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*Conserving biological diversity of native fish and protecting their habitats*

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May 18, 2009

Oregon Department of Fish and Wildlife Commissioners  
3406 Cherry Avenue N.E  
Salem, OR 97303

Dear Commissioners:

RE: Comments on harvest proposal for Oregon Coastal Natural coho salmon

The reasons NFS does not support a kill fishery on ESA-listed wild coho in selected Oregon coastal rivers are:

A coho kill fishery as proposed is perfect for a population that is recovered rather than listed as a protected species under the ESA.

The time series data that ODFW uses to justify the fishery is a subset of the time series data that is available. This data on run size should be placed in the context of the historic time series. We have provided a graphic for that time series (1890 to 2000s) produced by ODFW biologists. This database indicates that wild coho production in Oregon coastal rivers has declined and the trend takes this population closer to extinction.

The increase in wild coho abundance in the early 2000s was due to an improved ocean condition and these populations have benefited from that increase in spawner abundance, but it is too early to kill spawners given their threatened status.

The kill fishery would target Yaquina, Coos, Coquille, and Nehalem rivers. Except for the Coquille River, the wild coho populations in the other streams have displayed a volatile fluctuation in abundance ranging from near zero spawners to thousands of spawners. This volatility should be of concern for these threatened populations. They are not stable and there is no increasing trend.

The Yaquina and Coos rivers are predicted to have a declining spawner abundance in 2009.

Capacity of the habitat to support coho salmon and other salmonids is increased by marine derived nutrients that enrich these streams from salmon carcasses. However, there is no target for carcass enrichment of these streams called for by Amendment 13 or in the proposal to increase harvest by the agency. The scientific literature estimates that to be 93-155 salmon carcasses per kilometer of stream. There has been no analysis by the agency to determine whether this recommended nutrient enrichment of streams can be achieved in target rivers.

Historically coho salmon fluctuated between 100,000 to 450,000 fish (1890 to 1940s) with average annual harvests of 310,000 prior to 1923 (Gharrett and Hodges 1950) with a declining trend since that time. It was due to this declining trend that ODFW (then the Oregon Fish Commission) restricted commercial harvest in coastal rivers.

The historic biomass of salmon returning to Pacific Northwest rivers was 160-226 million kg. Now the number of fish returning to these rivers has declined to 11.8 – 13.7 kg. This means that only 6-7% of the marine derived nutrients that once were delivered to streams is now reaching them (Gresh et al. 2000). Oregon salmon streams are starved for nutrients that increase their capacity to produce salmon.

Over the last 100 years management plans developed by ODFW, PFMC, and NMFS have failed to reverse the decline of Oregon Coastal coho salmon. This proposal is consistent with earlier recovery-conservation plans in its emphasis on harvest rather than conservation.

It is our concern that the proposed targeted harvest in select Oregon coastal rivers on ESA-listed coho salmon is premature for it relies on a narrow data base for spawner abundance; it does not take into account nutrient enrichment from salmon carcasses to enhance the productive capacity of the habitat; projected spawner abundance is expected to decline in two of the four rivers proposed for harvest; and unfortunately continues the long series of efforts to recover wild coho on the Oregon coastal rivers that have failed to succeed.

The ODFW proposal does not include a viability analysis and risk assessment comparable to the work done by ODFW through the Interior Columbia River Technical Recovery Team (ICTRT). In the ICTRT viability assessment they reviewed each population according to viability criteria that includes:

- Number and arrangement of spawning area
- Analysis of gaps or continuity of spawning and rearing areas
- Phenotypic variation
- Genetic variation
- Spawner composition (potential effect of hatchery fish)
- Harvest impact on phenotypes at risk
- Hatchery impacts on population and risk assessment
- Predation impacts
- Ecological effects
- Abundance and Productivity analysis

Each population is analyzed according to the risk it is exposed to and rated from very high risk to very low risk and an estimate of viability based on this analysis (ICTRT 2007).

In reading the ODFW proposal for a kill fishery on wild ESA-listed coho salmon in select coastal rivers I did not find a risk analysis comparable to that developed by ODFW for interior Columbia River ESA-listed salmonids by the ICTRT. I can only conclude that the risk analysis for this proposal is not sufficient to justify a kill fishery on ESA-listed coho salmon.

We are also concerned about the impact of a targeted wild coho kill fishery on fall chinook in Oregon coastal rivers. The prospect is for a very low abundance of fall chinook. Since coho and fall chinook fisheries are similar, that is, the fishing techniques using bait will catch both species, the coho fishery may impact chinook abundance in these rivers.

If a coho fishery is adopted by the commission, restrictions on terminal tackle should be included. We brought this up to staff at a recent meeting in Salem and were told that they had not discussed the impact of the coho fishery on chinook and had not recommended limitations on tackle. We recommend that the Commission adopt a regulation requiring no bait and barbless hooks for these fisheries. This would assist in protecting fall chinook.

I am also including with these comments our letter to the National Marine Fisheries Service regarding this proposed coho fishery. This document includes more information and scientific references supporting our conclusion.

Sincerely,

Bill M. Bakke

#### References

Gharrett, John T. and John I. Hodges. 1950. Salmon fisheries of the coastal rivers of Oregon south of the Columbia River. Oregon Fish Commission. Contribution No. 13. Portland, Oregon.

Gresh, Ted, Jim Lichatowich, and Peter Schoonmaker. January 2000. An estimate of historic and current levels of salmon production in the Northwest Pacific ecosystem. In *Fisheries*. American Fisheries Society

Interior Columbia Technical Recovery Team (ICTRT). January 8, 2007. Scenarios for major population group and ESU viability consistent with TRT viability criteria. National Marine Fisheries Service. U.S. Department of Commerce. Memorandum. Seattle, Washington.