

**A REPORT FROM THE  
TREATY INDIAN TRIBES IN WESTERN WASHINGTON**

# **Treaty Rights At Risk**

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**Ongoing Habitat Loss, the Decline of the Salmon  
Resource, and Recommendations for Change**

**July 14, 2011**

## **Executive Summary**

This paper examines how the rights of western Washington treaty tribes to harvest treaty fish and shellfish, and the federal government's salmon and orca protection efforts, are at grave risk. This is being caused by a lack of coordinated federal leadership, a failure to exercise authorities and the disparate application of salmon conservation measures. The U.S. government must step up and provide the leadership needed to resolve these issues if salmon are to be successfully recovered and protected.

### **Stopping habitat degradation is the cornerstone of salmon recovery, but habitat is still declining.**

According to the Puget Sound Chinook Salmon Recovery Plan developed by the state and tribal salmon co-managers and adopted by the National Marine Fisheries Service (NMFS), protecting existing habitat is *the most important action needed in the short term*. Despite this commitment, NMFS' 2010 assessment of the Puget Sound Chinook Salmon Recovery Plan declared that habitat is still declining and protection efforts need improvement.

### **Tribal harvest is accountable and tribes are doing their share to promote recovery.**

In 1974, the federal court decision in *United States v. Washington* – known as the Boldt decision – affirmed the tribes' treaty right to half of the harvestable salmon, and established the tribes as co-managers of Washington fisheries. Initially, this recognition of the tribes' rights led to a significant increase in treaty harvest because the tribes finally were able to catch their share. However, harvest has been and continues to be constrained dramatically by degraded habitat. As a direct result, treaty harvest has been diminished to levels not seen since before the Boldt decision.

Tribal co-management of harvest is governed by the tribes' commitment to support salmon rebuilding efforts. NMFS' own analysis of recovery plan implementation indicates that harvest is doing its share to support salmon recovery. NMFS also concedes that salmon populations in many watersheds cannot recover even if harvest were completely eliminated. Yet, while harvest is accountable for recovery, habitat degradation continues steadily, destroying the salmon resource and along with it, the cultures and communities of the treaty Indian tribes in western Washington.

### **NMFS is applying disparate conservation standards to harvest actions versus habitat actions, thereby threatening treaty rights and impeding salmon recovery.**

NMFS holds the tribes to a different standard than all others by applying more stringent standards to tribal salmon harvest than to actions that degrade salmon habitat. In reviewing harvest decisions, NMFS expects tribal harvest plans to

contribute to salmon recovery over time. In contrast, when reviewing actions affecting Puget Sound habitat, NMFS seeks merely to maintain existing habitat productivity and quantity – regardless of whether it is adequate to support recovery.

NMFS' Biological Opinion and Reasonable and Prudent Alternative (RPA) for the Federal Emergency Management Agency (FEMA) National Flood Insurance Program is a key example of this disparate treatment. This flood insurance program sets the minimum requirements for floodplain management throughout most of Puget Sound. However, NMFS does not require an increase in habitat productivity and quantity, even in watersheds where NMFS concedes that habitat conditions are the key obstacle to salmon recovery. Another example of disparate treatment is NMFS' approach to southern resident killer whales (orca). NMFS claims orca are not recovering because there are too few large chinook salmon for them to eat. But instead of addressing all activities that affect chinook abundance, NMFS looks only to harvest reductions to address the problem.

This overemphasis on harvest restricts the tribes' treaty rights, while ignoring the science that indicates that habitat loss and degradation account for an even greater take of salmon and orca. These discriminatory actions contravene the federal government's trust responsibility to the western Washington treaty Indian tribes and undermine accomplishment of federal fish and wildlife management objectives.

**The federal government is not fully implementing its obligation to protect treaty rights.**

Salmon recovery is based on the crucial premise that we can protect what habitat remains while we restore previously degraded habitat conditions. Unfortunately, significant investments in recovery may not be realized because the rate of habitat loss continues to outpace restoration. The resulting net decline in habitat demonstrates the federal government's failure to protect the tribes' treaty-reserved rights.

The federal government has existing tools that it could employ to better protect habitat and support salmon recovery, but in many cases those tools are either misapplied or not being implemented adequately. For example, the U.S. Army Corps of Engineers' § 404 permitting authorizes the very same structures that salmon recovery actions seek to remove. Also, the federal government has approved and continues to fund state programs under the guise of coastal zone management that actually impede salmon recovery. For instance, the state's Shoreline Management Act also permits shoreline development for single-family residences, including bulkheads and docks that degrade habitat.

Instream flows also are under assault and need protection from excessive withdrawals. The tribes have pursued a number of approaches to define and

establish the instream flows necessary to protect and restore salmon resources. Unfortunately, each of these efforts has been undermined by flawed state policies that failed to institute a comprehensive effort to establish instream flows. Therefore, federal intervention is needed to adjudicate instream flows that are protective of fish habitat, and consistent with treaty-reserved rights.

Finally, federal agencies such as NMFS have failed to use their authority to prosecute those who degrade salmon habitat. In July 2000, NMFS formally published its policy governing enforcement of the Endangered Species Act (ESA) prohibition against take, and included a series of habitat impacts that would receive “heightened scrutiny.” Although shoreline armoring and riparian vegetation removal were on NMFS’ priority list, there appears to be only one instance of NMFS exercising its enforcement authority over these activities during the past decade.

**Salmon recovery crosses many jurisdictions, and leadership is needed to implement recovery consistently across those jurisdictional lines.**

The government’s piecemeal approach to recovery has resulted in a lack of agency consistency and ultimately the implementation of federal programs that serve neither to recover salmon nor protect treaty rights. For example, many federally funded environmental and conservation grant programs are not required to protect salmon. Instead, in many cases those programs rely on a planning process that ultimately lets the landowner decide what is best for salmon, even if those choices are contrary to federally approved total maximum daily loads (TMDLs) or federally-approved salmon recovery plans.

Moreover, despite ESA listing, and declining harvest and habitat, basic federal obligations remain unfulfilled. For example, the National Oceanic and Atmospheric Administration (NOAA) and U.S. Environmental Protection Agency (EPA) have failed to use their authority under the Coastal Zone Management Act (CZMA) to protect salmon and treaty rights. The CZMA obligates EPA and NOAA to assure that state nonpoint source coastal protection plans are consistent with applicable federal law, including the Clean Water Act, ESA, and federally secured treaty rights. These plans were supposed to be developed by 1995, but 17 years later, the federal agencies have failed to obtain the state of Washington’s compliance.

Given the critical importance of protecting habitat, it is essential that leadership is exercised to ensure that these basic federal obligations are met, including protection of treaty rights.

***The federal government can remedy this erosion of treaty-reserved rights by taking action:***

***I. Stop the disparate treatment of Indian tribes when applying salmon conservation measures.***

- Apply at least as stringent a conservation standard to actions affecting salmon habitat as is applied to salmon harvest.
- Assure that all federal actions affecting habitat contribute to recovery of salmon and orca.
- Develop a comprehensive and timely plan for addressing orca prey consumption needs that does not result in disparate treatment of treaty fishing and addresses all identified factors for decline.

***II. Protect and restore western Washington treaty rights by better protecting habitat.***

- Require federal funding that supports state programs and pass-through grants to be conditioned so that all funded efforts are designed to achieve consistency with state water quality standards and salmon recovery plan habitat objectives.
- Direct federal agencies to increase enforcement of federal obligations to protect habitat including the ESA and Clean Water Act.
- Direct NMFS and EPA to assure that state Shoreline Master Program updates are consistent with all federal obligations involving treaty rights.
- Direct the Department of Justice to initiate limited water rights adjudications to identify treaty-reserved rights for instream flows in selected watersheds.

***III. Establish federal oversight and coordination to align environmental and conservation programs to achieve salmon recovery and protect treaty-reserved rights.***

- Oversee and align funding programs to ensure achievement of recovery objectives.
- Unify federal agencies and resolve inter-agency conflicts to support salmon recovery.
- Hold federal agencies accountable for acts or omissions that lead to disparate treatment of tribes and failure to protect treaty-reserved rights.
- Harmonize federal actions to ensure consistency and compliance with federal obligations and treaty rights.

## **Introduction**

*“Through the treaties we reserved that which is most important to us as a people: The right to harvest salmon in our traditional fishing areas. But today the salmon is disappearing because the federal government is failing to protect salmon habitat. Without the salmon there is no treaty right. We kept our word when we ceded all of western Washington to the United States, and we expect the United States to keep its word.”* – BILLY FRANK JR., CHAIRMAN OF THE NORTHWEST INDIAN FISHERIES COMMISSION

As sovereign nations, 20 treaty Indian tribes in western Washington signed treaties with the United States, ceding most of the land that is now western Washington, but reserving our rights to harvest salmon and other natural resources. For those rights to have meaning there must be salmon available for us to harvest.

Today our fishing rights have been rendered almost meaningless because the federal and state governments are allowing salmon habitat to be damaged and destroyed faster than it can be restored. Salmon populations have declined sharply because of the loss of spawning and rearing habitat. Tribal harvest levels have been reduced to levels not seen since before the 1974 *U.S. v. Washington* ruling that reaffirmed our treaty-reserved rights and status as co-managers with the right to half of the harvestable salmon returning to Washington waters.

As the salmon disappear, our tribal cultures, communities and economies are threatened as never before. Some tribes have lost even their most basic ceremonial and subsistence fisheries – the cornerstone of tribal life.

The Northwest tribes are heartened by millions of dollars and years of focused cooperative work that have been spent on salmon recovery in the region during the past two decades. We have been at the center of most of these efforts. While we have made progress in some areas, the overall quality and quantity of salmon habitat continues to decline. Four species of salmon in western Washington are listed as “threatened” under the Endangered Species Act, some for more than a decade.

Our considerable investment in habitat restoration has not been able to turn the powerful tide of loss and degradation. We are steadily losing habitat throughout the region, and that trend shows no sign of improvement.

The reason is not a lack of effort or a lack of desire to recover salmon. The reason is a lack of federal and state government leadership, policy, commitment and coordination toward a set of salmon recovery goals and objectives.

We know that we cannot stop the massive population growth anticipated in this region over the coming decades, but we can ensure that the associated development is designed and implemented in ways that will better protect salmon and its habitat.

Habitat loss and degradation are the biggest contributors to the decline of the salmon resource, yet the federal government's primary response is to restrict harvest. Tribes are required to prove that our fishing and hatchery plans will lead to increased salmon populations and will not harm ongoing wild salmon recovery efforts. But we have observed that those who damage and destroy salmon habitat aren't held to the same standard.

Instead, the U.S. government continues to approve federal actions and federally funded state actions that either do not contribute to, or actually impede recovery of salmon habitat. The result is the continued slow degradation of habitat that already has suffered from years of pollution, poor land use practices, and other factors. This situation sets the bar higher and higher for tribes to continue our way of life, while setting it lower and lower for those who would destroy the salmon's home. This uncoordinated approach solidifies habitat losses and ultimately fails to protect our huge investment of funding, time, and effort.

The federal government's over-reliance on restricting harvest as the primary means to protect salmon is unfair, ineffective, and contrary to established principles of Indian law. In the end, this policy undermines the recovery of salmon and other listed species in western Washington. Like harvest and hatchery operations, habitat quality and quantity must be calibrated across the spectrum of agencies and jurisdictions involved in salmon recovery.

Salmon recovery begins and ends with habitat. No amount of fishery restrictions can restore the resource unless salmon have good spawning and rearing habitat.

An example is the Nisqually River, with its headwaters in a national park and its mouth in a national wildlife refuge. It is one watershed in Puget Sound where we have made significant habitat gains in recent years. More than 85 percent of lower river estuary habitat has been reclaimed through cooperative federal, tribal, and state work to remove dikes; nearly 75 percent of mainstem river habitat is in permanent stewardship.

Despite this massive cooperative effort, research shows that young ESA-listed salmon and steelhead from the Nisqually River are dying before they can reach Seattle, just 30 miles away. The main cause is believed to be a lack of good nearshore habitat caused by ongoing development practices.

If salmon are to survive, we must begin to achieve real gains in habitat protection and restoration. The path we are on leads to the extinction of the salmon resource and our treaty-reserved rights.

The federal courts have recognized four basic values associated with the treaty-reserved rights of the tribes: (1) conservation value of the resource, (2) ceremonial, religious, and spiritual values, (3) subsistence, and (4) commercial value. The treaty right to fish is a property right of the tribes and is protected under the Fifth Amendment of the U.S. Constitution, our treaties and the U.S. Supreme Court affirmation of this right.

In failing to protect salmon habitat, the federal government is failing in its trust responsibility to honor its treaties with the tribes. We are left with few choices other than the courts to protect our treaty-reserved rights and the salmon that are so essential to our culture.

We are at a legal and biological crossroads in our efforts to recover the salmon and preserve our tribal cultures, subsistence, spirituality, and economies. Not since the darkest days of the fishing rights struggle before Judge Boldt's decision in *U.S. v. Washington* have we feared so deeply for the future of our treaty rights.

This document discusses specific federal government actions that are impeding salmon habitat recovery and restoration, including:

- The application of disparate standards to harvest and habitat.
- Failure to protect treaty rights and financial investments by fully implementing existing federal authority.
- A general lack of alignment by the federal government of its actions with salmon recovery efforts.

This document also recommends specific solutions that will help the federal government meet its trust responsibilities to the treaty Indian tribes in western Washington as we rebuild the salmon resource. Broadly, those actions encompass:

- An urgent call for the federal government to hold the degradation of habitat to the same standards applied to tribal harvest.
- A demand that federal government begin to protect treaty-reserved rights by better protecting habitat.
- Urging federal leadership to provide leadership and oversight to ensure alignment and harmonization of federal programs with salmon recovery efforts.

These actions are critical to reverse the trend toward extinction, and ultimately to recover salmon and restore treaty-reserved harvest rights.

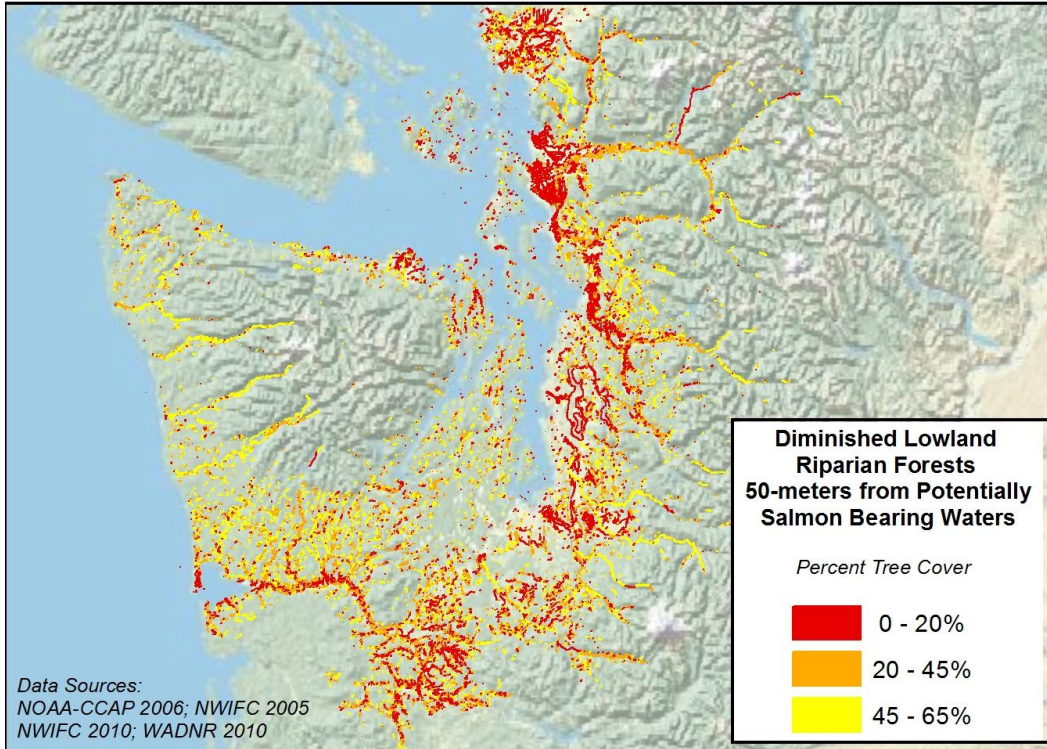


## Salmon Habitat Still Declining Despite Recovery Efforts

*“We have worked for decades to restore habitat in the Elwha River system, and we are still not fishing on the salmon stocks we have been working to protect. We had to push for an act of Congress to remove two fish-blocking dams on the river, but the way it’s going now, we still may never be able to fish for chinook again.”*

– RUSS HEPFER, LOWER ELWHA KLALLAM VICE CHAIRMAN

**Diminished riparian forests in the lowlands of Western Washington continue to impair habitats critical to the recovery of the region’s anadromous salmon.**



Wild salmon are naturally productive and have just a few basic needs for their survival: access to and from the sea, good spawning and rearing habitat, and the opportunity to reproduce.

Salmon harvest already has been eliminated to the point that further cuts can no longer contribute significantly to the recovery of wild salmon stocks. Yet habitat loss and degradation continue steadily destroying the salmon resource and along with it, the cultures and communities of the treaty Indian tribes in western Washington.

Protecting existing salmon habitat from further decline is the key to recovering endangered salmon populations. According to the 2007 Puget Sound Chinook

Salmon Recovery Plan adopted by NOAA Fisheries and developed by the state and tribal salmon co-managers, and numerous watershed entities:

Protecting existing habitat and the ecological processes that create it is *the most important action needed in the short term* to increase the certainty of achieving plan outcomes. Protection must occur in both urban and rural areas if we are to ensure the long-term persistence of salmon in Puget Sound.<sup>1</sup>

In the final supplement to the recovery plan, NMFS concurs with the imperative of immediate habitat protection, stating that “protecting functioning habitat is one of the top priorities and first steps for achieving a viable ESU (evolutionarily significant unit).”<sup>2</sup>

However, despite ESA listing of Puget Sound chinook in 1999 and the subsequent call for enhanced protections of remaining habitat, NMFS’ 2010 assessment of the Puget Sound Chinook Salmon Recovery Plan declared:

- Habitat is still declining; and
- Habitat protection needs improvement.<sup>3</sup>

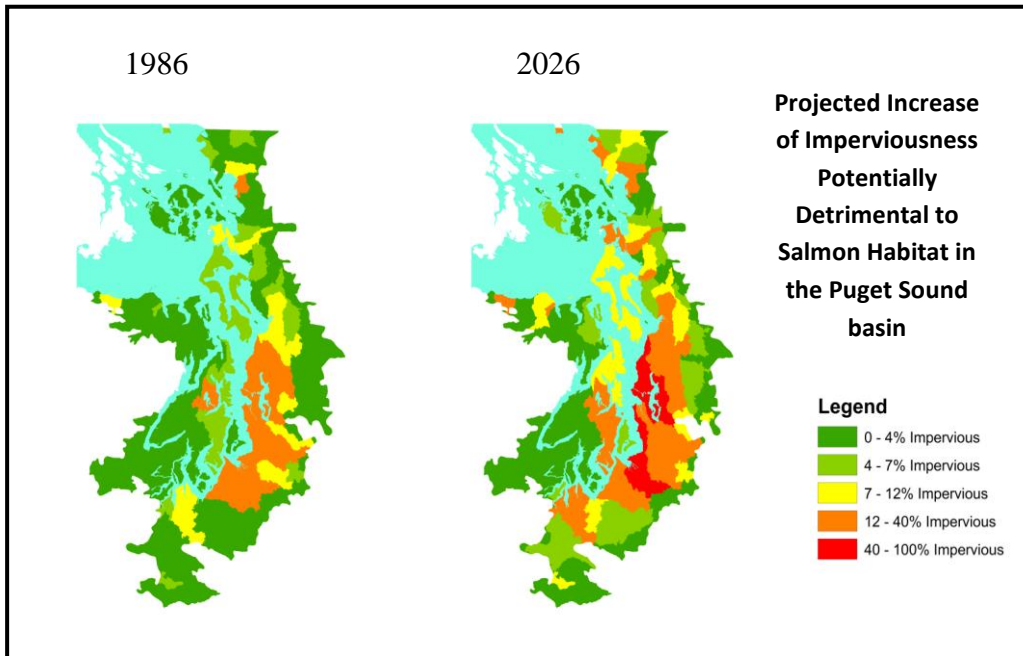
The status and trend data summarized in the NMFS report revealed extensive habitat losses across key indicators such as intertidal wetlands and forest cover. The report identified declining trends in habitat by comparing both historical data and trends since the ESA listing of Puget Sound chinook salmon.<sup>4</sup> For example:

- After ESA listing, from 2001 to 2006, about 10,700 acres of forest and 4,300 acres of agricultural land were converted to impervious surfaces.<sup>5</sup>
- Washington has lost an estimated 70 percent of its estuarine wetlands, and 90 percent of its old-growth forest. Together, these native habitat types have been considered among the most diverse and productive in the state.<sup>6</sup>

Other studies and analyses echo the NMFS report findings. Key indicators of a declining trend in salmon habitat include:

- Since the ESA listing of Puget Sound fall chinook in 1999, loss of shoreline habitat and function through shoreline armoring continues at a rate of 1.5 miles per year.<sup>7</sup>
- 83 percent of waters sampled to compile the state’s 305(b) and 303(d) Clean Water Act lists violate state water quality standards and are polluted.<sup>8</sup>
- About half of critical low gradient riparian forest habitat has insufficient forest cover to support salmon.<sup>9</sup>

- A Puget Sound Nearshore Ecosystem Restoration Project study revealed dramatic losses of habitat in all but one place in the sound during the last 150 years.<sup>10</sup>
- Hood Canal is highly impaired by a lack of dissolved oxygen, and the resultant hypoxia causes fish kills.<sup>11</sup>
- Eelgrass beds, essential to the intricate food web for salmon, are in overall decline.<sup>12</sup>



In a recent geographic information system (GIS) analysis of Puget Sound land cover data and population growth rates,<sup>13</sup> existing and projected trends demonstrate dramatic increases in the conversion of vegetated areas to concrete. These increases in impervious surfaces impact salmon habitat by removing essential vegetation and biota, increasing runoff, conveying pollutants, and altering hydrology. Without appropriate planning, placement, and mitigation, these actions will continue to imperil salmon.

Trends at the watershed scale in western Washington also provide a bleak outlook:

- Within the Stillaguamish watershed, during the time period of 1996 through 2006, there was a decrease of 41 percent in forest cover within the Urban Growth Area and a 22 percent decrease of forest cover inside rural residential areas. Now, only 23 percent of the 1,777 acres of riparian area within the floodplain have any forest cover.<sup>14</sup>
- In the Hoh watershed, approximately 31 percent of private forestlands were harvested between 1998-2010 (post ESA listing).<sup>15</sup>
- In the Snohomish watershed, dikes, levees, and flow devices have resulted in the loss of 55 percent of critical mainstem salmon habitat.<sup>16</sup>
- In the Port Gamble S'Klallam Tribe's usual and accustomed grounds, places such as Port Gamble Bay have had 74 percent of the shoreline armored or modified.<sup>17</sup>
- In the Skokomish basin, the watershed has experienced a 51 percent increase in impervious surfaces, with a third of that paving occurring just one mile from Hood Canal.<sup>18</sup>
- In the Muckleshoot Indian Tribe's area of concern, NOAA models predict that more than half of the stream miles of known coho salmon habitat will experience pre-spawn mortality rates greater than the average, and that 141 of those miles will experience mortality rates greater than 35 percent, when under normal conditions these rates are generally less than 1 percent.<sup>19</sup>

## Loss of Harvest and Catch Opportunity

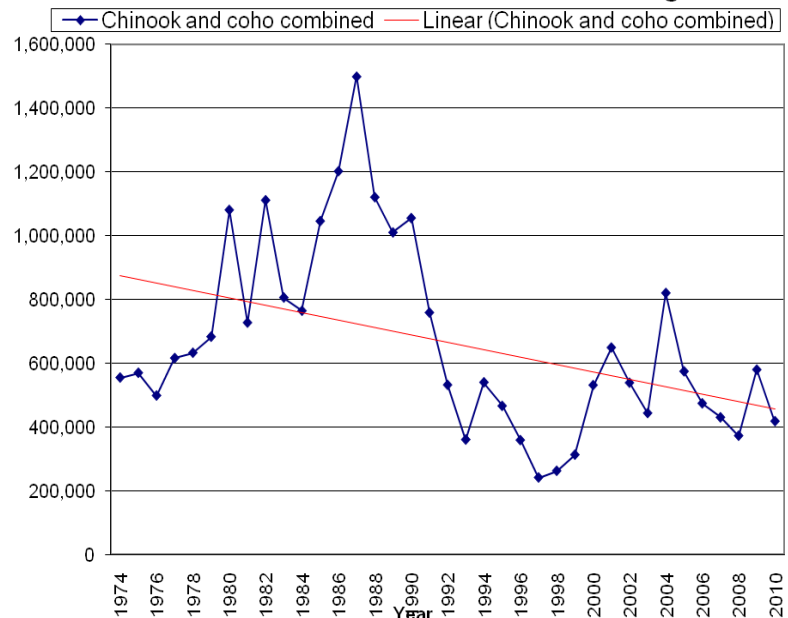
*“We volunteered not to fish for chinook and to focus on the recovery of our salmon. But even with the nets out of the river, our fish numbers are not increasing. We work hard to restore habitat and recover Stillaguamish chinook, but in the meantime, our culture faces extinction. We are a living culture and we must have salmon to harvest.”* –SHAWN YANITY, STILLAGUAMISH CHAIRMAN

Western Washington tribes pursued recognition of their treaty-reserved salmon fishing rights in *U.S. v. Washington* 384 F. Supp. 312 (1974) because their fisheries were being preempted by the state of Washington. The state was allowing its ocean and Puget Sound fisheries to overharvest returning adult chinook and coho salmon, but was denying the tribes’ treaty rights to fish in their traditional waters. Tribes were left with little or no fishing opportunity.

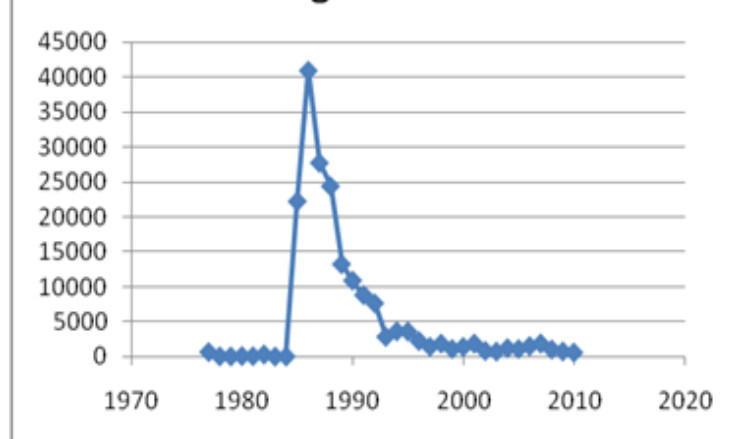
*U.S. v. Washington* – known as the Boldt decision – affirmed the tribes’ treaty fishing rights and established the tribes as co-managers of the resource with the right to half of the harvestable salmon returning to Washington waters.<sup>20</sup>

The years following the 1974 ruling witnessed the growth of harvest opportunity and catch, as tribal fisheries accessed 50 percent of the harvestable run. A

### Tribal Harvest in Western Washington



### Tribal Steelhead Harvest in Puget Sound

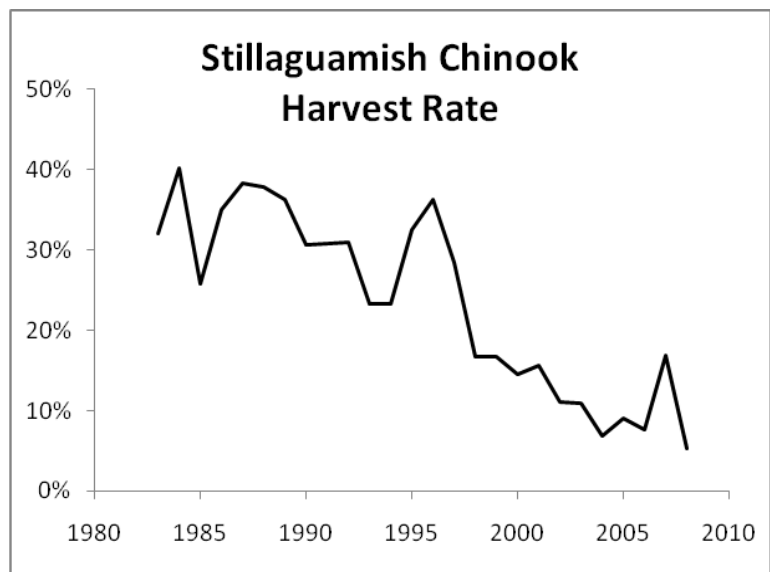


joint management framework developed by the state of Washington and the treaty tribes led to better balancing of harvest opportunity across all salmon fisheries.

Despite highly conservative fisheries and the prudent use of hatcheries, ongoing salmon habitat loss and degradation have led to pre-*U.S. v. Washington* tribal harvest levels. This habitat loss has continued even after the establishment of Puget Sound coho as a species of concern (1995), and the listing of Puget Sound chinook (1999) and steelhead (2007) as threatened under the Endangered Species Act.

For more than two decades, harvest rates in all fisheries have been sharply reduced to compensate for the precipitous decline of salmon abundance in Washington state waters, but today harvest cuts can no longer compensate for losses in salmon spawning and rearing habitat.<sup>21</sup>

Analysis of total U.S. harvest rates and run sizes for North Fork Stillaguamish River chinook illustrates this point. Washington harvest rates have been sharply and steadily reduced in reaction to declining returns. While this harvest action maintained spawning at targeted levels, it did not result in more fish returning to spawn, clearly indicating that factors other than harvest are responsible for the stock's decline.<sup>22</sup>



As a result, the Stillaguamish Tribe's treaty-protected river fishery was effectively eliminated and with it, an essential element of tribal culture and source of traditional food. Although the action was not matched by other managers, the tribe gave up even its most basic treaty-reserved ceremonial and subsistence harvest for more than 25 years in an effort to ensure the conservation of this run. In recent years, the Stillaguamish people had to purchase fish from outside their river system to conduct the traditional first salmon ceremony that welcomes and honors the salmon that are the foundation of their culture.

## ***Request for Federal Action***

### ***I. Stop the disparate treatment of Indian tribes when applying salmon conservation measures.***

#### ***The Problem***

Currently, NMFS holds the tribes to a different standard than all others by applying more stringent standards to tribal salmon harvest than to actions that degrade salmon habitat. NMFS requires salmon harvest to be managed to contribute to salmon recovery, but fails to apply a corresponding obligation to activities affecting salmon habitat. Similarly, NMFS claims that southern resident killer whales (orca) are not recovering because there are too few large chinook salmon for them to eat. But instead of addressing all activities that affect chinook abundance, NMFS looks only to harvest reductions to address the problem. The federal government continues to focus on restricting the tribes' treaty rights even though the science indicates that salmon will not recover or survive unless the government reduces the even greater take of salmon and orca caused by habitat loss and degradation. The federal government's disparate treatment contravenes its trust responsibility to the western Washington treaty Indian tribes and undermines accomplishment of federal fish and wildlife management objectives.

#### ***The Remedy***

To eliminate these discriminatory practices, NMFS must hold habitat actions to no less a standard than harvest. Specifically, NMFS should be directed to:

- Apply at least as stringent a conservation standard to actions affecting salmon habitat as is applied to salmon harvest.<sup>23</sup>
- Ensure that all federal actions affecting habitat contribute to recovery of salmon and orca.
- Develop a comprehensive and timely plan for addressing orca prey consumption needs that does not result in disparate treatment of treaty fishing.
- In areas where NMFS has declined to designate critical habitat, adopt commensurate harvest management policies.

## ***How the federal government is failing in its trust responsibility:***

### **NMFS applies disparate standards under the ESA, by treating harvest management requirements differently than habitat management requirements.**

The Endangered Species Act (ESA) created a responsibility for federal actions affecting listed species to provide an adequate potential for recovery, not just maintain the degraded status quo. For example, as a consequence of the Ninth Circuit's decision in *NWF v. NMFS*,<sup>24</sup> the federal operating agencies and NMFS now recognize that the dams comprising the Federal Columbia River Power System are obligated to contribute to the recovery of salmon. In response to the decision, NMFS and the federal action agencies (in consultation with state and tribal co-managers) assessed the proposed operation of the dams and determined that it would jeopardize ESA-listed salmon. They also determined what improvements were necessary to assure salmon survival and "provide an adequate potential for recovery." Generally, any level of population growth greater than 1 to 1 replacement meets NMFS' interpretation of providing an adequate potential for recovery with respect to the Columbia River dams.<sup>25</sup> While there are differences of opinion among states, tribes, and federal agencies as to whether this interpretation adequately addresses recovery, no one questions that there is a recovery obligation on the Columbia River.

The western Washington treaty tribes' harvest plans are designed to contribute to recovery. NMFS has developed an elaborate procedure for determining whether the impacts of tribal harvest will interfere with recovery of Puget Sound chinook. This includes modeling the likely effects of harvest on 22 individual populations that make up the Puget Sound chinook evolutionarily significant unit (ESU). This analysis looks at the current productivity of existing habitat and assesses the likelihood of a given population falling below a certain critical level or rising above a rebuilding level. Using this approach, harvest is managed to assure both survival *and* eventual recovery.<sup>26</sup>

In analyzing the tribes' harvest plan, NMFS also has stated that poor habitat productivity, not harvest, is the factor preventing chinook rebuilding in river systems such as the Nooksack, Puyallup, Sammamish, Skokomish, Dungeness, and Stillaguamish.<sup>27</sup> NMFS' own federal assessment of recovery plan implementation states that harvest has been managed consistently with this obligation to support recovery, while habitat continues to be the limiting factor to recovery.<sup>28</sup>

In stark contrast to the standards applied to the harvest of listed salmon, NMFS' review of the Federal Emergency Management Agency (FEMA) floodplain insurance program does not address Puget Sound salmon recovery. Instead NMFS applies a no net loss standard that attempts, at best, to maintain existing degraded



habitat conditions. In September 2008, NMFS determined that the continued implementation of the National Flood Insurance Program in Puget Sound (and the land use practices that go along with it) jeopardizes the continued existence of chinook, steelhead, summer chum, and orca. FEMA's flood insurance program subsidizes the alteration and destruction of salmon habitat by providing inexpensive insurance coverage for property and structures that are built in the floodplain.<sup>29</sup> As required by the ESA when it finds jeopardy, NMFS designed a "reasonable and prudent alternative" (RPA) as part of its biological opinion (BiOp), to allow the flood insurance program to go forward. NMFS' RPA is intended explicitly to result in no net loss of floodplain habitat and no adverse impact to "protected areas" (riparian areas, floodways, and channel migration zones).<sup>30</sup> In other words, NMFS' RPA is intended to maintain current degraded habitat conditions.

In crafting its RPA, NMFS did not identify management practices intended to address the gap between current productivity of salmon habitat, and what is needed to provide an "adequate potential for recovery," as it did in the Columbia basin. In contrast, NMFS' analysis of the tribes' Chinook Harvest Plan includes harvest rate ceilings which insure that populations will achieve escapement levels consistent with rebuilding abundance, as needed to foster recovery.<sup>31</sup> Essentially, NMFS fails to apply the same escapement and rebuilding levels required of tribes to its habitat protection decision in the FEMA BiOp.

The problem gets worse. Whereas the RPA calls for no adverse impacts in floodways, channel migration zones, and riparian areas, FEMA's response promises more habitat degradation and allows for local governments to permit development in these areas, with mitigation. NMFS is supporting this response.<sup>32</sup> However, the initial failure of mitigation to alleviate the impacts of development in these areas is one of the reasons why treaty rights aren't being met and salmon became subject to the ESA.<sup>33</sup> Moreover, this is bad flood policy because this development impairs watershed flood capacity and exacerbates flood damages.

Along with allowing more habitat degradation, FEMA and NMFS are delegating to local governments the responsibility for deciding what riparian/floodplain salmon habitat still retains value and what habitat can be written off as undeserving of protection.<sup>34</sup> The federal agencies provide no watershed and salmon population context for how these decisions ought to be made. Nor do NMFS and FEMA explain how writing off salmon habitat is consistent with their obligations to support salmon (and orca) recovery and comply with treaty rights. Moreover, local governments have neither the expertise nor the interest in meeting these obligations.

Despite NMFS' findings regarding the crucial need for increased habitat quantity and productivity to reverse declining population trends, the FEMA BiOp and RPA lack specific provisions for improving habitat to assure the survival and eventual

recovery of these populations. By failing to hold FEMA's flood insurance program to the same standard that it holds harvest, NMFS both applies disparate treatment of treaty harvest and fails to apply conservation measures necessary to assure the survival and recovery of salmon (and the orca that depend on them). If Columbia River dams and Puget Sound treaty fisheries had been managed this way, ESA compliance could have been achieved by simply freezing salmon mortality levels to those occurring at the time salmon were listed. Obviously, this has not occurred.<sup>35</sup> To the contrary, exercise of treaty rights has been restricted and millions of dollars have been spent changing both the configuration and the operation of the dams, as needed to assure an adequate potential for recovery.

**In “protecting” orca, NMFS focuses on chinook harvest while ignoring other more damaging impacts.**

Southern resident killer whales (orca) were listed as “endangered” under the ESA in November 2005. Prior to December 2010, NMFS indicated that harvest did not significantly affect the availability of prey for orca. Since then, NMFS has gathered additional information regarding orca prey requirements, and concluded that further reduction of chinook harvest may be necessary for orca recovery.

The treaty tribes and states of Alaska and Washington have significant concerns regarding the quality of the new data and the assumptions underlying NMFS' analysis. However, should the data withstand rigorous scientific review, they underscore the need to protect and increase overall chinook abundance, not simply reallocate harvest from humans to orcas. Unfortunately, NMFS's current focus on the reallocation of harvest does not address important factors causing orcas' decline, including toxic contaminants, vessel disturbance, noise, and the continued loss and fragmentation of salmon spawning and rearing habitat.

NMFS, in cooperation with the Canadian Department of Fisheries and Oceans, is convening an expert panel and a series of workshops to evaluate the effects of salmon fisheries on orca. The workshops are being focused narrowly on just one factor that affects chinook abundance – harvest. They will not address key factors such as habitat, even though habitat decline is the critical factor limiting chinook abundance.<sup>36</sup> NMFS has declared that it will start identifying alternative harvest regimes in response to the workshop before the process is even complete. Essentially, NMFS is proposing to preempt their scientific process by acting on conclusions yet to be established. By any standard, this is not an objective approach.

If prey availability (i.e. chinook abundance) is an important problem affecting orca, then the federal government needs to address all the key factors. Other actions and policies affecting chinook abundance include land management, such as FEMA's National Flood Insurance Program, pesticide management, evaluation of Puget Sound hatchery programs, and NMFS' recently issued “Population Recovery Approach.”

For example, NMFS is consulting with the EPA about the impacts of a number of pesticides on ESA-listed salmon. Despite the evidence that orca are harmed by the toxic chemicals in the fish they eat<sup>37</sup>, NMFS has yet to assess the impacts on orca from ingesting chinook exposed to pesticides and other toxic compounds. Given NMFS' findings that several of these chemicals pose jeopardy to Puget Sound chinook,<sup>38</sup> it would logically follow that NMFS should promptly assess the effects of these pesticides on orca, prior to altering harvest regimes and impacting treaty rights. However, NMFS continues to focus on harvest and ignore the impacts of pesticides on chinook, orca, and the tribes' treaty rights, even though action on toxic chemicals would provide benefits for chinook and orca, as well as improve the overall health of Puget Sound and all the people that reside within the region.

In the case of FEMA's flood insurance program, NMFS found that the program jeopardizes both chinook and orca. Since that 2008 finding was made, NMFS has modified its views regarding orca consumption of chinook. As a result, the impacts stemming from the flood insurance program pose even greater jeopardy to orca. Despite this, NMFS maintains its position that the flood insurance program is obligated only to preserve existing habitat conditions. Worse yet, as discussed above, FEMA's plan allows continued degradation of salmon habitat even though NMFS insists that more chinook are necessary for orca to survive and recover.

Again, the federal government imposes one standard on the treaty tribes and a less stringent standard on activities that jeopardize salmon. As a consequence, treaty rights are impaired and the species these rights depend upon will not recover. The federal government needs to address *all* the sources of the problem in a manner that is consistent with the salmon conservation necessity principles established in treaty case law.<sup>39</sup>

## **Request for Federal Action**

### **II. Protect and restore western Washington treaty rights by better protecting habitat.**

#### **The Problem**

Although the federal government makes significant investments in restoring degraded habitat, it does not fully exercise its authority to protect the essential habitat that remains. Without these protections, overall habitat will continue to decline. This progressive habitat degradation will make recovery impossible and threatens the ability of tribes to protect, restore and exercise their treaty-reserved rights to fish.

The lack of habitat protection does not stem from an absence of authority – it is caused by the federal agencies’ inability to align environmental and conservation programs with recovery efforts, and to effectively implement and enforce existing laws. For example, federal funding from a number of agencies continues to support state environmental and conservation programs that are inconsistent with salmon recovery and do not achieve compliance with state water quality standards. Moreover, federal agencies have not enforced key environmental statutes such as the ESA, which could serve to protect salmon habitat.

#### **The Remedy**

Protecting salmon habitat is an essential element of the fiduciary duty to ensure that the tribes can exercise treaty-reserved rights. In implementing this duty, the federal government must employ *all* authorities and tools to leverage better habitat protection. Specifically, we ask the Administration to:

- Require federal funding supporting state programs and pass-through grants to be conditioned so that all funded efforts achieve consistency with state water quality standards and salmon recovery plan habitat objectives. Examples include:
  - Clean Water Act funds, National Estuary Program funds and Coastal Zone Management Act funds should implement actions designed to achieve state water quality standards, total maximum daily loads (TMDLs), and salmon recovery plan habitat objectives.
  - USDA funds, including Farm Service Agency (FSA) and National Resource Conservation Services (NRCS) programs should implement riparian buffers comparable to those that NMFS has called for in its RPA for FEMA’s National Flood Insurance

Program, and implement all other practices consistent with TMDLs, water quality standards, and salmon recovery objectives.

- Direct federal agencies to increase enforcement of their obligations to protect habitat, including the Endangered Species Act and Clean Water Act.
- Direct NOAA and EPA to ensure that state shoreline master program updates are consistent with all federal obligations, including treaty rights.
- Direct the Department of Justice to initiate limited water rights adjudication to identify treaty-reserved rights for instream flows in selected watersheds.

### ***How the federal government is failing in its trust responsibility:***

#### **Habitat continues to decline despite investments in habitat enhancement.**

Salmon recovery is based on the crucial premise that we can protect what habitat remains while we restore degraded habitat conditions. In the effort to restore salmon, many millions have been spent to protect and restore salmon habitat:

- The Salmon Funding Recovery Board has administered approximately **\$788 million** in federal, state, and local funds since 1999.<sup>40</sup>
- The USDA's Farm Service Agency Conservation Reserve and Enhancement Program – developed to rebuild salmon habitat on agricultural lands – has allocated approximately **\$71 million** since 1998 (80 percent is federal).<sup>41</sup>
- Since 1987, the Department of Ecology has administered approximately **\$60 million** in federal clean water funds to protect beneficial uses – namely salmon.<sup>42</sup>

Unfortunately, these and other significant investments in recovery may not be realized because the rate of habitat loss continues to outpace restoration.<sup>43</sup> This decline can be attributed to the fact that current habitat protection is contingent upon the same programs that existed prior to the ESA listing of Puget Sound salmon. Moreover, since ESA listing, these programs have yet to be recalibrated to protect salmon habitat. The result, as the NMFS report explains, is that the current habitat protection system is based on the very same programs that failed to prevent ESA listing.<sup>44</sup> Nonetheless, many of these outmoded tools continue to be funded by federal dollars and authorized by federal agencies without conditions to require recalibration and alignment with recovery objectives.

**The federal government approves funding for state programs that should protect salmon habitat, but do not.**

The federal government financially supports the development and implementation of Washington's Shoreline Management Act (SMA), because it is the cornerstone of the state's Coastal Zone Management Program (CZMP).<sup>45</sup> As a result, extensive coastal zone management funds have been given to local governments to develop local plans for their shorelines, and to the state government to subsequently approve them. Since these programs relate to the shorelines, they also govern a large portion of critical salmon habitat.

The SMA was adopted prior to the ESA listing of salmon and has never been calibrated to protect the species, habitat, or the financial investments to rebuild habitat. In fact, in some instances, the SMA has been used to undermine it. For example, Washington state's highest court struck down the City of Bainbridge Island's moratorium on shoreline development, passed in part to prevent potential impacts to endangered salmon.<sup>46</sup> The court rejected the city's protective efforts because its moratorium prohibited what the SMA permits – shoreline development for single family residences, including bulkheads, and docks.<sup>47</sup>

Essentially, although the SMA is funded under the guise of coastal protection, it does not serve to protect coastal species such as ESA-listed chinook salmon and its habitat. In fact, as determined by the programmatic biological assessment for the Shoreline Master Program Guidelines:

Many project types specifically regulated by *and allowed* under the guidelines are likely to adversely affect proposed critical habitat for Puget Sound chinook salmon.<sup>48</sup>

Another problem with the federally funded SMA program is that it employs a standard that is neither quantifiable nor specific enough to provide concrete performance standards to protect salmon habitat. For example, development of new SMA rules, which amended the state's CZMP, prompted NMFS to declare that the rules were so broad that they could not assess the effects of the rules on salmon.<sup>49</sup> Moreover, even the implementing state agency agreed that the SMA contains an incalculable performance standard, which the state then defers to local governments to quantify.<sup>50</sup>

**The nationwide permit system is streamlining habitat modification and inhibiting treaty rights.**

The U.S. Army Corps of Engineers is responsible for permitting actions that discharge dredge and fill material into waters of the state. These actions commonly include shoreline armoring, stream modifications, and the attending maintenance of those structures. The Corps' nationwide permit process provides a streamlined system for this work. In the Seattle District, approximately 1,000 permits are obtained each year.<sup>51</sup> The resulting cumulative armoring of waterways is a key cause for Puget Sound decline and habitat loss, in part because it affects nearshore fish abundance, distribution, and behavior patterns.<sup>52</sup> Ironically, the Corps' streamlined system helps build the very structures in which we are investing federal funds to remove as part of habitat improvement projects.

**State policies are not protecting instream flows necessary for salmon, and federal protection is needed.**

For more than four decades, the western Washington treaty Indian tribes have pursued a number of administrative, cooperative, voluntary, and inter-governmental approaches to define and establish the instream flows necessary to protect and restore salmon resources. Unfortunately, each of these efforts has failed to institute a comprehensive effort to establish instream flows to protect and restore fish habitat consistent with the treaty-reserved rights of the tribes.

Tribes are left with few options, because of a combination of the state-based priority date for instream flows (which is junior to most appropriations); municipal water purveyors' ability to dewater streams; the state's broad use of a vague "public interest" exception to override habitat protection; and the unwillingness of the state to enforce its own laws or control the cumulative impacts from permit-exempt wells. Based on the policies of state law, it will be impossible to truly restore or, at best, protect instream flows. The federal government needs to aggressively secure the protection of tribal rights to instream flows and resources through initiation of litigation or limited adjudications.

**Enforcement is necessary to implement salmon recovery, yet federal agencies fail to take action.**

On July 10, 2000, NMFS published its take guidance for Puget Sound. It listed a range of activities most likely to cause harm to endangered salmon habitat, which therefore violate the ESA. Implementing this guidance is critical to supporting salmon recovery. There appears to be only one instance of NMFS exercising its enforcement authority over these activities during the past decade.<sup>53</sup> Aside from this anomaly, we know of no further instances of NMFS exercising its enforcement authority to protect habitat.

The first item on NMFS' list of harmful activities is constructing or maintaining barriers to fish passage, e.g., fish-blocking culverts.<sup>54</sup> The Washington Department of Fish and Wildlife recently disclosed that 30 percent of randomly sampled culverts, despite receiving a state permit in the last 10 years, still resulted in blocked fish passage.<sup>55</sup> A state report also noted that increased regulatory presence and subsequent enforcement were necessary to ensure that landowners complied with the ESA. However, NMFS has not instituted ESA enforcement to help remedy this.

Another example of an action known to harm salmon is shoreline armoring. Washington's Shoreline Management Act provides an exemption from state regulation for shoreline homeowners who armor their shoreline.<sup>56</sup> Between 2004 and 2008 alone, the Washington Department of Fish and Wildlife granted 456 permits for new bulkheads in Puget Sound. This doesn't include replacement of old bulkheads.<sup>57</sup> However, NMFS has not used its authority to address any of these harmful habitat modifications.



## ***Request for Federal Action***

### ***III. Establish federal oversight and coordination to align environmental and conservation programs to achieve salmon recovery and protect treaty-reserved rights.***

#### ***The Problem***

The federal government has a fiduciary responsibility to exercise its authority so that the tribes receive the benefit of the rights they reserved in their treaties. In western Washington, the government's fiduciary responsibility includes the protection and restoration of salmon and the habitat needed to ensure their survival and recovery. However, the process of salmon recovery crosses many jurisdictions, and there is a lack of leadership to ensure that programs are implemented consistently across those jurisdictional lines. This piecemeal approach to recovery has resulted in a lack of agency consistency and the implementation of federal programs that serve neither to recover salmon nor protect treaty rights. For example, NMFS threatens significant changes in approaches to salmon harvest because of orca concerns. However, EPA and NOAA remain complacent about the state of Washington's 17 years of non-compliance with the Coastal Zone Management Act – a key salmon and orca recovery component. In the meantime, federally funded salmon restoration actions are undermined by state and federal permitting processes that degrade salmon habitat.

#### ***The Remedy***

The tribes seek stronger federal leadership to oversee the salmon recovery process and ensure successful implementation of recovery actions across jurisdictional lines. This leadership must serve to:

- Align funding programs to ensure achievement of recovery objectives.
- Unify federal agencies and resolve inter-agency conflicts to support salmon recovery.
- Hold federal agencies accountable for acts or omissions that lead to disparate treatment of treaty tribes or failing to protect treaty-reserved rights.
- Harmonize federal actions to ensure consistency and compliance with federal obligations and treaty rights.

## ***How the federal government is failing in its trust responsibility:***

### **Federal funding lacks alignment with salmon recovery efforts.**

Many state and federal grant programs, while intending to make improvements, lack mechanisms to ensure that projects are consistent with recovery and protect treaty-reserved rights. For example, water temperature is a limiting factor for salmon survival, and many western Washington watersheds are temperature-impaired. To address this type of water pollution, the state, with significant federal funding, follows the federal Clean Water Act process and develops temperature total maximum daily loads, or TMDLs. Temperature TMDLs develop site-specific prescriptions to reduce stream temperatures, which ultimately are approved by EPA.

However, there are no assurances or accountability mechanisms that ensure that these pollution control prescriptions get implemented through relevant federal programs. For example, despite the fact that grants are the only tool used to implement TMDLs, neither the state nor EPA require that grant recipients actually follow the specific requirements of the TMDL. Instead, in an effort to provide assurances of implementation efficacy, the state requires riparian buffers be a mere 35 feet wide, which under most circumstances does not satisfy the requirements of their own TMDLs,<sup>58</sup> let alone the needs of salmon.<sup>59</sup>

Other state and federal conservation programs, such as the Natural Resources Conservation Service and Washington State Conservation Commission grants, also do not require their grant programs to implement these Clean Water Act prescriptions. Instead those programs rely on a planning process that ultimately lets the landowner decide what is best for salmon and water quality, even if those choices are contrary to federally approved TMDLs or salmon recovery plans.

### **Federal funding is not conditioned to ensure protection of treaty rights.**

The tribes have called for state and federal action to better prevent pervasive pollution problems impacting treaty-reserved rights,<sup>60</sup> with little response or change. However, when non-Indian commercial shellfish interests recently cried for relief from fecal pollution problems, the EPA promptly provided \$1 million to a local county for a pollution identification and correction program.

Unfortunately, the granting of funds did not include conditions that required the program to be consistent with water quality standards. After funds were turned over to the county, a governor-led inquiry into the process revealed that even the most basic of pollution controls, such as keeping cows out of streams, were not implemented.<sup>61</sup> Despite the EPA funding, a recent downgrading of 4,000 acres of shellfish beds occurred in this area, impairing treaty-reserved rights and prompting the governor to declare the overall effort a “failure.”<sup>62</sup>

**Federal approval of coastal protection plans has been unlawfully delayed for 17 years.**

The Coastal Zone Act Reauthorization Amendments (CZARA), a component of the Coastal Zone Management Act, requires coastal states to develop and implement nonpoint pollution control programs that “restore and protect coastal waters.”<sup>63</sup> To receive approval, a state program must meet both statutory and administrative criteria. If a state fails to submit an approvable program, up to 30 percent of coastal management assistance and 30 percent of the Clean Water Act nonpoint source pollution funding is to be withheld.

These programs were supposed to be developed by 1995, but 17 years later, the federal agencies have failed to approve the state’s program. Final approval was withheld because of numerous deficiencies in the state’s program, including a lack of communication between the involved agencies.<sup>64</sup>

With ESA listing of salmon and orca, the need for coastal protection is now more pressing than ever. Nonetheless, NOAA and EPA continue their complacency with the state’s noncompliance, and have failed to rescind funding in accordance with the law. In Oregon, this institutional lethargy resulted in a recent lawsuit filed against NOAA and EPA to compel final agency action under the Administrative Procedure Act. The subsequent settlement ought to result in enforcement of TMDLs along the Oregon coast. Given the critical importance of protecting habitat, it is essential that leadership is exercised to ensure that basic federal obligations in Washington are met, and in a way that better protects salmon and treaty rights.

**Leadership and oversight are needed to align salmon protection programs.**

The tribes have worked hard to foster salmon recovery while other federally supported programs undermine this progress. Examples include:

- The federal government significantly invests in habitat enhancement, while federally supported programs such as the state Shoreline Management Act and Corps of Engineers permitting processes continue to degrade habitat.
- NMFS requires tribal harvest to foster salmon and orca recovery, while FEMA is allowed to administer its flood insurance program in a manner that results in continued degradation of salmon habitat and fewer orca.
- The federal government prepares to alter treaty harvest requirements because of orca prey needs, but continues a 17-year streak of not

pressuring the state to finalize its coastal nonpoint pollution plan – a key salmon and orca recovery component.

- Funding secured for conservation and environmental protections are handed out without basic conditions and assurances to require that those actions be consistent with recovery efforts.

Leadership and oversight of salmon recovery is critical to ensure that the myriad federal programs relied upon to implement salmon recovery are in fact working together to accomplish this fundamental goal. Federal leadership must be provided to synchronize actions and ensure protection of the tribes' treaty-reserved rights.

## **Afterword**

This paper is an immediate request for action. Faced with waning salmon populations and declining habitat, the tribes fear for the loss of their cultures and treaty rights. For the tribes, fish and fishing are as essential to life as water and air.

Our requests are simple: Stop the disparate treatment of tribes. Start protecting our treaty rights. Provide leadership to ensure that this is done.

We ask you to act now, before it is too late for the salmon and the treaty Indian tribes in western Washington.

### **For More Information:**

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<sup>1</sup> Puget Sound Chinook Salmon Recovery Plan at p. 354

<sup>2</sup> NFMS Northwest Region, Final Supplement to the Shared Strategy's Puget Sound Salmon Recovery Plan, November 17, 2006.

<sup>3</sup> NMFS, Puget Sound Chinook Salmon Recovery Plan – 2011 Implementation Status Assessment Final Report, 2011, at p. 6.

<sup>4</sup> Id at 20.

<sup>5</sup> Id at 15

<sup>6</sup> NMFS, Puget Sound Chinook Salmon Recovery Plan – 2011 Implementation Status Assessment Final Report, 2011, at 6.

<sup>7</sup> Carman, Taylor, and Skowlund, 2010, Regulating Shoreline Armoring in Puget Sound, in Shipman, Dethier, Gelfenbaum, Fresh and Dinicola eds, 2010 Puget Sound Shorelines and the impacts of Armoring – proceedings of a state of the science workshop, May 2009: U.S. Geological Survey Scientific Investigations Report 2010-5254. P. 49-54.

<sup>8</sup> SSHIAP analysis of Washington's 2008 Water Quality Assessment Data.

<sup>9</sup> SSHIAP analysis of data sources: *NOAA-CCAP 2006; NWIFC 2005; NWIFC 2010; WADNR 2010* . Conservatively, riparian forest cover with less than 65% cover has been determined to be insufficient for anadromous salmon and corroborated. However, NOAA has indicated in guidance that 80% cover was properly functioning, and <70% as not functioning. See National Oceanic and Atmospheric Administration, Coastal Salmon Conservation: Working Guidance for Comprehensive Salmon Restoration Initiatives on the Pacific Coast. Washington, D.C., (1996).

<sup>10</sup> Puget Sound Partnership, State of the Sound Report, Ecosystem Status and Trends at pp 80-82 (2009).

<sup>11</sup> Further information about Hood canal D.O. is available at <http://www.hoodcanal.washington.edu/>

<sup>12</sup> Further information is available in the annual monitoring report: [http://www.dnr.wa.gov/ResearchScience/Topics/AquaticHabitats/Pages/aqr\\_nrsh\\_eelgrass\\_monitoring.aspx](http://www.dnr.wa.gov/ResearchScience/Topics/AquaticHabitats/Pages/aqr_nrsh_eelgrass_monitoring.aspx)

<sup>13</sup> The following datasets were used to generate the Impervious Surface analysis and forecast for the Puget Sound region: Washington State Department of Natural Resources (DNR) Watershed Administrative Unit (WAU); NOAA CCAP. Coastal Change Analysis Project: Washington State Impervious Surface Polygons 1986 and 2006. NOAA Coastal Services Center. Charleston, S.C.; WA OFM. 2007. Projections of the Total Resident Population for the Growth Management Act (2000 to 2030, Low to High) Washington State Office of Financial Management. Olympia, WA; WA OFM. 2010. April 1 Population Determinations Official Change from April 1, 2000 to April 1, 2010. Washington State Office of Financial Management. Olympia, WA. WA OFM. 2011. WA OFM web site search to determine 1986 population by county. Using ArcGIS Desktop 9.3.1 Zonal Mean

function, the mean impervious surface value was calculated for each WAU draining to Puget Sound for both the 1986 and 2006 years. The 1986 and 2006 population totals were calculated for the counties containing the WAUs. The 2026 low, medium and high population estimates were also totaled for the same counties. Change values were calculated for population (2006-1986 & 2026 forecast - 2006) and impervious surface (2006-1986). A ratio analysis was performed comparing the change in population to the change in impervious surface to forecast the 2026 impervious surface change. The regional percentage increase in impervious surface was calculated for each WAU to generate the final thematic map using OFM's "High" 2026 county population estimate. The impervious surface categories are based upon the analysis by Tyson Waldo in the 2010/2011 Tulalip State of the Watershed report.

<sup>14</sup> SSHIAP, State of Our Watersheds Report - Principle Findings, 2011, p. 1.

<sup>15</sup> Id at p. 1

<sup>16</sup> Haas, A and Collins B., A Historical Analysis of Habitat Alterations in the Snohomish River Valley, Washington since the Mid-19th Century: Implications for Chinook and Coho Salmon. Report Funded by the Tulalip Tribes with some additional funding from Snohomish County, 2001.

<sup>17</sup> SSHIAP, State of Our Watersheds Report - Principle Findings, 2011, p. 3.

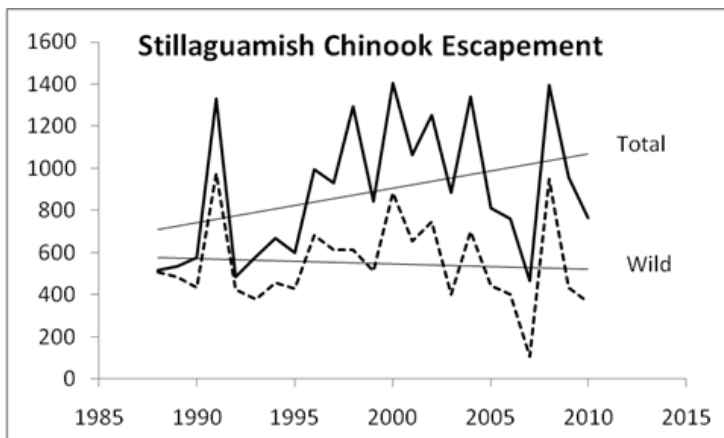
<sup>18</sup> Id. at p. 4.

<sup>19</sup> Id at 5.

<sup>20</sup> The Boldt decision was largely affirmed by the United States Supreme Court in *Washington V. Fishing Vessel Assn.*, 443 U.S. 658 (1979)

<sup>21</sup> Harvest Rates and Graphs in this section are based upon the following: NWIFC, Analysis of Harvest Data from Tribal Online Catch Accounting System (TOCAS), 2011

<sup>22</sup> Despite dramatic reduction in the harvest rate of Stillaguamish Chinook, which has resulted in an increasing trend in the total number of spawners (escapement), the number of wild fish returning has not increased. Wild productivity is constrained by degraded habitat.



<sup>23</sup> To the extent that conservation-based restrictions on treaty fisheries are necessary, these are governed by the conservation necessity principles established in federal case law and reflected in Secretarial Order 3206.

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<sup>24</sup> See *National Wildlife Federation v. NMFS*, 524 F.3d 917, 931 (9<sup>th</sup> Cir. 2008) (amended opinion) where the court held that NMFS read the species recovery requirement out of the ESA.

<sup>25</sup> See NMFS, Supplemental Comprehensive Analysis (May 5, 2008) at 7-5.

<sup>26</sup> See NMFS, Proposed Evaluation and Determination on Chinook Plan (12/14/10) (E&D) at 38-39.

<sup>27</sup> *Id.* at 69.

<sup>28</sup> See NMFS, Puget Sound Chinook Salmon Recovery Plan – 2011 Implementation Status Assessment Final Report, 2011, at 45 (Harvest plans have been implemented as anticipated. Harvest being managed to meet or exceed established thresholds); see *id.* at 43 (Habitat quality continuing to decline. Current habitat protection tools generally the same as those that failed to forestall ESA listing).

<sup>29</sup> See NMFS, ESA Section 7 Consultation Final Biological Opinion: Implementation of the National Flood Insurance Program in the State of Washington, Phase One Document – Puget Sound Region, NMFS Tracking No. 2006-00472) (September 22, 2008) at 3. See also *National Wildlife Federation v. FEMA*, 345 F. Supp. 2d 1151, 1163-65 (W.D. Wash. 2004).

<sup>30</sup> See NMFS, ESA Section 7 Consultation Final Biological Opinion: Implementation of the National Flood Insurance Program in the State of Washington, Phase One Document – Puget Sound Region, NMFS Tracking No. 2006-00472) (September 22, 2008) Appendix 4 at 222-223.

<sup>31</sup> NMFS requires that harvest management contribute to recovery by assuring that sufficient escapement occurs to make optimal use of current habitat conditions. Further harvest constraint, to produce higher escapement, would not result in higher productivity beyond the capacity of habitat. In concluding this is sufficient constraint of harvest NMFS, has stated that rebuilding to higher abundance, en route to recovery goals, is contingent on alleviating the habitat constraints, but federal consultations on actions affecting habitat are failing to require that habitat conditions improve.

<sup>32</sup> Public statements by NMFS staff at May 2, 2011 workshop instructing local governments how to comply with the RPA and flood insurance requirements. See also Letter from Dan Siemann, National Wildlife Federation, to Will Stelle, NMFS, and Ken Murphy, FEMA (May 17, 2011).

<sup>33</sup> As recently conceded by the Washington Department of Ecology: “Estimates of mitigation success vary, but local, regional, and national studies show that most mitigation projects fail to fully achieve their intended goals and are not effectively replacing lost or damaged resources, habitats, and functions. We are not even close to achieving the goal of no net loss for wetlands and other aquatic habitats.” See WDOE, Making Mitigation Work: Report of the Mitigation that Works Forum (December 2008) at 1. This report is available at: [www.ecy.wa.gov/biblio/0806018.html](http://www.ecy.wa.gov/biblio/0806018.html)

<sup>34</sup> FEMA’s Model Ordinance, and apparently NMFS’ interpretation of its RPA, allows local governments to decide (regardless of expertise): (a) whether a given piece of floodplain or riparian habitat retains any fish habitat functions (See FEMA Revised Model Ordinance at 46 (commentary)); (b) whether a proposed action may affect any of these habitat functions (*Id.* at 52, §7.7(d)); and (c) how those impacts should be mitigated (*Id.* at 52-53, §7.8).



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<sup>35</sup> While it is not yet fully recognized in the land management realm, harvest managers have long understood that they have a duty to manage salmon as needed to perpetuate harvestable runs. *See e.g., Washington v. Washington State Commercial Passenger Fishing Vessel Ass'n*, 443 U.S. 658, 684 (1979).

<sup>36</sup> See NMFS, Puget Sound Chinook Salmon Recovery Plan – 2011 Implementation Status Assessment Final Report, 2011

<sup>37</sup> See NMFS, Recovery Plan for Southern Resident Killer Whales (Orca) (2008) at II-87-96.

<sup>38</sup> *See e.g.*, NMFS, ESA Section 7 Biological Opinion on the Effects of EPA Registration of Pesticides Containing Carbaryl, Carbofuran, and Methomyl (April 20, 2009) (finding that registration of such pesticides would result in both jeopardy and adverse habitat modification to Puget Sound Chinook); *see also* NMFS, DRAFT ESA Section 7 Biological Opinion on the Effects of EPA Registration of Pesticides Containing 2,4-D, Triclopyr BEE, Diuron, Linuron, Captan, and Chlorothalonil (May 2011 DRAFT) (finding that registration of pesticides containing 2,4-D jeopardizes Puget Sound Chinook and that adverse modification of habitat results from use of pesticides containing diuron, and chlorothalonil).

<sup>39</sup> The Departments of the Interior and Commerce have some familiarity with the conservation necessity principles. They are referenced in Principle 3 of Department of the Interior Secretarial Order 3206, American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act (June 5, 1997).

<sup>40</sup> Governors Salmon Recovery Office, State of Salmon in the Watersheds Report, 2010, at p. 20.

<sup>41</sup> Based upon correspondence with Washington State's CREP coordinator

<sup>42</sup> Based upon correspondence with Department of Ecology's nonpoint source pollution (CWA § 319) coordinator

<sup>43</sup> NMFS, Puget Sound Chinook Salmon Recovery Plan – 2011 Implementation Status Assessment Final Report, 2011, at 43.

<sup>44</sup> *Id.*

<sup>45</sup> Department of Ecology, *Managing Washington's Coast, Washington's Coastal Zone Management Program*, Publication 00-06-029, February 2001, at p. 98.

<sup>46</sup> *Biggers v. City of Bainbridge Island*, 162 Wash.2d 683 (2007).

<sup>47</sup> *Id.* at 698.

<sup>48</sup> National Oceanic and Atmospheric Administration - Ocean and Coastal Resource Management, Washington State Shoreline Master Program Guidelines Programmatic Biological Assessment, March 15, 2005. Page 7-12, emphasis added

<sup>49</sup> Letter From Steven W. Landino, Washington State Director for Habitat Conservation Division of the National Marine Fisheries Service to John King, Chief Coastal Programs Division NOAA Office of Ocean and Coastal Resource Management, re: Endangered Species Act Section 7 Informal Consultation and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation for NOAA's proposed approval of the Washington State Shoreline Master Program guidelines promulgated by the Washington State Department of Ecology, April 23, 2009.

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<sup>50</sup> In Washington State Department of Ecology’s response to comments on Coastal Zone Management Section 309 Program Assessment and Strategy 2011-2015, the agency stated the following: “The [shoreline master program] SMP process involves conducting a cumulative impact analysis to determine whether or not the SMP will result in no net loss of ecological functions...However, at this time there are no broad tools available to quantitatively measure cumulative impacts, and jurisdictions are responsible for developing their own analysis.”

<sup>51</sup> According to a recent meeting with the Corps in the Seattle district regarding renewal of nationwide permits

<sup>52</sup> Toft, J.D., Cordell, J.R. Simenstad, C.A. and Stamatiou, L.A. 2007 fish distribution, abundance, and behavior along city shoreline types in Puget Sound: *North American Journal of Fisheries Management*, v. 27, p 465-480.

<sup>53</sup> On June 15, 2011, Darigold, Inc., pleaded guilty to dumping ammonia from its milk-processing plant into an adjacent creek, which resulted in the death of several ESA-listed Puget Sound chinook salmon. The corporation signed an agreement to pay a \$10,000 fine and to donate \$60,000 to a non-profit foundation to pay for habitat restoration work. In addition, the corporation committed to develop an environmental compliance plan to address risks at the half dozen plants it operates in five western states. EPA agents involved in the enforcement action noted that Darigold has a history of spills over the last decade in Washington streams. *Seattle Times*, *Darigold Pleads Guilty to Federal Polluting Charges* (June 16, 2011), [http://seattletimes.nwsourc.com/html/localnews/2015331678\\_darigold16m.html](http://seattletimes.nwsourc.com/html/localnews/2015331678_darigold16m.html) (accessed June 16, 2011).

<sup>54</sup> 65 Fed Reg 42472 (July 10, 2000) (NMFS Take Guidance).

<sup>55</sup> See Price, D., Quinn, T., and Barnard, J. Fish Passage Effectiveness of Recently Constructed Road Crossing Culverts in the Puget Sound Region of Washington State, *North American Journal of Fisheries Management* 30:1110–1125 (2010).

<sup>56</sup> See RCW 90.58.030(3)(e)(ii) (Shoreline Management Act exempts from regulation “construction of the normal protective bulkhead common to single family residences”).

<sup>57</sup> See *Seattle Times* “Beaches Suffer as Walls Go Up” by Warren Cornwall and Justin Mayo (May 13, 2008) found at [http://seattletimes.nwsourc.com/html/localnews/2004409777\\_growth\\_shorelines15m1.html](http://seattletimes.nwsourc.com/html/localnews/2004409777_growth_shorelines15m1.html).

<sup>58</sup> See e.g. Washington State Department of Ecology, *Stillaguamish River Watershed Temperature Total Maximum Daily Load Study*, March 2004, Publication No. 04-03-010, at p. 71 *stating* that the load allocation for effective shade for all perennial streams in the Stillaguamish River watershed is the maximum potential effective shade that would occur from mature riparian vegetation.

<sup>59</sup> Washington State Department of Ecology, *SFY 2012-2013 Water Quality Financial Assistance Guidelines*, August 2010.

<sup>60</sup> See e.g. Lummi Nation letter to EPA, or Upper Skagit Tribe letter to Governor Gregoire.

<sup>61</sup> Government Management Accountability & Performance regarding Puget Sound, April 06, 2011 8:30am available at

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<http://www.tvw.org/media/mediaplayer.cfm?EVID=2011041010&CFID=4788631&CFTOKEN=15725173&bhcp=1>

<sup>62</sup> *Id.*

<sup>63</sup> 16 USC § 1455b (a)(1)

<sup>64</sup> NOAA and EPA's Findings For The Washington Coastal Nonpoint Program