

Pacific Northwest Salmon Habitat: The Culvert Case and the Power of Treaties¹

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Abstract: American Indian tribes in the Pacific Northwest signed treaties with the federal government in the 1850's that preserved their right to fish in their "usual and accustomed" fishing grounds. The tribes have had to continually fight to have this right recognized. U.S. v. Washington, 1974, the Boldt decision, upheld this fishing right and ruled that the tribes were entitled to 50% of the harvestable portion of salmon returning to their usual and accustomed grounds. Though this historic court decision enabled the Indians to legally fish, the decline of the salmon has meant that the importance of this decision has been eroded. For the last three decades the tribes have worked to preserve salmon runs by protecting and restoring fish habitat. The tribes are in a unique position to advance habitat restoration on a landscape scale. Restoring fish passage in streams throughout the state is an example of how the power of the treaties can facilitate salmon recovery significantly. In 2001, they went into federal district court with a specific habitat lawsuit: the culvert case. The decision in this case has been called the most significant victory for tribal treaty fishing rights since the Boldt decision.

The American Indian tribes in the Pacific Northwest have historically depended on salmon as the basis of their culture and their livelihood. These tribes have an annual first fish ceremony. In this ceremony the first salmon caught in the season is officially welcomed and honored by the tribal members. After the ceremony honoring this salmon, its remains are returned to the waters and set adrift. The spirit of the fish returns to its people, the "Salmon People," and tells them it has been honored. This means that more salmon will return to ensure the tribe good fishing (Brown).

The importance of the first salmon ceremony has to do with the celebration of life, of the salmon as subsistence, meaning that the Indians depend upon the salmon for their living. And the annual celebration is just that - it's an appreciation that the salmon are coming back. It is again the natural law; the cycle of life. It's the way things are and if there was no water, there would be no salmon, there would be no cycle, no food. And the Indian people respect it accordingly. --Antone Minthorn (Umatilla) (CRITFC)

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This case study describes how the Indian tribes in the Pacific Northwest have fought to retain both their fishing rights and their right to have fish to catch. The right to catch fish implies that there are fish in the streams and rivers. This, in turn, means that these streams and rivers have suitable habitat for fish to survive and reproduce. Indian tribes in Washington State are in the forefront of habitat protection and restoration. This case study examines the most important court decision on habitat in several decades, the Martinez decision (the culvert case decision), and looks at its potential impact on salmon habitat.

When Isaac Stevens was sent west to the Pacific Northwest in the 1850's to negotiate treaties with the Indian tribes he soon became aware of how important salmon were to the Indians. The Indians spoke up at the treaty councils about retaining their right to fish. At the Point No Point Treaty negotiations, Che-law-tch-tat said: "What shall we eat if we do so (sell our land). Our only food is berries, deer and salmon – where shall we find these" (Trafzer, 1986, p. 30). Moreover, Stevens and his party traded with the Indians for salmon to supplement their foodstuff. Therefore the treaties that Stevens negotiated in what is now Washington State, northern Oregon State, and western Montana contain the following clause or similar clause:

The right of taking fish at usual and accustomed grounds and stations is further secured to said Indians in common with all citizens of the Territory, and of erecting temporary houses for the purposes of curing, together with the privilege of hunting and gathering roots and berries on open and unclaimed lands. *Provided, however*, that they shall not take shell-fish from any beds staked or cultivated by citizens (NWIFC, Treaties, Treaty of Point Elliot, Article 5, NWIFC, Treaties).

This meant that though the Indian tribes in the Pacific Northwest ceded 64 million acres of land "that now comprises much of the states of Idaho, Montana, Oregon, and Washington," (Blumm, 2002, p. 57, Blumm and Steadman, 2009, p. 655) in exchange for modest reservations³ they retained the right to fish in their traditional fishing grounds located off of these reservations.

While the Indians tried to maintain their traditional mode of subsistence fishing, hunting, and gathering, enormous changes were taking place in the Pacific Northwest. Euro-Americans were pouring into the area. These settlers regarded the salmon supply as endless. The streams and rivers were incredibly rich with salmon. The supply seemed inexhaustible. But it wasn't. More settlers arrived and more fish were caught. Canneries on the Columbia River and the Puget Sound area consumed enormous amounts of fish, both for the local population and to ship by railroad to the eastern United States (Blumm, 2002, p. 5). What historian David Montgomery calls salmon "mining" peaked on the Columbia River in 1883 when almost 43 million pounds of Chinook salmon were caught. (Montgomery, p.133) Logging, water diversion, and dams were beginning to increase, foreshadowing the impacts of the tremendous growth and development of the first half of the twentieth century.

³ The Quinault, Yakama, and Flathead Reservations are the largest.

Scientists agree that salmon runs in the various rivers of the Pacific Northwest peaked between 1882 and 1915 and since then have been in continuous decline. (Lichatowich, et al, 1999, p. 467) Montgomery notes that by the 1890's observers were not only concerned about over fishing, but also about obstructions to fish migration such as dams. (Montgomery, 2003, pp.133-134) In fact, severe habitat alteration was just beginning to accelerate at the beginning of the 20th century. Forestry was the dominant economic activity in western Washington as was agriculture in eastern Washington during the first half of the twentieth century. Population growth and development throughout the century also negatively effected salmon habitat.

The first of these was logging. Early commercial timber harvesting had a profound impact on streams and rivers. Not only were the stream side trees cut down, but often in the early days of logging the rivers were used to float the logs to the mills. This habitat degradation continued into the 1980's. As more land was put into agriculture, streams and rivers were dammed for water and more and more water was withdrawn for irrigation. This reduced the amount of water in the streams (instream flow) for the salmon. Waters draining back into the streams and rivers (return flow) from agricultural practices were polluted with pesticides and fertilizers. Cattle grazing in riparian zones destroyed the stream side vegetation, tramped down the sides of the streams, and waded through them, destroying salmon spawning beds. As cattle feeding lots grew, they caused increasing pollution of the streams they bordered. Mining operations also withdrew water and returned water with dirt and toxic chemicals used in the mining processes. Factories were built along rivers and streams and discharged their waste into them until Clean Water Act restrictions were in place. Towns and cities such as Seattle and Tacoma were built at the mouths of rivers⁴, both destroying the precious estuaries and also polluting the rivers with runoff. Increasing urbanization of the Pacific Northwest meant the loss of more and more salmon habitat.

The era of large scale dam building on the Columbia River, its tributaries, and other major rivers in the Pacific Northwest began in the 1930's. Even with fish ladders for returning salmon, the mortality of migrating salmon was horrendous. The smolts were often killed by the turbines or turbulence as they migrated downstream, and the returning salmon faced a hazard at each fish ladder. Biologists estimate that 10-15% of the smolts perish at each dam they swim downstream on the Columbia River. However many dams did not have fish ladders at all and so up-stream salmon migrations was entirely blocked.⁵ This closed off enormous amounts of up-stream habitat for the salmon.

⁴ See Brian Footen case: "Ancestral Roots and Changing Landscapes: The Impact of Seattle's Development on the Salish People of Central Puget Sound."

⁵ Dams on the Olympic Peninsula are examples. Two dams were built on the Elwha River in 1912 and 1925 without fish ladders which destroyed an important salmon run. In 1930 a dam was built on the North Fork of the Skokomish River diverting all of the River flow to an electric power generating plant. This devastated fish runs in the Skokomish River. (Morisset, p. 23)

The Tribes Fight for their Fishing Rights

The tribes had to go to court to fight for their fishing rights for two main reasons. One reason was to obtain access to their usual and accustomed fishing grounds and another was to contest the increasingly restrictive State fishing regulations. The Winans case is an example of the first of these. The Winans brothers bought land near Celilo Falls and fenced it, thus denying this historic fishing site to the Indians. Indian agents convinced the U.S. government to file a case on behalf of the Indian fishers. When the case finally made it to the U.S. Supreme Court in 1905 the court concluded that the reserved right of taking fish means that the Indians had the right to cross the private property to go their traditional fishing site. Blumm and Steadman say that “This 1905 decision has been the foundation of treaty rights for over a century” (Blumm and Steadman, 2009, p. 663).

It was soon apparent that the salmon stocks had begun to decline. By the end of the 19th century, both Oregon and Washington began to attempt to regulate fishing by imposing fishing seasons, prohibiting the taking of salmon in spawning streams, requiring that all dams have fishways, and building and operating hatcheries (Montgomery, 2003, p. 134). Game wardens enforcing the Washington regulations interpreted the treaties’ phrase “fish in common” to mean that Indians were equally subject to the State regulations. This imposed a particularly hard burden on Indian fishers because they had their own seasons and means of conservation. Moreover, their historic fishing grounds were often at the mouths of streams and rivers near which the Indians had lived for centuries. The Indians were increasingly squeezed out of their traditional fishing grounds. While the treaty clause was treated as essentially meaningless in the enforcement of State fishing regulations, the Indians knew what this clause meant: to them it meant that they had reserved their right to catch fish.

The Indians and their representatives went to State and federal court to preserve this treaty right. A series of court decisions slowly began to recognize the Indians treaty rights to fish without state regulation. A 1918 court decision in *Seufert Bros. Co. v. US* extended the Winans decision to lands a tribe had not explicitly ceded, but which they had used historically. A 1942 decision in *Washington v. Tulee* held that Indian fishers were not subject to State license fees. In the 1960’s and early 1970’s the three Puyallup court decisions, arising out of the “fish-ins” described below, “began to confront and strike down discriminatory ‘conservation’ regulation of tribal harvests....Thus by 1973 ...the tribes had won significant judicial victories” (Blumm and Steadman, 2009, pp. 663-664). The stage was set for the tribes to go to court again to win their most significant victory.

By the 1960’s – 1970, the tribes were only catching 2 – 5 % of the total amount of salmon being harvested. The Indian fishers had been almost completely squeezed out of their historic fishing by commercial and sport salmon fishers and by the enforcement of State fishing laws and regulation. The Indians began to press harder and harder for their treaty right to fish. One way they did this was to stage public “fish-ins” in defiance of State fishing regulations. The most famous of these were held on the Nisqually and

Puyallup Rivers. When the game wardens publicly and sometimes brutally manhandled the Indian fishers, arrested them, and confiscated their fishing boats and fishing gear, publicity began to mount. Celebrities such as Marlon Brando joined the protests and more publicity ensued. These fish-ins occurring over a six year period were ultimately successful in making the public aware of treaty fishing rights and in laying the groundwork for the federal government to file suit. “Through this systematic and uncompromising form of protest, the Native American community achieved public recognition of the legality of their cause, as well as its essential justice” (Chrisman, 2006).

U.S. v. Washington, 1974, the Boldt Decision

By 1970, the federal government was persuaded to go to court on behalf of Indian fishing rights. Fourteen federally recognized Indian tribes in Washington State⁶ and the federal government filed suit in federal court asking for an allotted share of the salmon. The suit asked for three things: 1) a share of the harvest, 2) the inclusion of hatchery fish in the salmon harvest, and 3) that their treaties protected the fish from habitat destruction (Blumm and Steadman, 2009, p. 19). The case was assigned to Judge George Boldt. Judge Boldt gathered historical information and numerous reports and his deliberations took nearly four years. On February 12, 1974 Judge Boldt issued his historic decision. (U.S. v. Washington, 1974, 384 F. Supp. 312) His decision was that the State fishing regulations discriminated against tribal fishers and were not applicable to them. Furthermore he interpreted the treaty phrase “in common” to mean that tribal fishers were entitled to catch 50% of the harvestable salmon returning to their usual and accustomed fishing grounds. Judge Boldt deferred the questions of hatchery fish and habitat protection, noting that the court would decide at a later time “claims for relief concerning alleged destruction or impairment of treaty right fishing due to state authorization of, or failure to prevent, logging and other industrial pollution and obstruction of treaty right fishing streams” (Blumm & Steadman, 2009 p. 668, quoting U.S. v. Washington, 384 F. Supp. At 328).

Non-Indian commercial and sports fishers were bitterly opposed to the decision and vehement in their protests of it. “Judge Boldt himself became the target of the non-Indian fisherman’s anger. Bumper stickers, protests, and petitions were directed against him” (Cohen, pp. 88-89). The State of Washington flatly refused to enforce the decision and repeatedly went to court to overturn it. “Consequently, from 1977 to 1979, Judge Boldt managed the Puget Sound and coast Washington fisheries himself, enforced via court orders, criminal contempt citations, and federal marshals” (Blumm and Steadman, 2009, p.670). Finally in 1979, U.S. v Washington was upheld by the U.S. Supreme Court. (Passenger Fishing Vessel, 443 U.S. 658). Washington State finally had to reluctantly begin to accept the U.S. v. Washington decision.

⁶ The federally recognized Indian tribes that initiated U.S. v. Washington, 1974 were: Hoh, Lummi, Makah, Muckleshoot, Nisqually, Puyallup, Quileute, Quinault, Sauk-Suaittle, Stillaguamish, Upper Skagit, and Yakama.

Salmon Freshwater Life History

Salmon have a vast migratory range through the watersheds of the Pacific Northwest. Every part of these watersheds provides critical elements for the survival of the salmon. Salmon are anadromous⁷ and depending on the species, spend from 2 to 5 years in the ocean. There they feed, growing muscle and storing fat to sustain them during their long journey to the spawning grounds in the freshwater environment of rivers and streams. Maximizing size in the ocean is important to species survival because salmon stop feeding upon entering freshwater. Although the ocean phase of salmonid life history is complex and can limit production, the majority of mortality occurs during the freshwater phase of the juvenile salmonid life cycle. Due to the many environmental factors that affect salmon mortality in the streams and rivers in which juvenile salmon are born, migrate and rear, salmon have developed life history strategies that maximize the number of juveniles produced to avoid a potential juvenile-production bottleneck during freshwater residency. These salmonid life history strategies are the result of over ten thousand years of evolution, creating five unique species of semelparous salmon whose life history patterns and genetics reflect the habitat complexity and connectivity in which they evolved.

The interaction between life history strategy and habitat plays a primary role in determining salmon productivity. However, the prehistoric habitat responsible for molding these fish's life history strategies has all but disappeared. Over the last 150 years, anthropomorphic activities such as the damming of rivers, deforestation and urbanization have had severe negative impacts on the environmental mechanisms of watersheds that are productive habitats for salmon.

Fractured Environmental Mechanisms

In freshwater, salmon have three fundamental habitat requirements: a functional navigable waterway, a functional spawning area, and a functional rearing area. These habitat types are complex and each one's relationship to successful salmon production is dependant on the proper function of a series of interconnected environmental mechanisms. These mechanisms are governed by the geomorphology (shape and size) of the watershed that the salmon inhabit. A functional waterway is one that is free of lethal amounts of pollutants, has relatively cool water, and is unimpeded by artificial barriers. A functional spawning area varies with species; however, ubiquitous among them is the need for stable, porous gravels through which oxygenated water flows. Human activities can disrupt beneficial salmonid habitat attributes by altering the underlying environmental mechanisms present within the watershed.

Paramount to a salmon's ability to return to the river in which it spawned is its sense of smell. This ability can be disrupted by certain chemical pollutants released into the waterway. In addition, high levels of heavy metals in the water can reduce egg viability

⁷ Anadromous fish migrate from saltwater to freshwater to spawn.

or, if present at high enough concentrations, can cause mortality in adults before spawning occurs. Elevated water temperatures also have negative impacts on salmon. There are many ways anthropomorphic activities cause riverine temperatures to artificially rise. The slowing of water velocity via dams allows the water to be heated by the sun's rays. Deforestation of the river or stream riparian zone removes shade from the waterway. Hydropower plants and other industrial activities can also increase water temperatures as well.

A primary cooling mechanism for riverine environments is the waterway's connection to adjacent groundwater. This connection is maintained in an area of the river known as the hyporheic zone.

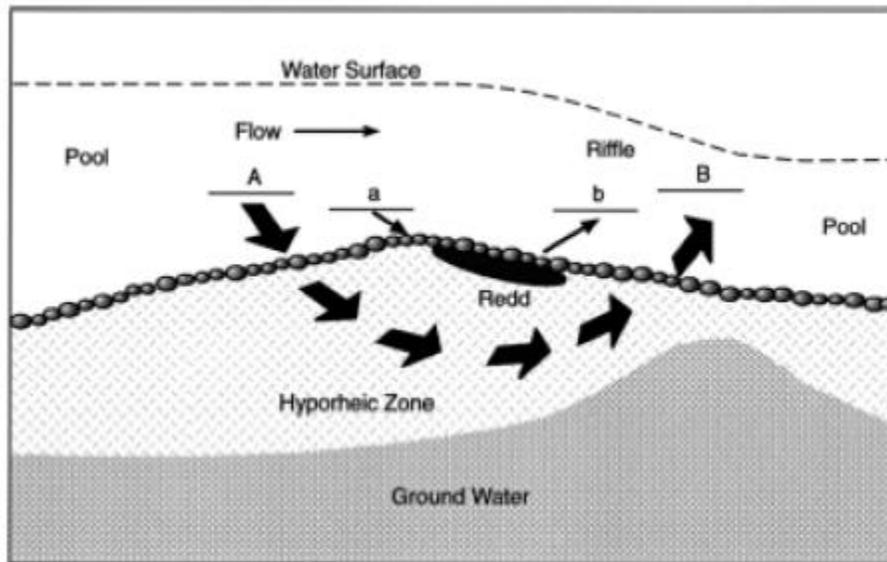


Figure 1. Hyporheic Zone and a Salmon Redd (Geist and Dauble, 1998)

In this zone, cool groundwater moves through suitable sediments and wells up into the river via the riverbank or river bed. Activities such as building levees can block hyporheic pathways. In addition, removing groundwater via private and municipal wells can disrupt the groundwater pressure necessary to move cool water through the hyporheic zone.

Large wood that falls into the river from the river's riparian zone can alter the river's pathway, create multiple channels, and cause the river to scour deep pools. As a result, large wood is an important mechanism that facilitates a river's intersection with hyporheic zones that otherwise might not be available if the river is contained within a single channel or is less variable in its depth. ubiquitous in its bathymetry. Hence, removal of large wood from a river can reduce a river's hyporheic zone. Channelization of the river through the use of riprap or other types of bank armoring also can result in a disconnection from cool groundwater sources. Whatever the cause, the disruption of groundwater cooling effects is an often overlooked but crucial mechanism for salmonid survival in riverine systems.

Access to spawning areas is paramount for salmon. Without unimpeded navigable waterways that lead to preferred spawning habitat, salmonid production is severely limited. There are many ways human activity blocks salmon from reaching potential spawning grounds, the most prevalent of which is the building of roads across streams. When roads are built across smaller streams and riverine headwaters, culverts are used to channel the stream flow under the road. A culvert is a “metal, wooden, plastic, or concrete conduit through which surface water can flow under or across roads” (US, EPA, 2010). Research has shown that culverts create barriers to fish passage. However, because of cost considerations, corrugated metal pipe culverts are frequently installed instead of bridges over streams. Despite numerous studies over many years describing the loss of habitat and fragmentation of small streams due to poorly installed culverts, little attention has been given to this continuing problem which can have “serious deleterious effects on fisheries and ecosystem health” (Gibson, et al, 2005, p. 10, 15). A U.S. General Accounting Office report in 2002 estimated that over 10,000 culverts exist on fish-bearing streams in Washington and Oregon (Gibson, et al, 2005, p. 10).

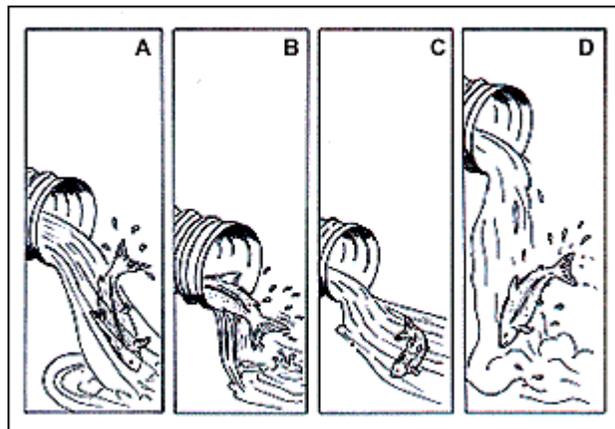


Figure 2

Improperly installed culverts can block fish passage because: (A) the water velocity is too great for salmon to migrate upstream through the culvert; (B) there is not enough water in the culvert; (C) there is no resting pool below the culvert for migrating salmon; and/or (D) the jump is too high for salmon to continue upstream. (Wiest, reprinted from NWIFC).

According to the evidence presented in the Martinez decision (discussed below), culverts may become impassable to fish because they have become blocked by silt or debris, or because they are ‘perched’—that is, because the outfall of the culvert is several feet or more above the level of the stream into which it flows. (United States v. Washington, Case No. CV9213RSM, Subproceeding 01-01 (Culverts), Summary judgment, Sept., 2007, p. 3. Hereafter: Summary judgment).

Dams are another way salmon are blocked from reaching their spawning grounds (although fish ladders may be built to facilitate adult fish passage). In addition, by slowing down the river and impounding the water, dams warm the water—and so can create thermal barriers which can prevent salmon from reaching spawning grounds. Warmer water also can create low-oxygen barriers to salmon passage by increasing

phytoplankton growth: when the plankton die, they sink to the bottom of the river, where the process of decomposition removes dissolved oxygen from the water—thereby creating areas where the dissolved oxygen content of the water is too low for fish to breathe. Fish will avoid these areas—and if suitable conditions persist, the entire water column can become uninhabitable for salmon. Temperature barriers are usually present when oxygen conditions are low as well. During adult migration, temperatures above 18 degrees are harmful to salmon and temperatures above 21 degrees can be lethal. Migrating salmon will avoid warm water as well as water with low oxygen, if necessary delaying migratory behavior. Spawn timing is important and delay can often result in spawning salmon intersecting with less-than-favorable flow conditions for the building and locating of their egg nests.

Although some of the necessary conditions differ by species, the building and success of salmon egg nests (called “redds”) requires some basic, specific conditions. These conditions are also governed by environmental mechanisms within the watershed that are often disrupted by human activity. Excess fine sediment can choke or entomb redds—and the primary inputs of fine sediments into watersheds are from road building and landslides on unstable slopes caused by forestry-related activities. Certain forest practices can further exacerbate these conditions by removing sources of large fallen wood from waterways. As mentioned earlier, large wood debris creates pools and creates and maintains multiple channels, all of prevents high water velocities that could harm redds. The deep pools created by large woody debris also are an area where fine sediments can settle out of the water, diverting fine sediments from areas where salmon form redds. Water velocities often are increased in waterways running through urban areas, due to impervious surfaces (such as pavement and roofs) funneling water into the stream or river faster than would occur in forested conditions. Removing water and altering water flows for hydropower dams and municipal purposes can negatively impact redd building, egg incubation, and juvenile survival. Without enough water in the river, areas that normally are accessible to spawning fish are no longer accessible. Water release patterns by hydroelectric projects can abruptly change water levels, causing salmon to spawn in areas that do not stay wet, drying out the redds.

Boldt Phase II: Habitat

By the time the U.S. Supreme Court had upheld *U.S. v. Washington* in 1979, Judge Boldt had retired and was replaced by Judge William Orrick. Thus it was Judge Orrick’s job to resolve the two issues left undecided by Judge Boldt, the inclusion of hatchery fish in the harvest, and habitat protection. He ruled in 1980 that hatchery fish were included in the tribes’ share of the harvest and that treaties did protect the habitat. The tribes and the federal government argued that:

state authorization of “watershed alterations, water storage dams, industrial developments, stream channel alterations, and residential developments” led to a degradation of their usual and accustomed fishery grounds. Federal treaty rights implied a promise of habitat integrity and specifically granted the right “to have the fishery resource protected from

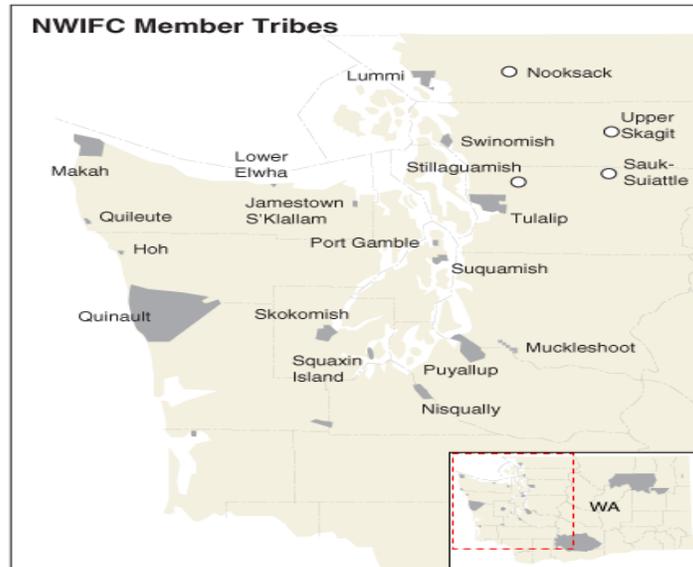
adverse environmental actions or inactions of the State of Washington” (Belsky, 1996, p. 57, quoting U.S. v. Washington, 506 F. Supp. 187).

The tribes and the federal government stated that if the decline of the salmon was not stopped, then the treaty right to fish was meaningless. Judge Orrick ruled that it was beyond dispute that the salmon had become scarce, due at least in part to the commercial fishing industry and habitat degradation. Judge Orrick stated that for salmon to survive they needed: “1) access to and from the sea, 2) an adequate supply of good-quality water, 3) a sufficient amount of suitable gravel for spawning and egg incubation, 4) an ample supply of food, and 5) sufficient shelter” (U.S. v. Washington, 1980, 506 F.Supp187,203). He said there was an implicit right in the treaties to have fishery habitat protected from “man made despoliation created by urbanization and intensive settlement of fishing areas...(w)ere this to continue, the right to take fish would eventually be reduced to the right to dip one’s net into the water...and bring it out empty” (Belsky, quoting U.S. v. Washington, 506 F. Supp. 198, 203).

The Orrick decision was an important one for the tribes, but the State of Washington did not like it. They appealed the case to the 9th circuit court on the grounds that existing state and federal laws already adequately protected fish habitat. The 9th circuit court issued several opinions, finally stating that Judge Orrick should not have ruled on the question of habitat degradation without having a specific factual dispute to rule on. Such a case would “depend for their definition and articulation upon concrete facts which underlie a dispute in a particular case” (Blumm and Steadman, 2009, p. 676, quoting U.S. v. Washington 759 F.2nd 1353, 1357). However, it would take the tribes almost two decades to decide which case they wanted to pursue.

The Tribes Implement U.S. v. Washington, 1974 (Boldt Decision)

In 1976, the tribes that were party to the U.S. v. Washington case formed the Northwest Indian Fisheries Commission (NWIFC) as an administrative agency to provide staff and support to implement the process of co-management of the salmon resource. “The role of the NWIFC is to assist member tribes in their role as natural resource co-managers. The commission provides direct services to tribes in areas such as biometrics, fish health and salmon management” (NWIFC, About Us). The NWIFC emphasizes its role as a support service organization for the twenty treaty tribes in Western Washington. It speaks on the behalf of its member tribes, but it is not a “super tribe.”



Map source: NWIFC

The NWIFC provides support services to its member tribes who are co-managers of the salmon resource in Washington State. Co-management is the government to government process by which the treaty Indian tribes in western Washington State jointly manage the shared salmon resource.⁸

Co-management recognizes that tribes and state maintain individual sovereignty while jointly managing these shared resources. Co-management minimizes duplication of management activities and thus provides great economic benefit to the state by sharing the costs of management. Co-management incorporates extensive data sharing and review, development of joint management objectives, monitoring, and a workable dispute resolution system (NWIFC, 2010).

The federally recognized Indian tribes signed a Centennial Accord with the State of Washington in 1989 recognizing the government to government relationship as the foundation of co-management. This agreement was renewed in 1999 as the Millennium Agreement (Washington, Governor’s Office of Indian Affairs). In addition to the primary relationship between the tribes and the Washington Department of Fish and Wildlife to manage salmon, the tribes work with a multitude of state agencies, regional authorities, county governments, and local government entities to protect and restore fish habitat. It is a never-ending and exhausting process for the tribes who have far fewer staff than the government entities do.

⁸ Co-management was later extended to hunting and shellfish. See Brian Footen’s case: “Co -Management of Puget Sound Salmon: How well does the Use and Collection of Shared Fishery Science between Tribes and the State Guide Resource Protection?” on the difficulties of co-management.

Though Washington State tacitly recognized the tribes' right to habitat protection, this was acknowledged in very different ways by the various state agencies, and by the successive State administrations. The State knew that the tribes could always return to the federal court system with a specific case involving habitat. The possibility of the tribes doing so continued throughout this period. The difficulty was to decide on the right case to take to court. One obvious choice was to name a specific watershed where logging, grazing, and agriculture all impacted habitat. The problem with this choice was that it involved too many levels of government, from the federal government which usually owned the higher elevation lands in the form of National Forests, to State government which owned or regulated commercial forests in the lower elevations, and individual property owners, often agricultural lands, in the valleys. The tribes did not want to sue the federal government – they wanted them on their side. Nor did they want a case that involved a multiplicity of parties to sue.

Meanwhile the tribes addressed the habitat issue in other ways. They helped initiate and were active participants in first the Timber/Fish/Wildlife process and then later the Forests and Fish Report, both of which addressed timber harvest and habitat protection on state and private commercial timber lands. They helped to start the Chelan Agreement negotiations on water resource management. When the Chelan process failed, the tribes were at the table for state mandated watershed planning.⁹ All these processes involved endless negotiations, data gathering, and report writing. Again, this was an exhausting process for the tribes with their relatively small staffs. But it was necessary in order for the tribes to protect salmon habitat.

Western Washington treaty tribes have had a seventeen years partnership with the U.S. Environmental Protection Agency (EPA) to address clean water issues under the federal Clean Water Act (NWIFC, Comprehensive Tribal ... p. 10). While engaged in these numerous processes to protect salmon habitat, they retained their right to go to court over the issue of the right to habitat protection. These processes achieved some successes, but kept tribal officials constantly at negotiating tables working out the plans, and then in the field implementing, and monitoring them.

Habitat Restoration

The importance of landscape-scale restoration is clear for future salmon recovery efforts. “Landscape scale habitat restoration” is a salmon habitat restoration activity that improves the function of multiple environmental mechanisms throughout a vast area within and across watersheds. However, the limitations caused by private land ownership and municipal boundaries make implementation of these large-scale restoration efforts difficult. One method of implementing landscape-scale restoration is by using public lands. However, those lands tend to be in better condition and need less restoration than lands in private ownership and in urban areas. In order for landscape-scale salmon recovery to be successful, private lands and urban areas must be part of the equation. Nevertheless, public lands can play a critical role for near-term salmon conservation

⁹ See Jovana Brown's case “Tribes and Watersheds in Washington State” on the watershed planning process.

because there are political and legal options making it easier to do landscape-scale restoration on public lands (Burnett, 2007). Public landscape-scale restoration is not a panacea, however, and is subject to the whims of political ideology. For example, in 1994 the Clinton Administration put in place *The Pacific Northwest Forest Plan*, which included many habitat restoration efforts beneficial to salmon including a landscape scale restoration, the closing of hundreds of miles of no longer active federal logging roads. In the following decade, however, the Bush administration reworked the Plan removing protections that protected old growth forests and salmon. Currently, the Interior Secretary for the Obama administration is reworking the Plan yet again to restore some of the environmental protections.

Habitat restoration is just the beginning of a recovery process during which environmental mechanisms are given an opportunity to reach peak function. This opportunity is improved over time as the recovered area matures. Habitat restorative efforts subject to four- or eight-year presidential cycles are not operating within a timeframe sufficient for this maturation process. For example, wildfires are a natural destructive process that eliminates large tracts of wood from watersheds and temporarily negatively impacts salmon habitat. These fires often occur on three to five hundred-year cycles. So for successful salmon habitat restoration temporal scale is just as important as spatial scale.

Do Restoration Efforts Work?

There is a great deal of debate as to the cost and effectiveness of engineered habitat restoration efforts. As far back as 1944, natural resource managers were struggling with how to engineer riverine environmental mechanisms. In his paper about stream mistakes Wickliff (1944) lists a series of stream management missteps that can be seen in engineered river restoration projects today. Cederholm, et. al. tackled the problem of the cost benefit of stream restoration strategies as well. They compared two types of localized stream restoration efforts. One section of stream was treated by the engineered placement of large wood in hopes of restoring habitat features beneficial to Coho salmon. Another reach of the same stream was treated by a non-engineered technique: simply cutting the trees in the adjacent riparian area so they fell into the stream. Both techniques were beneficial to Coho production at the study site (Cederholm, et. al. 1997). Although the engineered site had greater longevity, a cost efficiency analysis found that the estimated cost per juvenile Coho produced was about equal \$13 per fish for the non-engineered treatment and \$15 per fish for the engineered treatment.

Although it is of interest that comparable salmon production can be obtained from simple restoration techniques as opposed to highly engineered ones, the cost of the effort should not be overlooked. If extrapolated out over the many thousand kilometers of stream habitat in need of such treatment throughout the Puget Sound Lowlands, it becomes apparent that such restoration efforts are cost prohibitive. Indeed, protection and restoration across the region of the riparian areas from which wood is recruited by the rivers and streams would be a landscape restoration alternative. An attempt to accomplish this was implemented in 1999 by the Washington Department of Natural

Resources Forest and Fish Plan. In the plan that governs forest practice regulations, buffers around riparian areas were increased substantially (Washington, DNR, *Forests and Fish*, 1999). Although the plan is a great start, some elements inhibit a holistic landscape approach. Nevertheless, protection efforts such as these that re-establish rather than re-create conditions under which environmental mechanisms can form and evolve throughout multiple watersheds and across private, political and municipal boundaries are preferred.

A great deal of effort and attention is focused on riverine habitat restoration. However, a pristine watershed can only produce as many juvenile salmon as its estuary will allow. This concept is referred to as *estuarine carrying capacity* and is fundamental to effective salmon recovery. No matter how many juvenile salmon are produced by restoration efforts upstream, the number of fish entering the oceanic life phase is ultimately determined by the health of the estuary.

Restoration efforts are often constrained by myopic views of the natural processes at work in a watershed. Understanding this concept embodies the importance of landscape scale recovery. In the Nisqually river system, the importance of a healthy estuary has been taken into consideration by the initiation of one of the largest estuarine restoration projects on the West coast, returning 699 acres of diked freshwater marsh into estuarine habitat. By removing the dikes, the U.S. Fish and Wildlife Service—in cooperation with the Nisqually Tribe and other private conservation agencies—are allowing the area to be reclaimed by the tidal influences of Puget Sound, ultimately supporting additional habitat restoration efforts higher up in the watershed (Nisqually Delta Restoration).

Habitat restoration efforts such as the Nisqually Delta estuary are landscape scale restoration efforts that are the result of political will.¹⁰ Litigation also has its place in establishing important habitat protection and restoration measures. The Martinez decision on culverts demonstrates the power of litigation as a method of instituting landscape scale restoration. The replacement or repair of culverts is a landscape scale activity because it can improve salmon production above the fish barrier restoring ecosystem mechanisms that result from salmon activity.

Endangered Species Act

Another factor was added to this already complicated issue in the late 1990's. This was the listing of salmon under the Endangered Species Act. In 1973 the Endangered Species Act (ESA) was passed by Congress and signed into law by President Richard Nixon. The ESA:

provides for the conservation of species that are endangered or threatened throughout all or a significant portion of their range, and the conservation

¹⁰ For a case on the Nisqually restoration see Robinson and Alesko, *The Return of a River: A Nisqually Tribal Challenge* at <http://nativecases.evergreen.edu>.

of the ecosystems on which they depend.... A "species"¹¹ is considered endangered if it is in danger of extinction throughout all or a significant portion of its range. A species is considered threatened if it is likely to become an endangered species within the foreseeable future (US NOAA, Fisheries, Office of Protected Species).

The U.S. National Oceanic and Atmospheric Administration Fisheries (NOAA) and its sub-agency the National Marine Fisheries Service (NMFS) manages marine and anadromous species and thus is responsible for ESA listings. The following Puget Sound and Washington coast salmon species have been listed:

- Puget Sound Chinook - listed as threatened in 1999
- Hood Canal & Strait of Juan de Fuca summer chum – listed as threatened in 1999
- Lake Ozette sockeye – listed as threatened in 1999
- Puget Sound steelhead – listed as threatened in 2007 (US NOAA, 2009)

In the Pacific Northwest a great deal of salmon habitat restoration has been governed by the Endangered Species Act, under which several species of Pacific salmon have been listed. The listings have led to the development of salmon recovery plans and habitat conservation plans for watersheds throughout the region. Long-term freshwater habitat protection and restoration projects are central to all plans. A guideline within the plans refers to *Properly Functioning Conditions* (PFC) as a metric by which habitat should be restored. Planners rely heavily on fish habitat models to evaluate the potential effectiveness of proposed restoration, and numerous models have been developed to predict restoration effects on population recovery. However implementing the salmon habitat restoration projects comes with great uncertainty and is tied to economic and logistic feasibility. ESA does not have a great track record as a tool that initiates and enforces successful habitat restoration that leads to delisted or recovered species. Since 1973, 1311 species have been listed. Nearly as many recovery plans have been implemented resulting in 41 delistings of which only 39% were a result of a recovered population. The remaining 61% either went extinct, were taxonomically revised, or otherwise reclassified because of updated information (Macalester College, 2007). In the greater Puget Sound area, Chinook Salmon were listed as threatened under ESA in 1999. The recovery plan for the species was completed in 2006. Since then a very small percent of the proposed restoration efforts have been completed in King County.

Even completion of some of the Recovery Plan habitat restoration proposals do not match requirements put forth by the National Marine Fisheries Service (NMFS), the author of guidance documents for properly functioning conditions (PFC). For example, wood placement in rivers can be an effective restoration tool (Fox & Bolton, 2007). However,

¹¹ The term "species" under the ESA includes species, subspecies, and, for vertebrates only, "distinct population segments (DPSs)". Pacific salmon are listed as "evolutionarily significant units (ESUs)", which are essentially equivalent to DPSs for the purpose of the ESA. (US NOAA, Fisheries, Office of Protected Species)

according to NMFS guidelines getting to the necessary density for proper function is not feasible given current wood placement rates in some rivers in King County. According to NMFS guidelines 2.8 “key pieces” of wood are needed every hundred meters in a typical Puget Sound Chinook river. King County’s *Programmatic Biological Effects Analysis* states that in 2002 87 key pieces of wood were placed in the sixty two mile long Green River, King County Washington as part of recovery efforts (King County, 2003, pp 76-77). That may seem like a significant contribution to habitat restoration: however, given the area needed for restoration, it is insufficient to provide the river with a functional density of large wood. In fact it would take nearly ten years to get to PFC at a rate of 2,800 key pieces placed per year. The standards assume, of course, that the engineered wood placement effectively mimics natural processes once in the river.

Culvert Case: U.S. v. Washington, 2007 (Martinez decision)

In 1985, the 9th circuit court overruled Judge Orrick’s 1980 decision by stating that a specific case of environmental degradation was needed. The case of culverts blocking fish passage is such a case. Moreover, Washington State is responsible for building and maintaining road culverts and therefore is a clear and obvious entity for the tribes to sue for habitat redress. The tribes¹² assert that culverts under state roads block salmon access to “at least 249 linear miles of stream, thus closing off more than 400,000 square meters of productive spawning habitat, and more than 1.5 million square meters of productive rearing habitat for juvenile fish.” (Summary judgment, p 4) The tribes used the State’s own data in their suit. The Washington State Departments of Transportation and Fish & Wildlife had issued a report in 1997 which provided these figures (Blumm & Steadman, 2009, p. 683). Thus the state itself had estimated that if the culverts were repaired, 200,000 more adult wild salmon could be produced. The tribes state that a “significant reason for the decline of harvestable fish has been the destruction of habitat needed for their survival.” It is significant to the case that the tribes were able to use the State’s own estimate that the removal of blocked culverts would result in the 200,000 increase of fish (Morisset & Summers, 2009, p. 50).

The tribes and the U.S. Department of Justice filed suit in federal district court in Seattle in January of 2001:

The Tribes, in their Request for Determination, state that they brought this action to enforce a duty upon the State of Washington to refrain from constructing and maintaining culverts under State roads that degrade fish habitat so that adult fish production is reduced, which in turn reduces the number of fish available for harvest by the Tribes. In part due to the reduction of harvestable fish caused by those actions of the State, the ability

¹² The Indian tribes that are party to the Culvert Case are: Suquamish, Jamestown S’Klallam, Lower Elwah, Port Gamble, Nisqually, Nooksack, Suak-Suiattle, Skokomish, Squaxin Island, Stillaguamish, Upper Skagit, Tulalip, Lummi, Quinalt, Puyallup, Hoh, Yakama, Quileute, Makah & Swinomish.

of the Tribes to achieve a moderate living from their Treaty fisheries has been impaired (Summary judgment, p. 3).¹³

The suit was therefore to compel the State of Washington to repair or replace any culverts that impede salmon migration to or from the spawning grounds. Furthermore, the tribes wanted a determination that the State has a treaty-based duty to preserve fish runs so that the tribes can earn a “moderate living.” The case was assigned to Judge Ricardo Martinez; hence the decision in the case is often referred to as the “Martinez decision.” Judge Martinez quoted extensively from prior opinions in the long court history of *U.S. v. Washington*. He determined that the treaty right to fish included a right to habitat protection. Judge Martinez stated: “It was thus the right to **take** fish, not just the right to fish, that was secured by the treaties.” (Summary judgment, p. 10, emphasis in original) His ruling “came down squarely on the side of the tribes and the federal government” (Blumm and Steadman, p. 686). Judge Martinez ruled:

The Court hereby declares that the right of taking fish, secured to the Tribes in the Stevens Treaties, imposes a duty upon the State to refrain from building or operating culverts under State-maintained roads that hinder fish passage and thereby diminish the number of fish that would otherwise be available for Tribal harvest. The Court further declares that the State of Washington currently owns and operates culverts that violate this duty (Summary judgment, p. 12).

Blumm and Steadman have said: “The Martinez Decision represents the most significant step forward in the progression of treaty fishing rights litigation since the Supreme Court’s affirmation of Judge Boldt thirty years ago” (p. 704).

Seattle Times reporter Lynda Mapes has stated:

The lawsuit is potentially a more powerful tool than the Endangered Species Act (ESA) for a couple of key reasons. First, it could affect streams and rivers everywhere in Washington with a state highway culvert that affects runs for Western Washington tribes. The ESA only protects streams that are home to fish listed for protection. Second, the ESA only requires fish runs to be restored to the point that they are no longer on the brink of extinction. The lawsuit seeks to restore habitat to the point it supports enough salmon to successfully sustain commercial, cultural and subsistence fishing (Mapes, 2001).

Though the decision was a critical one, it may be some time before it is implemented.

¹³ The term “moderate living” was defined in *Passenger Fishing Vessel* (443 U.S. 658) which upheld *U.S. v. Washington*, 1974, the Boldt decision.

After the Martinez Decision

There is no final resolution of this case until Judge Martinez proposes a remedy and any potential appeals have completed. This has not happened as of January, 2011. Representatives of the tribes and Washington State initially agreed to try to reach a settlement. A news story appearing in August of 2007 stated: “After meeting with U.S. District Judge Ricardo S. Martinez in Seattle, both sides have agreed to settle the case by spring” (Mapes, 2007). This did not happen. No resolution of the issues came from these negotiations. The talks probably broke down because of the costs of repairing and replacing the culverts and the fact that the tribes want the culverts fixed in a speedier manner.

This meant a return to Court. In April, 2009, Terry Williams, Commissioner of Fish and Wildlife for the Tulalip Tribes, stated: “The tribes had an expectation that this would go to trial because we weren’t seeing the responses from the state like we thought we would” (NWIFC, Blog). The tribes went back to court in October 2009 asking Judge Martinez to require the State to accelerate the process of replacing or repairing the culverts. The tribes want the culverts fixed within 20 years and the State maintains that because of costs it will take 50 years to do so (Welch, 2009). On June 7, 2010, closing arguments for *United States v. Washington* were heard before Judge Martinez in federal district court. The Tribes’ presentation centered on four specific issues: 1) Fixing the State culverts and maintaining them will significantly improve tribal salmon harvest, 2) This action is essential to uphold treaty rights and recover salmon runs, 3) Fixing the culverts will not trigger a State budget crisis, and 4) the action will “minimize future legal disputes while preserving State discretion.” (Hollowed, personal communication, 9/10/10).

On average, the Washington State Department of Transportation (WSDOT) completes about 14-20 culvert projects a year to correct fish passage. With approximately 845 on the fix list these repairs will extend well beyond the mandated time for completion. According to the settlement the State has until 2045 to complete repairs. Currently they are fixing the culverts at only about half the necessary rate. Repairs were actually slowed down after the original court order in 2013, which did not help their appeal in the 9th District Court in 2016, which they lost. A couple strategies are suggested for delaying repairs. One is that eventually they will be successful in appeal attempts resulting in less culverts that need repairing. Another is that by delaying the repairs the State is trying to garner federal funding by going through appeals (unsuccessfully thus far) the State will declare it does not have the funds to fulfill the mandate and federal funding will be applied to help (Pers. Com, Martin Fox).

Billy Frank, Jr. (Nisqually), Chairman of the Northwest Indian Fisheries Commission, has stated that the State of Washington has a duty to the treaty tribes. That duty is to not allow salmon habitat to be degraded to the point that salmon are no longer available to the tribes. When the tribes signed treaties with the federal government, they reserved certain rights that were the most important for them. “Foremost was the right to continue

fishing in all of their traditional fishing areas. The tribes reserved this right because the salmon was the very basis of their culture....Salmon remains the center of tribal culture today.” The salmon that once sustained an entire region, have now all but disappeared. “Over the past two decades, the treaty tribes have voluntarily reduced their overall salmon harvests by 80-90 percent to protect weak wild salmon stocks.”... Salmon recovery is dependent on protecting and restoring habitat. “Fixing the culverts, alone, will not save the salmon. It is, however, a simple and cost-effective step toward the goal of salmon recovery. If treaty rights can be used to reach that goal, it is to the benefit of everyone – Indian and non-Indian – who lives in the Puget Sound region” (NWIFC, Being Frank).

Conclusion

The negative impacts of human activity on salmonid habitat across Western Washington have fractured the landscape like a reflection in a broken mirror. Localized site specific habitat restoration projects equate to gluing the adjacent broken pieces of the mirror together, however the reflected image of restored habitat is still a fractured one. Site-specific restored habitat and the way the fish use it is limited to semi-functional segments of habitat, each of which has a reduced viability because it has been partitioned within the ecosystem. Although incredibly important to sustaining salmon populations, these localized habitat restoration efforts may not be robust enough to recover salmon populations. Economic limitations, the Endangered Species Act mitigation requirements, private land ownership and multiple municipal and institutional jurisdictions limit most salmon habitat restoration efforts to small localized areas. Public lands offer opportunities for landscape scale restoration efforts within and across watersheds. Provisions in Pacific Northwest Indian Tribes Treaties create opportunities for large scale salmon habitat restoration efforts as well. The culvert case (the Martinez decision) affirmed the Tribes’ treaty rights to salmon habitat restoration. But this would not be the end.

Recently the State’s appeals process made it to the Supreme Court. In January of 2018 the United States Supreme Court agreed to take up a petition by the State of Washington that seeks to overturn the 2016 9th District Appeal Court’s ruling concerning tribal treaty rights. After failing in its appeal attempt to convince the 9th Circuit to rehear the case, Washington brought an appeal to the Supreme Court. The State's lawyers have argued that the 9th Circuit ruling creates a new treaty obligation that will require the State to consider tribal treaty rights for all natural resource management throughout the State. However, the federal government sided with tribes and had urged the Supreme Court to leave the 9th Circuit ruling specific to culvert repairs in place (Evans, 2018). The case was heard in March 2018 and is awaiting a decision.

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Pacific Northwest History: Timeline of discovery and conquest

1570 -1800 Ships of European powers explore and map the Pacific Northwest coastline.

1790-1795 Captain George Vancouver sails up PNW coast and compiles first extensive map of area.

1792 Captain Robert Gary discovers mouth of Columbia River

1805 Lewis & Clark expedition reach the Columbia River enroute to Pacific Ocean

1811 John Jacob Astor builds Fort Astoria at the mouth of the Columbia River.

1825 Hudson's Bay Company established Fort Vancouver on Columbia River.

1833 Hudson's Bay Co. established Fort Nisqually, first Euro-American settlement in Puget Sound.

1830's-1840's Euro-American settlers head west over the Oregon Trail

1846 Oregon Territory divided between the U.S. and Great Britain. Boundary set at 49th parallel where it remains.

1853 Washington Territory created by Congress which included present state of Washington, western Montana, and northern Idaho.

Dec. 1853 President Fillmore appoints Isaac Stevens as first Governor of Washington Territory. Stevens serves as governor until 1857

1853-1857 Franklin Pierce administration. Commissioner of Indian Affairs George W. Manypenny establishes federal government policy of assigning tribes to reservations: Indians would be "colonized in suitable locations." (Richards)

1854 Washington Territorial Governor Isaac Stevens meets with Commissioner Manypenny in Washington, D.C. and receives written instructions to conclude "Articles of Agreement & Convention with the Indian Tribes in Washington Territory." (Richards)

Dec 26, 1854 Treaty of Medicine Creek. Treaty council attended by delegates from Nisqually, Puyallup, & Squaxin tribes.

Jan 22, 1855 Treaty of Point Elliot. Treaty council attended by delegates from the Duwamish, Suquamish, Swinomish, Skagit, Nooksack, Lummi, the various small tribes later to be named the Muckleshoot, and the Snohomish, Snoqualmie, Skykomish predecessors of the Tulip Tribes and the Stoluck-wa-mish River Tribe (now Stillaguamish).

Jan 26, 1855 Treaty of Point No Point. Treaty council attended by delegates from the S'Klallam, Skokomish, Elwha and other tribes.

Jan 31, 1855 Treaty of Neah Bay. Treaty council attended by delegates from the several villages of Makah Indians.

Feb 24-27, 1855 Chehalis River Treaty Council. Attended by delegates from the Chehalis, Quinault, Queets, Chinook, and Cowlitz tribes. The delegates found the treaty terms unacceptable and did not sign a treaty. Only the Quinault Indians later signed a treaty with Stevens.

June 9, 1855 Treaty with the Walla Walla, Cayuse, etc. Treaty council attended by delegates from the Walla Walla (later Warm Springs), Cayuses, and Umatilla Tribes. Established Warm Springs Reservation and the Umatilla Reservation in northern Oregon.

June 9, 1855. Treaty with the Yakamas. Treaty council attended by delegates from the Yakama, Palouse, Klickitat and other Indian tribes. Today: Confederated Tribes and Bands of the Yakama Indian Nation.

June 11, 1855 Treaty with the Nez Perces.

July 1, 1855 Treaty of Olympia with the Quinault, Quileute, & Hoh Indians.

July 16, 1855 Treaty of Hell Gate. Attended by delegates of the confederated tribes of Flathead, Kootenay, and Upper Pend d'Oreilles. Created the Confederated Salish Kootenai Tribes of the Flathead Reservation in western Montana.

1859 Oregon becomes a state

1862 Homestead Act is passed.

1866 Chehalis Confederated Tribes established by Executive Order.

1871 Congress passed a law that ended treaty making with Indian tribes. After this date Indian reservations established by Presidential Executive Order.

1872 The Colville Confederated Tribes established by Executive Order.

1881 The Spokane Tribe established by Executive Order

1883 The Northern Pacific Railroad is completed and reaches Tacoma

1887 The Dawes Act (Allotment Act) is passed

1889 Washington becomes a state

1914 Kalispel Tribe established by Executive Order

1981 Jamestown S’Klallam became a federally recognized tribe.*

2002 Cowlitz Tribe became a federally recognized tribe.*

* For the current federal recognition process see: National Congress of American Indians: Federal Recognition <http://www.ncai.org/Federal-Recognition.70.0.html>

Court Decisions Upholding Treaty Rights

U.S. v. Winans, 1905 The U.S. Supreme Court upheld Yakama Indian treaty fishing rights for access to traditional off-reservation fishing sites.

Tulee v Washington, 1942 Court found that state could not charge tribal fishers license fees.

Puyallup trilogy, 1968-1977 Court began to “confront and strike down discriminatory ‘conservation’ regulation of tribal harvests promulgated by the Pacific Northwest states.” (Blumm & Steadman)

U.S. v. Oregon, 1969 Case involved Yakama tribal fishers on the Columbia River. Judge Belloni ruled that treaty fishing rights ensured a right to a “fair share” of the fish harvest for tribal fishers (Blumm & Steadman)

U.S. v. Washington, 1974 (Boldt)

Northwest Indian Fisheries Commission (NWIFC) was established in 1975 by the treaty tribes in U.S. v. Washington case. Agency is as a “support service organization for the member tribes.” Now consists of 20 treaty Indian tribes in Western Washington.

Columbia River Inter Tribal Fish Commission (CRITFC) The Warm Springs, Yakama, Umatilla, and Nez Perce tribes joined together in 1977 to renew their authority in fisheries management. To do so they created a coordinating and technical organization to support their joint and individual exercise of sovereign authority.

Washington v. Washington State Commercial Passenger Fishing Vessel Assn, 1979. U.S. Supreme Court upholds U.S. v. Washington, 1974

U.S. v. Washington, Phase II 1980 Orrick decision. The tribes have a right to have salmon habitat protected from man-made destruction. Treaties imply an “environmental right.”

U.S. v. Washington, 1985 Ninth circuit court of appeals remanded the Orrick decision to a district court for a ruling based on specific factual situations.

U.S. v. Washington, 1998 The treaty right to fish includes the right to harvest shellfish embedded in the state's tidelands and bed lands.

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