



COLUMBIA RIVER INTER-TRIBAL FISH COMMISSION

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TESTIMONY OF

The Honorable N. Kathryn Brigham, Chairwoman Columbia River Inter-Tribal Fish Commission

to the

United States House of Representatives

Committee on Natural Resources

*“Defining Species Conservation Success: Tribal, State and Local Stewardship vs. Federal
Courtroom Battles and Sue-and-Settle Practices”*

June 4, 2013

Chairman Hastings and members of the Committee, the Columbia River Inter-Tribal Fish Commission (CRITFC) is pleased to share our views on the Endangered Species Act as it relates to Columbia River salmon. Our testimony will highlight: tribal restoration successes; institutional barriers to building abundance and; recommendations to overcome these barriers.

CRITFC was founded in 1977 by the four Columbia River treaty tribes: Confederated Tribes of the Umatilla Indian Reservation, Confederated Tribes of the Warm Springs Reservation of Oregon, Confederated Tribes and Bands of the Yakama Nation, and Nez Perce Tribe. CRITFC provides coordination and technical assistance to these tribes in regional, national and international efforts to protect and restore our shared salmon resource and the habitat upon which it depends.

Our collective ancestral homeland covers nearly one-third of the entire Columbia River Basin in the United States. In 1855, the United States entered into treaties with the four tribes whereupon we ceded 40 million acres of our homelands to the United States. In return, the U.S. pledged to honor our ancestral rights, including the right to fish. Unfortunately, a perilous history brought the salmon resource to the edge of extinction and now 12 salmon and steelhead populations in the Columbia Basin are listed under the Endangered Species Act (ESA).

Today, the CRITFC tribes are leaders in fisheries restoration and management working with state, federal and private entities. CRITFC’s member tribes are principals in the region’s efforts to halt the decline of salmonid, lamprey and sturgeon populations and rebuild them to levels that support ceremonial, subsistence and commercial harvests. To achieve these objectives, the tribes’ actions emphasize ‘gravel-to-gravel’ management including supplementation of natural stocks, healthy watersheds and collaborative efforts.

Columbia River Fisheries Management – A New Era of Collaboration

The Columbia Basin is in the greatest era of collaboration in our lifetimes. In 2008 lengthy negotiations involving CRITFC and its member tribes resulted in three landmark agreements: 1) the 2008-2017 *United States v. Oregon* Management Plan with federal, tribal and state parties

that sets forth collaborative fishery arrangements and specific artificial production commitments, and which is also an order of the federal court for the District of Oregon, and; 2) the Columbia Basin Fish Accords with federal action agencies overseeing the federal hydro system in the Columbia Basin, and; 3) a new Chinook Chapter of the Pacific Salmon Treaty. These agreements establish regional and international commitments on harvest and fish production efforts, commitments to critical investments in habitat restoration, and resolving contentious issues by seeking balance of the many demands within the Columbia River basin. Our tribes have committed to substantial on-the-ground projects to fulfill these agreements. Tribal propagation programs are an important part of these commitments and their successes.

Tribal Successes – Stream by Stream, Stock by Stock

This section highlights just a sampling of the numerous successes our tribes have forged in the Columbia Basin. These include success through both re-introduction and recovery projects.

Methow and Wenatchee River Coho

Prior to the 20th century, an estimated 120,000 to 165,000 coho returned annually to mid-Columbia tributaries—the Yakima, Wenatchee, Entiat, Methow, and Spokane. Impassable dams, overfishing, unscreened irrigation diversions, habitat degradation, and hatchery policies all contributed to the virtual disappearance of coho in these tributaries.

Responding to the losses the Yakama Nation began an aggressive suite of actions beginning with reintroduction of coho to the Methow River in 1997 and the Wenatchee River in 1999. Using the only coho stock available, an early-run, lower river coho, the Yakama Nation designed an innovative supplementation approach which acclimates juvenile fish to spawning areas. Within a few years of inception, returns were sufficient to transition to solely in-basin broodstock.

Since the program's inception, total adult coho returns to the two basins have ranged from 1,751 to 30,341 with a 10-year average of 8,576 fish. Significantly, adult returns in 2009 were at a record high (since the mid-1900s) and deemed sufficient to open a limited tribal and non-tribal fishery in Icicle Creek, a Wenatchee tributary. It was the first fishery in over half a century. Another record return – nearly twice that of the 2009 record - occurred in 2011.

Partnerships with Grant County and Chelan Public Utility Districts and the Methow Salmon Recovery Foundation have helped make this restoration project possible. Sportsfishers, tribal members, and non-tribal commercial fisheries are now sharing in the benefits.

Similar coho reintroduction and restoration have occurred in the Yakima and Clearwater river basins. Both the Yakama Nation's Yakima River Coho Re-Introduction Study and the Nez Perce Tribe's Clearwater Coho Restoration Project are successful with results comparable to the Wenatchee/Methow program. Despite starting with out-of-basin hatchery stock, the Clearwater, Yakima, Wenatchee, and Methow rivers are seeing increasing returns of natural origin coho—fish that are adapting to their new environment and establishing spawning populations in new habitat areas.

Walla Walla River Spring Chinook

The Walla Walla subbasin is in the SE corner of Washington State within the northeast portion of the aboriginal title lands of the Confederated Tribes of the Umatilla Indian Reservation. Spring chinook were extirpated from the Walla Walla River for more than 80 years.

The construction of the Nine Mile (Reese) Dam in 1905 preceded the disappearance of spring chinook and caused the Walla Walla River to run dry each summer for nearly 100 years.

Then, in 2001, thanks to an agreement among three irrigation districts, the Umatilla Tribes, and federal agencies, the Walla Walla River started flowing all year long. This agreement supplemented earlier tribal, state, and landowner partnerships to improve fish passage and habitat. The tribe began its spring chinook reintroduction program because the species is critical to the Walla Walla River's ecological health consistent with the tribes' River Vision, and spring chinook are integral to the tribal cultural, spiritual and economic life.

To initiate the program, the Umatilla Tribes released surplus Umatilla and Ringold adult spring chinook into the South Fork of the Walla Walla River. Needing additional broodstock, the Umatilla tribe was able to acquire an additional 250,000 spring chinook smolts from Carson National Fish Hatchery in Carson, Washington and successfully reprogrammed these fish for release into the South Fork Walla Walla.

The Umatilla tribe's spring chinook reintroduction in the Walla Walla River is demonstrating how, when given the opportunity, adult fish will return, spawn, and rear in available habitat. Since the program began, adult spring chinook returns to the upper Walla Walla River and Mill Creek have increased from 200 fish in 2004 (the first year of returns) to 1,135 in 2009. The tribal goal is 5,500 adults to the river mouth. Due to the program's success, the tribe was able to open a tribal fishery on the Walla Walla in 2010, the first time in nearly a century.

Snake River Fall Chinook

Snake River fall chinook have been brought back from the brink of extinction. Listed as threatened under the Endangered Species Act, the estimated return of naturally-spawning Snake River fall chinook averaged 328 adults from 1986-1992. In 1994, fewer than 2,000 Snake River fall chinook returned to the Columbia River Basin.

The construction of dams on the Snake River, beginning with Swan Falls in 1901 and continuing with the Hells Canyon Dam Complex in the 1950's and Lower Snake River dams in later years, eliminated or severely degraded 530 miles – or 80% – of the historical habitat. The most productive of that habitat was upriver from the site of Hells Canyon Dam, which has no fish passage. A precipitous decline of Snake River fall chinook followed with only 78 wild adults observed at Lower Granite Dam in 1990.

Today the Nez Perce Tribe uses a cutting-edge hatchery program that supplements natural chinook populations with hatchery-reared fish of the same stock. The details of the Snake River Fall Chinook Program were refined through *U.S. v. Oregon* processes, and since 1995 the parties have included commitments for a Snake River Fall Chinook supplementation program. The development of numerous rearing and acclimation facilities in the Snake River Basin as well as

the Nez Perce Tribal Hatchery is essential to the implementation of the program. The tribes secured the initial funding for the program through the U.S. Congress. In 1996, Congress instructed the U.S. Army Corps of Engineers to construct acclimation facilities under the Lower Snake River Compensation Plan. Today the Nez Perce Tribe operates and maintains three acclimation facilities in addition to the Nez Perce Tribal Hatchery.

Together, the Nez Perce facilities release approximately 450,000 yearling and 2.8 million sub-yearling fall chinook smolts each year into the Clearwater and Snake rivers. These releases have dramatically increased the number of natural and hatchery origin adult fall chinook returning above Lower Granite Dam.

Total adult fall chinook salmon returns have increased from less than 500 adults to Lower Granite Dam annually from 1975-1995 to a record count of more than 41,000 in 2010. The natural origin adult return in 2012 was just under 13,000 fish, which was a record since the construction of Lower Granite Dam in 1975.

Utilizing Salmon Hatcheries for Natural Stock Recovery

The Columbia River treaty tribes' approach to salmon recovery is to put fish back into the rivers and protect the watersheds where fish live. We employ supplementation and propagation to improve abundance, productivity, distribution and diversity to increase naturally spawning populations of salmon using biologically appropriate hatchery fish.

CRITFC endeavors to secure a unified hatchery strategy among tribal, federal and state co-managers. To that end, we seek to design hatchery programs using the best available science and supported by adequate, efficient budgets.

Best Available Science: Significant New Findings on Supplementation

Significant new research on hatchery and wild fish interaction, conducted by the Columbia River Inter-Tribal Fish Commission, was published in the journal *Molecular Ecology* in October, 2012. The study, "*Supportive breeding boosts natural population abundance with minimal negative impacts on fitness of a wild population of chinook salmon,*" found that hatchery-reared salmon that spawned with wild salmon had the same reproductive success as salmon left to spawn in the wild, a result that refutes earlier perceptions that interbreeding of hatchery-reared fish with wild fish will always decrease productivity and fitness of the wild populations.

The study focused on a population of summer chinook whose natal stream is located in central Idaho, almost 700 miles upstream of the Pacific Ocean and the subject of the Nez Perce Tribe's Johnson Creek Artificial Propagation Enhancement Project (JCAPE).

The Nez Perce Tribe began the JCAPE Project in 1998 after tribal biologists observed critically low numbers of returning adult chinook to Johnson Creek, a tributary to the South Fork of the Salmon River in central Idaho, and upstream of eight large dams. By 1995 the number of spawning fish pairs in Johnson Creek had been reduced to five.

Adult return numbers are now consistently meeting the Johnson Creek project's short-term abundance goal of 350 returning adults, with the project already returning more than 1,000 summer chinook adults in some years. A limited harvest will be allowed when the tribe reaches a goal of 6,900 adults returning to Johnson Creek. The long-term ecological return or escapement goal is 19,000 summer chinook. The Nez Perce Tribe believes that by continuing the careful work of the JCAPE Project these goals stand a good chance of being met.

Supplementation Did Not Reduce Fitness of Wild Fish

The Johnson Creek research demonstrates two things: first, hatcheries don't inherently change salmon genetics. Second, well managed supplementation programs can increase population abundance while minimizing the genetic impacts to wild fish populations.

The study used DNA from all returning adults collected over a 13-year period to track parents and their offspring and to determine how successful hatchery fish were at mating in the wild when compared to wild fish. The study showed a clear boost to the number of adult salmon returning to the population from supplementation: Fish taken into the hatchery produced an average of nearly 5 times the number of returning adults compared to the fish that were left in the wild to spawn. A key finding of the Johnson Creek study was that a hatchery-origin fish spawning naturally with a wild fish had the equivalent reproductive success as two wild fish, suggesting that chinook salmon reared for a single generation in the hatchery did not reduce the fitness of the wild fish. Similarly, productivity of two hatchery fish spawning naturally was not significantly lower than for two wild fish.

Identifying the Institutional Barriers to Recovery

The Law and Policy provides, but the Regulators do not

ESA listing of salmon populations in the Columbia River has a complex and contentious history. While the Endangered Species Act explicitly provides for the use of artificial propagation in the conservation of listed species the role of propagation has not evaded this tension. Section 2 (b) of the ESA (16 U.S.C. 1531(b)) calls for recovery of the species in the wild, while section 3(3) explicitly authorizes the use of propagation in the conservation of listed species. To resolve this legal tension, the National Marine Fisheries Service and U.S. Fish and Wildlife Service have adopted formal policies regarding controlled propagation following notice and comment rulemaking procedures. Joint NMFS-USFWS Policy on the Controlled Propagation of Species Listed under the ESA (65 FR 56916, September 20, 2000); and NMFS Policy on the Consideration of Hatchery-Origin Fish in Endangered Species Act Listing Determinations for Pacific Salmon and Steelhead (70 FR 123, June 28, 2005). The central tenet of the hatchery policy is the conservation of naturally spawning salmon populations and the ecosystems upon which they depend, recognizing the contribution that properly managed hatchery programs may provide. Hatchery fish will be included in assessing an ESU's status in the context of their contributions to conserving natural self-sustaining populations.

Section 4 of the NMFS policy reads as follows:

Status determinations for Pacific salmon and steelhead ESUs generally consider four key attributes: abundance; productivity; genetic diversity;

and spatial distribution. The effects of hatchery fish on the status of an ESU will depend on which of the four key attributes are currently limiting the ESU, and how the hatchery fish within the ESU affect each of the attributes. The presence of hatchery fish within the ESU can positively affect the overall status of the ESU, and thereby affect a listing determination, by contributing to increasing abundance and productivity of the natural populations in the ESU, by improving spatial distribution, by serving as a source population for repopulating unoccupied habitat, and by conserving genetic resources of depressed natural populations in the ESU. Conversely, a hatchery program managed without adequate consideration of its conservation effects can affect a listing determination by reducing adaptive genetic diversity of the ESU, and by reducing the reproductive fitness and productivity of the ESU. In evaluating the effect of hatchery fish on the status of an ESU, the presence of a long-term hatchery monitoring and evaluation program is an important consideration.

We believe the law and policies are clear – carefully-managed propagation should have an important role to play in conserving salmon listed under the ESA. However, regulators are typically dogmatic and contrary to these possibilities.

The Mass-Marking Requirement

Mass marking of salmon started in the early 1980s as a management tool for recreational fisheries to access healthy hatchery returns while theoretically minimizing harvest impacts on naturally spawning returns. The practice of mass marking hatchery fish began to spread to salmon in the Columbia Basin after the ESA listings in early 1990s and culminated in 2004 with federal appropriations language requiring mass marking at facilities receiving federal funding.

The experience in the Columbia Basin for steelhead indicates that mass marking and the implementation of mark selective fisheries are not conservation measures. Naturally spawning steelhead in the Upper Columbia and Snake rivers were listed for protection under the ESA despite over a decade of mass marking and mark selective fishing. Money spent on mass marking and mark selective fishing could be reallocated to other actions that have a higher likelihood of contributing to recovery of naturally spawning populations.

Mass-marking is detrimental to ocean fisheries monitoring. Harvest arrangements under the Pacific Salmon Treaty are based on coded wire tag (CWT) information. The Treaty includes a MOA that requires both countries to maintain a CWT database. Mass marking affects ocean fisheries sampling because the fin clip no longer indicates the presence of a CWT. A large number of samples with no tags will be sent to the tag labs, increasing the costs for the tag lab and complicating the data analysis, making it more difficult to assess ocean harvest impacts.

Our tribes have requested that Congress reconsider the never-authorized requirement, delivered through prior appropriations language, to visibly mark all salmon produced in federally funded hatcheries. We have requested that federal mass-marking requirements be waived in the Columbia River Basin in favor of local managers to ensure compatibility with our overall

objective of ESA delisting and with prevailing laws and agreements: *US v Oregon*, Pacific Salmon Treaty and the Columbia Basin Fish Accords.

Incompatible Conservation Statutes

All Columbia Basin salmon stocks suffer from predation. Predation is a naturally occurring source of mortality though the degree of that mortality may not be. Species laws like ESA, the Marine Mammal Protection Act and the Migratory Bird Act are all well intentioned, but poorly reconciled with one another. Predation amplified by species imbalance has become a significant source of mortality for salmon. Combined, protected marine pinnipeds and shore birds constitute the majority of predation on ESA stocks. Co-managers' ability to affect these interactions are extremely limited.

Our tribes are encouraged by the recent efforts by Congress to amend the Marine Mammal Protection Act through the *Endangered Salmon and Fisheries Predation Prevention Act*. This Act would provide clarity and flexibility to co-managers to manage and balance "hot-spots" of pinniped predation on salmon and other sensitive species. It would also provide tribes equitable access to management tools.

Recommendations to Overcome Institutional Barriers:

- 1) **Incentivize de-listing for federal agencies** – 100-year recovery timeframes are unacceptable socially and biologically. Tribes and States and local governments have inherent incentives to de-list and fully recover species. Federal regulatory agencies do not. Creation of incentives and targets for de-listing could synchronize activities of co-managers with regulators.
- 2) **Resolve Scientific Gridlock through goal-driven management** -We must ask the proper questions: Not "how does poor propagation management inhibit recovery," but rather "how can propagation be integrated with and support recovery."
- 3) **Eliminate Salmon Mass-Marking Requirements** –repeal the mass-marking requirement for Columbia Basin salmon hatcheries and allow the practice to occur only with the concurrence of local co-managers. Salmon managers should be provided the latitude to make case-by-case decisions whether to mark fish and, if so, in the appropriate percentages.
- 4) **Cross-cut budgeting** - NOAA Fisheries budget documents are nearly incomprehensible. The problem is not NOAA's alone. Eleven separate federal agencies receive federal funds to address some aspect of salmon management. NOAA Fisheries resources should be directed to supporting the types of hatchery actions the tribes are taking. To do so, NOAA Fisheries must issue the necessary research permits in a timely fashion. NOAA Fisheries' must find efficiencies in the preparation of biological opinions for hatchery genetic management plans
- 5) **Balance species interaction through greater flexibility of the Marine Mammal Protection Act and the Migratory Bird Act.**

In summary, through combined efforts of the four tribes supported by a staff of experts, we are proven natural resource managers. Our activities benefit the region while also essential to the U.S. obligation under treaties, federal trust responsibility, federal statutes, and court orders. The Endangered Species Act is at its best when it provides beneficial coordination and resources. It is at its worst when it creates delay, bureaucracy and limits the tools co-managers need to restore abundance. We welcome fresh eyes and where necessary, new oversight from this Committee.

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