is with the concept of opening a retention fishery, however limited, on an ESA-listed species. While I agree that the ESA should be used to allow a species to recover to the point where it can be delisted, I strongly disagree with the idea of using a small upward fluctuation in numbers to justify a kill fishery. Viewed in the context of historical abundance of wild coho, current numbers are very low, and have been decreasing for decades. It is only in the last few years that there has been an upward trend following the bottoming-out in the 1990's.

Prudent management requires extreme caution and conservative assumptions. The overarching principle should be to take actions that are likely to contribute to recovery of the ESU, and avoid actions that might hamper recovery.

Beyond that general concept, and accepting just for the sake of argument that a kill fishery might be justified for some basins, I strongly object to the retention fishery on the North Coast in particular, for the reasons detailed below.

The ultimate foundation of the recommendation for a retention fishery is ODFW's interpretation of the ESU's sustainability as defined in Wainwright et al.

(2008). That document is a synthesis of the best available science specific to Oregon Coast coho, and using it as a framework to guide management decisions is entirely appropriate. Wainwright et al. (2008) contains the most recent information available; ODFW has no further information relating to the sustainability scores (ODFW, 2009b). ODFW provides estimates of adult return and spawner abundance, based on factors such as recent ocean conditions, jack returns, and stock recruitment models (ODFW, 2009b).

ODFW has applied a very liberal interpretation of the “truth scale” generated by the Decision Support System (DSS). In particular, they used a “pass-fail” criterion in evaluating population sustainability:

“Populations proposed to have a fishery within the Oregon Coastal Coho ESU will have a positive truth value when the biological recovery criteria (Wainwright et al. 2008) are applied and will therefore be considered sustainable.” (ODFW, 2009a.)

The DSS truth scale is a fuzzy scale operating on a continuum from -1 to +1.

Wainwright et al. (2008) emphasize that the scale is **not** to be used in a Boolean manner (either/or; pass/fail). The problem with a Boolean approach is that any value above 0, no matter how small, is taken to indicate sustainability, when in fact there is uncertainty on both sides of 0. ODFW’s justification for their interpretation is that conservative assumptions were used to arrive at the score (ODFW, 2009a). Conservative assumptions are appropriate; they should be applied at every decision point, including interpretation of the “truth scale”.

The trigger point needs to be higher than .01. Reasonable people can disagree about what range of values might constitute a trigger, but I think many would agree that a population scoring with a “low certainty of sustainability”, as does the North Coast stratum, should not be a candidate for a kill fishery. According to Wainwright et al. (2008), “risks remain high until truth values are strongly positive”.

The North Coast stratum scores +.11 on the population sustainability scale, (Wainwright et al., 2008, Table 3), representing a “low certainty of sustainability”. In my opinion, this means that the entire North Coast stratum should be removed from consideration for a retention fishery. For the sake of argument, let us follow ODFW’s “cherry picking” approach (albeit in a very poor orchard), and consider only the Nehalem population for a retention fishery on the North Coast, as they have done.

The sustainability score of the Nehalem population is only +.15 (Wainwright et al., 2008, Table 3). This falls in the “low to moderate” certainty range. It is by far the strongest population on the North Coast, but is still in the high risk category, and once again I argue that the Nehalem should be taken out of consideration based on that score.

Drilling down a bit farther into the specifics of the Nehalem population, there are some disturbing metrics detailed in Table 6 in Wainwright (2008). The DSS scale measures the distribution of adult spawners. There are low-to-moderate scores

for spawner abundance in 2 HUC's: Middle Nehalem (.16) and Lower Nehalem (.25), and a moderate-to-high score in the Upper Nehalem HUC (.46), More importantly, there are strongly negative spawner abundance scores in the two remaining HUC's: the North Fork (-0.41) and Cook Creek (-0.93). A score of -1 would indicate spawners occupy less than 20% of available spawning habitat; Cook Creek is not far from that. A score of 0 indicates spawners occupy less than 50% of available spawning habitat, so -.41 would put the North Fork at something less than 40% occupancy. Management strategy should be aimed at getting **more** spawners into those watersheds. A surplus of spawners is not a waste. Given the many years of deficiency in marine-derived nutrients in those HUC's, a surplus of spawners is a desirable condition.

Clearly, the need for carcasses has already been recognized, as shown by the effort expended in placing carcasses of hatchery fish in streams. According to ODFW's website

(<http://nrimp.dfw.state.or.us/nrimp/default.aspx?pn=carcasstables>), 3,613 coho and steelhead carcasses were placed in the Nehalem basin September 2003 through January 2006. This was 34,418 pounds in 140.5 miles, (245 pounds/mile; 26 carcasses/mile).

A carcass deposited as a result of a wild fish dying on the spawning grounds would cost far less than a carcass placed by a person, even an unpaid volunteer. The North Fork population scores -0.70 in distribution of juveniles. This probably equates to utilization of less than 30% of available habitat by juveniles.

Given those weaknesses, I see no justification for killing wild coho on the Nehalem. Such an action would only put two weak sub-populations at further risk.

There are side effects that could arise in a retention fishery. Under current regulations (retention of hatchery fish only), there is very little angling effort directed at coho on Nehalem Bay upstream of the North Fork arm, as all of the hatchery releases are in the North Fork. Under the proposed regulations, it is likely that overall angling pressure would increase. The bulk of this activity likely would continue to be focused in the North Fork and in the bay downstream of the North Fork. This raises the possibility that the North Fork wild fish, a weak population, will bear a disproportionate share of the Nehalem basin wild fish harvest.

If the projected return materializes in the Upper, Middle, and Lower Nehalem HUC's, some of the additional angling pressure would shift to the bay upstream of the North Fork. This might help take some of the additional pressure away from the North Fork fish, but would increase pressure on the Cook Creek population. There would be no way to separate the Cook Creek fish from the Upper, Middle, and Lower Nehalem fish.

The fall chinook fishery in the Nehalem basin is under emergency closure for the 2009 season. A side effect of a coho retention fishery would be increased

mortality on chinook, whether the fish die as a result of handling or as a result of misidentification.

A key component of managing extinction risk involves habitat protection and enhancement. For a population scoring with a low certainty of sustainability, “aggressive ecosystem protection and restoration efforts are needed to prevent further deterioration” (Wainwright et al., 2008).

In June 2009 the Oregon Board of Forestry approved a significant change to the management plan for the Tillamook and Clatsop State Forests. This change will increase timber harvest, with more clearcutting and more road construction. The net effect will be to move from a plan estimated to produce about 50% of the timber volume that would be produced under a timber-maximization approach, to a plan estimated to produce about 70% of timber-maximized volume. When coupled with the extensive private timber holdings on the North Coast, which are managed for maximum timber production, the net effects on freshwater habitats could be significant. In addition, the Oregon Department of Forestry’s current “Salmon Anchor Habitat” strategy will be phased out beginning in 2011, to be replaced with an “Aquatic Anchor” strategy that will eliminate current caps on the level of clearcutting allowed in the “anchor” habitats. (Summary adapted from personal communication from Bob Van Dyke, Forest Policy Advisor for the Wild Salmon Center, Portland, OR.)

Forest management on the North Coast has never incorporated “aggressive ecosystem protection”. The likely further deterioration of freshwater habitat as a result of forest management changes is one more argument against the retention fishery on the North Coast.

Thank you for the opportunity to comment.

Literature referenced:

ODFW. 2009a. Oregon coastal coho, coastal rivers coho sports fishery. Fisheries Management and Evaluation Plan. Oregon Department of Fish and Wildlife. Salem, Oregon. 25 p.

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