



Columbia River Fisheries....A New Vision

Jim Martin, retired chief of fisheries, Oregon Department of Fish and Wildlife

Rod Sando, retired director Minnesota Dept. of Natural Resources and Idaho Department of Fish and Game

Bill Shake, retired assistant regional director, Fisheries, US Fish and Wildlife Service

Don Swartz, retired fisheries manager, Oregon Department of Fish and Wildlife

Columbia River salmon fisheries are in chaos.

- * Fisheries agencies attempt to balance sport and non-Indian commercial gill-net fisheries within tight Endangered Species Act (ESA) constraints.
- * Sportsmen are frustrated by reduced fishing seasons, abrupt closures and increased license fees.
- * Commercial fishermen are frustrated by mainstem constraints on protected salmon and steelhead, putting harvestable hatchery salmon off limits.
- * Environmentalists object to bycatch of protected fish and genetic impacts from too many stray hatchery salmon mixing with wild salmon on spawning grounds.
- * Businesses suffer devastating economic losses when the states of Oregon and Washington curtail salmon seasons. Sportfishing supports nearly 31,000 jobs in the Pacific Northwest. Many are directly tied to the Columbia River.
- * The Oregon Fish and Wildlife Department proposes to raise sport license fees by 20% in 2009 and the Washington Fish and Wildlife Department will soon follow. But anglers balk at paying more for less fishing. Steep decreases in angling license sales snowball into lost opportunity for everyone.

There is a Better Way

The solution is to move the lower Columbia River commercial gill-net fishery entirely into off-channel, terminal fishing areas called SAFE (for Select Area Fisheries Enhancement). SAFE is an experiment-turned-success. Oregon and Washington could then use the limited main stem ESA impacts to maximize sportfishing opportunity on hatchery fish. Impacts in this context refer to the total mortality on a listed run of fish, including hooking mortality from released fish as well as kept fish.

Terminal fishing in SAFE areas such as Young's Bay, near Astoria, Oregon, has been used for years to supplement the commercial fishery. For example, according to ODFW figures, in 2007 SAFE area fisheries contributed 62% of spring chinook commercial harvest and 26% of fall salmon harvest in the Columbia River.

Increased hatchery releases and improved survival rates in SAFE areas would ensure stable and profitable commercial fishing while adequately supplying markets. Even better, lower river netters are able to catch salmon in their prime, at top market value fresh from the Ocean. Profitable SAFE fisheries, in turn, would reduce wasted steelhead and cause fewer juvenile sturgeon mortalities.

This change also generates millions of dollars in economic value from sport fishing and tourism to local Columbia River communities from Astoria to Portland and Ilwaco to Vancouver. Expanded sport fishing license sales help stabilize the financial status of the fisheries agencies and their conservation mission.

This strategy holds substantial conservation benefits. Sport fishing involves just minor bycatch mortality of non-targeted species such as wild steelhead, sockeye and sturgeon. Because sport fishing removes more hatchery fish for each incidental wild fish handling mortality, the number of stray hatchery fish on the spawning grounds would be reduced. Reprogramming more juvenile hatchery fish to lower SAFE areas rather than upriver release sites would also reduce the number of adult hatchery fish that stray onto wild spawning grounds. A very high proportion of returning hatchery fish in SAFE areas will be caught in the commercial fishery after the fish pass through the sport fishery, further reducing strays.

Managing a sport fishery across a full season allows for better economics with a lighter touch on the resource. It also allows quick response to changed run sizes much more easily than if a front-loaded, intense commercial fishery has already used up a substantial portion of the ESA impacts allocated to the non-Indian fishery. Improved management flexibility in responding to surprises would also decrease the incidence of dramatic economic and social disruption, and is particularly important as climate change contributes to increased volatility in salmon run strengths.

Management reform can be phased in and mainstem fishing allocations shifted as new, increased salmon production returns to the SAFE areas. This strategy will facilitate an orderly transition that is fair to all parties, providing an equitable solution to a very heated and contentious controversy.

A Little History

Before the Endangered Species Act listings and the *US v. Oregon* allocation agreements with Columbia River treaty tribes, there were ample fall chinook and coho hatchery stocks to allow liberal sport and lower Columbia River gill-net fisheries to co-exist. However, several factors have changed.

First, allowable harvest rates have been severely reduced to support ESA recovery of salmon/steelhead stocks primarily decimated by habitat loss and hydropower mortality. In order to support recovery efforts, the total take or “impact” to listed fish is set by the federal regulators and then a percentage of that amount is allocated to various sectors (e.g. non-tribal fishing, tribal fishing, hydroelectric dam operation, etc.) As a result, lower Columbia River fisheries harvests are limited to well below 10% impact on endangered or threatened fish, with some fisheries, such as spring chinook, limited to just 2% impact. When the handling mortality of sport and gill-net fisheries combined reaches 2%, the spring chinook season is over. Sport fishing seasons get shorter each year.

Second, the majority of main stem ESA fishing impacts have been allocated by state and federal agencies to tribal fisheries for ceremonial/subsistence purposes, as well as tribal commercial harvest.

Today, there simply are not enough ESA impacts to allow both stable, dependable sport fisheries and substantial lower Columbia River commercial gill-net fisheries in the mainstem. The frustration is growing at ODFW/WDFW Commission hearings, Columbia River Compact meetings and in both state legislatures.

The Economics

Analyses show that the greatest economic benefit for each harvestable salmon results from sport fishing. For each spring chinook salmon caught, sport anglers in Oregon contribute roughly \$480.00 into the economy for gas, bait, food, lodging and gear.¹ A visitor to the Northwest would utilize a guide service at \$175.00 per day. A commercially caught salmon will usually sell for \$30-\$150 per fish at the dock, depending on species and season.

For each 10 wild fish caught and released, only one dies from handling in the sport fishery. Some studies have shown the mortality can be as low as 3% when fishing with lures rather than bait. Meanwhile, large mesh gill-net fisheries have roughly 40% release mortality and 14-18% mortality with smaller mesh gill-nets that capture the fish by tangling the teeth. However, “tooth nets” for salmon-sized fish act as gill-nets for smaller co-mingled steelhead. Bycatch mortality for juvenile sturgeon and other species is also an ongoing concern.

The Pacific Northwest is growing rapidly, with projections to double in population by 2040 and quadruple by 2100. Rapid growth will create both greater pressure on salmon habitat and greater demand for high quality sport fishing opportunities. Oregon and Washington must look to the future and formulate their plans for the next generation of fishermen and true salmon/steelhead recovery.

¹ Private angler trip expenditures are estimated by the US Fish and Wildlife Service at \$60/day for Oregon and \$102/day for Washington. For this analysis, we used the smaller amount to be conservative.

We can double the sport fishery and provide the same number of salmon to the market (or perhaps more). It's a win/win for both commercial and sport fishermen for the long term.

Hatchery smolt releases can be moved into new and existing SAFE areas in the lower Columbia River to enable commercial fisheries to catch just as many fish as they do now in the mainstem, with far more dependability, less environmental harm, lower harvest costs and higher economic value.

ODFW studies show that moving coho salmon smolts from upriver hatcheries to release points in SAFE areas significantly improves overall survival into Ocean fisheries and the overall harvest benefit, including substantial expansion of the Ocean, Buoy 10 and in-river commercial fisheries. At a time when Ocean coho fisheries are severely restricted, a doubling of hatchery fish survival would benefit every community on the Oregon and Washington Coast and would be an economic boon for lower Columbia River communities.

So Why Are We Stalemated in Controversy?

The Oregon and Washington Commissions share management responsibility for the benefit of citizens while protecting and maintaining these natural resources. They recognize that serious conflict exists, but have been unable or unwilling to take decisive action to break the deadlock. They recently sponsored a “visioning process” involving some stakeholders to guide future decisions. However when this vision was presented, the Oregon Commission refused to include it as an option. Thus, citizens are forced to seek solutions from the legislature. Recently, however, ODF&W staff has suggested a strategy similar to this proposal with respect to spring chinook.

Lower Columbia River commercial gill-net advocates recognize the current value of the terminal area fisheries. However, they cite the crowding problems in SAFE areas and the desire to fish traditional places where their fathers and grandfathers fished. Crowding can be reduced by developing new SAFE areas and deploying part of the fleet on alternate days.

The reality is that if not addressed with an innovative solution, the current conflict will eventually lead to a total elimination of the lower Columbia River gill-net fishery, as it has everywhere else in America. That has been the long-term fate of market hunting and commercial fishing in freshwater.

So, why not just wait until the conflict intensifies to the breaking point, eventually eliminating non-tribal commercial gill-netting? Because inaction sacrifices a valuable opportunity to convert surplus hatchery fish, uncaught in the sport fishery, into market value. We unnecessarily eliminate rural jobs in fishing and processing. We lose the incentive to reprogram hatchery fish into terminal areas with the resulting increase in survival and fisheries contribution. And we suffer far too many hatchery strays mixing with wild fish on the spawning grounds, which will eventually result in environmental lawsuits that could well shut down hatcheries critical to the region's fisheries.

Most of all, we endure years of increased conflict, management gridlock, lost fishing/economic opportunity and severe funding shortfalls in agency budgets resulting in reduced fishery production and poor conservation program quality.

Waiting is not worth it.

We Can Do This... Now!

If you have ever asked, "When are we going to do something about deteriorating Columbia River fishing opportunity and the impact of gill nets on wild fish?" the answer is "Now," But we can only succeed with your help. Please contact the Governor and your state legislators in support of this plan, talk to your friends about doing the same, and write a check to support our selective fishing campaign to **SAFE for Salmon**: PO Box 4, Oregon City, Oregon 97045. The SAFE for Salmon campaign is endorsed by a growing coalition that includes: Association of NW Steelheaders, NW Guides and Anglers Association, OR Council of Trout Unlimited, Oregon Wild, Puget Sound Anglers, and Northwest Sportfishing Industry Association. To learn more or get involved, please call SAFE for Salmon at 503-631-4747 or visit www.SAFEforSalmon.com.

About the Authors

We've spent a cumulative span of nearly 160 years of managing fisheries and advocating conservation programs. We have watched this conflict intensify and the management agencies suffer from "bunker mentality," sticking doggedly to the status quo when everyone else sees the need for change. This can be done and our economy and conservation efforts will benefit greatly.

