A TREATY RIGHT TO HEALTHY FORESTS? USING TRIBAL FISHING RIGHTS TO CHALLENGE TIMBER SALES

by Isaac Santos

Isaac Santos is a 2026 J.D. candidate at the University of Utah S.J. Quinney College of Law.

SUMMARY

Tribes in the Pacific Northwest have faced persistent obstacles to their exercise of treaty fishing rights, most prominently illegal regulation of off-reservation fishing by state governments. As salmon decline, a new frontier is emerging for treaty right violations: environmental degradation. A recent court victory ruled that a series of culverts owned and operated by the state of Washington violated tribal treaty rights to fish for salmonids at their "usual and accustomed" places. This Article adapts that "Culverts Case" framework to timber harvest applications and sale of timber on public lands, underscoring the tools and arguments available when making environmental degradation treaty rights claims and applying them to past timber sales and to current, contested timber sales. It identifies challenges such a lawsuit would face, and how these localized, small-scale cases relate to climate change mitigation and adaptation.

The Coast Salish people have inhabited what is now called Western Washington State for many millennia. From time immemorial, salmon have been so integral to the culture, spirituality, and survival of the numerous tribes and nations of this region that these groups often call themselves "Salmon People." Thus, when the U.S. government sent negotiators to form treaties with the Salmon People, Indigenous negotiators unwaveringly advocated to retain their right to fish. As a result of this advocacy, tribal fishing rights were enshrined in the various treaties signed between Pacific Northwest tribes and nations and the United States. For well over a century, tribes and individual Indians in the Pacific Northwest have fought vociferously to exercise their treaty fishing rights, despite consistent resistance by actors such as the commercial fishing industry and the state of Washington.

Today, the right to fish is compromised less by the opposition of these actors and more by a devastating paucity of fish. Salmon populations have declined precipitously across the region. Commercial fishing, along with habitat loss and degradation—including logging on Washington State public lands—are the leading causes. Consequently, even though treaty rights have received more protection in recent decades, there are simply not enough fish to fulfill tribal treaty rights. To meet these challenges, tribes have evolved new legal theories to protect their treaty rights. Through litigation that lasted more than a decade and a half, tribes succeeded on a claim asserting that certain state-owned culverts, by impeding salmon passage and reducing salmon populations, constitute a treaty violation. The series of cases concerning this issue will collectively be called the "Culverts Case."[1]

Following the rough framework established by this litigation, this Article argues that tribes might be able to challenge timber sales on state lands where those sales threaten the health of salmon populations. First, however, it outlines foundational principles of federal Indian law in Part I. Part II then briefly traces the history of the Coast Salish people from pre-colonization until contact with European settlers, and discusses the treaties that formed after this contact and the exercise of treaty fishing rights from treaty formation until a seminal case in the 1970s. This case, known as the

Author's Note: This Article was originally written for my Climate Law and Policy Seminar course, taught by Prof. Lingxi Chenyang. Thank you to Professor Chenyang and to Dean Elizabeth Kronk Warner for the invaluable feedback and guidance you both provided as I envisioned and wrote this Article.

Editor's Note: This Article received first place in the Chief Justice John B. Doolin Sovereignty Symposium 2025 writing competition, hosted by Oklahoma City University School of Law.

1. These cases are the initial trial in *United States v. Washington* (*Washington IV*), 20 F. Supp. 3d 828 (W.D. Wash. 2007); a bench trial to determine remedies in *United States v. Washington* (*Washington V*), 20 F. Supp. 3d 986 (W.D. Wash. 2013); the case on appeal in *United States v. Washington* (*Washington VI*), 853 F.3d 946 (9th Cir. 2017); and an affirmation of the court of appeals case by a divided U.S. Supreme Court, delivered without an opinion, in *Washington v. United States*, 584 U.S. 837 (2018).

"Boldt Decision,"[2] has spawned a half-century of litigation that has largely adumbrated the extent of Pacific Northwest tribal treaty fishing rights in the modern era. One spawn of this case, mentioned above, is the Culverts Case.

After discussing this case, Part III outlines the scientific connections between salmon, forests, deforestation, and climate change, to lay the groundwork for challenging timber sales as violative of treaty rights. The history of salmon decline and its impact on tribes follows in Part IV. Part V applies the legal framework to these facts to outline two causes of action that tribes might pursue: one concerning the damage caused by past timber sales on state lands, and another to challenge future timber sales by the state of Washington. Part VI highlights some of the challenges such litigation might face, as well as opportunities to apply the Culverts Case framework in other contexts, and Part VII concludes.

As an initial matter, however, the Article addresses the question: why target timber sales? Several legal academics have suggested that the Culverts Case framework might be applied to challenge land use practices, including logging.[3] The Article develops these suggestions with scientific, factual, and legal support, and concludes that tribes could likely succeed on a treaty rights violation claim challenging past or future timber harvests on Washington State lands if the tribe may prove strong causation, supported by localized science, regarding timber harvest harms to treaty rights salmon.

There are a number of reasons why tribes might seek to challenge timber sales. First, as will be explained, healthy, older forests provide numerous ecological and climate-adaptive benefits to salmon, whereas logged forests remove and often entirely invert many of these benefits. Thus, when the state of Washington sells timber to be harvested, it sometimes contributes to the degradation of salmon habitat.

Second, because the U.S. District Court for the Western District of Washington exercises ongoing jurisdiction to consider claims concerning tribal treaty fishing rights, the state of Washington's sovereign immunity for such claims is already pierced.[4] Whereas the state's inherent immunity from suits might normally preclude tribes from suing it in its sovereign capacity, it is not immune from suits asserted by the federal government,[5] as in the litigation resulting in the Boldt Decision.[6] Sovereign immunity is held continuously at bay by the court's ongoing jurisdiction, which allows tribes to assert specific claims like the claims explained here.[7]

Third, this litigation would address climate change mitigation and adaptation through the back door. Climate change poses an immense threat to salmon. However, though some scholars have deftly articulated that climate change might itself be a treaty violation,[8] litigation asserting this would face significant barriers. For one, federal courts have repeatedly dismissed climate change suits for reasons such as displacement, causation, and redressability.[9] This is not to say that such suits are infeasible—rather, it is unclear at this time whether tribal plaintiffs asserting a climate change treaty rights claim could circumvent such barriers.

To the contrary, the strategy employed here has been successfully applied before, and relatively recently. And though this suit does not *directly* address climate change, it does so indirectly. As explained here, healthy forests sequester immense amounts of carbon while also providing climate resiliency benefits for salmon. Thus, forests help not only to mitigate climate change, but also to ameliorate its impacts. By preserving intact forests, especially near valuable salmon habitat, legal claims like those suggested in this Article can protect salmon habitat, increase the climate resiliency of salmon habitat, and mitigate climate change. Moreover, in doing so, such claims may help to fortify the ability of tribes and individual Indians to harvest salmon well into the future.

I. Foundational Principles of Federal Indian Law

A. Overview

The case law that forms the foundation of this Article's argument largely incorporates foundational principles of federal Indian law. Federal Indian law is a body of law concerning the relationship between the federal government and Indian tribes.[10] This body of law encompasses various constitutional provisions, statutes, treaties with tribes, and

2. United States v. Washington (*Washington I*), 384 F. Supp. 312 (W.D. Wash. 1974), *aff'd and remanded*, 520 F.2d 676 (9th Cir. 1975).
3. Michael C. Blumm, *Indian Treaty Fishing Rights and the Environment: Affirming the Right to Habitat Protection and Restoration*, 92 Wash. L. Rev. 1 (2017); Michael C. Blumm & Jane G. Steadman, *Indian Treaty Fishing Rights and Habitat Protection: The* Martinez Decision *Supplies a Resounding Judicial Reaffirmation*, 49 Nat. Res. J. 653, 703 (2009); Vincent Mulier, *Recognizing the Full Scope of the Right to Take Fish Under the Stevens Treaties: The History of Fishing Rights Litigation in the Pacific Northwest*, 31 Am. Indian L. Rev. 41, 87 (2007).
4. *Washington I*, 384 F. Supp. at 418.
5. *Id.*
6. *See id.* at 327.
7. *See id.* at 419 ("The parties or any of them may invoke the continuing jurisdiction of this court . . . .").
8. Elizabeth Ann Kronk Warner, *Everything Old Is New Again: Enforcing Tribal Treaty Provisions to Protect Climate Change-Threatened Resources*, 94 Neb. L. Rev. 916 (2015).
9. For displacement, see *American Electric Power Co. v. Connecticut*, 564 U.S. 410 (2011) (holding that the Clean Air Act displaces federal nuisance claims against carbon dioxide emitters); for causation, see *Native Village of Kivalina v. ExxonMobil Corp.*, 696 F.3d 849, 867, 868, 869 (9th Cir. 2012) (Pro, J., concurring) (reasoning that a plaintiff's failure to distinguish the specific defendant greenhouse gas emitters from the "vast multitude of emitters worldwide" as the cause for their injury amounts to a failure to trace their injury to the defendants such that plaintiffs lack standing); for redressability, see *Juliana v. United States*, 947 F.3d 1159, 1170-72, 1175 (9th Cir. 2020) (holding that an Article III court could not compel "adoption of a comprehensive scheme to decrease fossil fuel emissions and combat climate change," and even if they could, due to the global scope of climate change, such action may not redress injuries caused by global climate change, and that therefore the plaintiffs lacked standing).
10. *See* David H. Getches et al., Cases and Materials on Federal Indian Law 1 (7th ed. 2017).

common-law doctrines.[11] From these sources flow several relevant legal principles, including treaty formation and interpretation, as well as the trust relationship between the United States and Indian tribes.

B. Treaty Formation

As dictated by the U.S. Constitution, the executive branch is empowered to enter treaties, which may be ratified by a two-thirds vote in the U.S. Senate.[12] Though tribes are not considered foreign nations, the federal government has entered hundreds of treaties with Indian tribes, which are considered federal law.[13] Under the Supremacy Clause, these treaties are "the supreme Law of the Land."[14] Therefore, treaties with Indian tribes bind the federal government and the states.[15] Where treaties reserve certain rights to tribes, these rights are often legally enforceable, such that state laws that "interfere with" treaty rights may be considered "unconstitutional and void."[16]

C. Treaty Interpretation

As is the case with the treaties at issue here, most treaties between the U.S. government and tribes were negotiated under conditions that significantly disadvantaged tribes.[17] Tribes typically faced language barriers, coercive circumstances, and power and knowledge asymmetries. Treaties were only written in English, and negotiations often involved linguistic complications. For example, "government negotiators would sometimes use a language they believed to be common to all tribes but which in fact carried different meanings to each."[18] Other times, treaties were negotiated in trade languages with very limited vocabularies.[19]

Negotiations often occurred under duress, as tribes faced the choice of either being overrun by white settlers or ceding their lands and moving west.[20] In addition, negotiators for the United States typically possessed a better understanding of the legal framework under which the treaty would be interpreted and applied.[21] Despite these imbalances, tribes often fought determinedly to retain certain rights, though usually at great cost.[22]

Acknowledging these imbalances in negotiations and also the federal government's role as trustee for tribes,[23] U.S. courts developed the Indian Canons of Construction as a tool to interpret and apply treaty provisions.[24] These canons generally encompass three principles: (1) "ambiguous expressions must be resolved in favor of the Indian parties concerned"[25]; (2) an Indian treaty must be construed "not according to the technical meaning of its words to learned lawyers, but in the sense in which they would naturally be understood by the Indians," at the time of signing[26]; and (3) Indian treaties must be liberally construed in the Indians' favor.[27] As explained by Charles Wilkinson and John Volkman, these rules are analogous to those applied in adhesion contracts, and like adhesion contract rules of interpretation, the Indian Canons of Construction are meant to apply the "reasonable expectations of the weaker party."[28]

As will be discussed later, the Indian Canons of Construction, and one canon in particular—that treaty provisions must be construed as Indians would have understood the provisions at the time of signing—has been repeatedly applied to the tribal treaty fishing rights of Pacific Northwest tribes.[29] Treaties are not only sources of rights, however; treaties also helped to develop a relationship that serves to protect these rights.

D. The Federal Indian Trust Relationship

Treaties, along with certain constitutional provisions, establish a trust relationship between the federal government and the tribes, in which the United States acts as trustee and the tribes as beneficiary.[30] Accordingly, the United States may assume certain obligations toward Indian tribes with whom the federal government enters treaties, including legally enforceable stewardship of Indian finances and

11. *Id.* at 3.
12. U.S. Const. art II, §2, cl. 2.
13. Getches et al., *supra* note 10, at 2.
14. U.S. Const. art VI, cl. 2.
15. *See* United States v. Winans, 198 U.S. 371, 381-82 (1905).
16. Worcester v. Georgia, 31 U.S. 515, 531 (1832); *see* Washington v. Washington State Com. Passenger Fishing Vessel Ass'n (*Fishing Vessel*), 443 U.S. 658, 673 n.20 (1979) ("this Court has . . . held that these treaties confer enforceable special benefits on signatory Indian tribes").
17. Charles F. Wilkinson & John M. Volkman, *Judicial Review of Indian Treaty Abrogation: "As Long as Water Flows, or Grass Grows Upon the Earth"—How Long a Time Is That?*, 63 Calif. L. Rev. 601, 609 (1975).
18. *Id.* at 610-11.
19. *Washington I*, 384 F. Supp. 312, 355 (W.D. Wash. 1974).
20. Wilkinson & Volkman, *supra* note 17, at 609-10.
21. *Id.* at 610-11 (quoting Jones v. Meehan, 175 U.S. 1, 11 (1899)).
22. *Id.* at 603.
23. *See infra* Section I.D.
24. Warner, *supra* note 8, at 931 (quoting County of Oneida v. Oneida Indian Nation, 470 U.S. 226, 247 (1985)).
25. Wilkinson & Volkman, *supra* note 17, at 617 (citing, *e.g.*, McClanahan v. State Tax Comm'n, 411 U.S. 164, 174 (1973); Carpenter v. Shaw, 280 U.S. 363, 367 (1930); Winters v. United States, 207 U.S. 564, 576-77 (1908)).
26. *Fishing Vessel*, 443 U.S. 658, 676 (1979) (quoting *Jones*, 175 U.S. at 11; United States v. Winans, 198 U.S. 371, 380 (1905) (citing Choctaw Nation v. United States, 119 U.S. 1, 28 (1886))); *see also* Wilkinson & Volkman, *supra* note 17, at 617 (citations omitted).
27. Wilkinson & Volkman, *supra* note 17, at 617 (citing, *e.g.*, Choctaw Nation v. United States, 318 U.S. 423, 431-32 (1943); Tulee v. Washington, 315 U.S. 681, 684-85 (1942); United States v. Walker River Irrigation Dist., 104 F.2d 334, 337 (9th Cir. 1939)).
28. *Id.* at 617-18.
29. *Washington I*, 384 F. Supp. 312, 401 (W.D. Wash. 1974); *Fishing Vessel*, 443 U.S. at 676; *Winans*, 198 U.S. at 380; *Washington VI*, 853 F.3d 946, 963 (9th Cir. 2017).
30. *See* Cherokee Nation v. Georgia, 30 U.S. 1, 17 (1831); Getches et al., *supra* note 10, at 3. Though the trust relationship has on many occasions served as a benefit to tribes, some of the foundational justifications for the Indian trust doctrine are founded upon "deeply embedded European cultural racism." Robert A. Williams Jr., *Columbus's Legacy: The Rehnquist Court's Perpetuation of European Cultural Racism Against American Indian Tribes*, 39 Fed. B. News & J. 358, 358-69 (1992), *reprinted in* Getches et al., *supra* note 10, at 33. As argued by Robert Williams, the racist doctrine of discovery, which granted the United States the ability to extinguish Indian title to their lands, was later "fashioned into the Trust doctrine's concept of a guardian-ward relationship between the United States and American Indian Tribes by the Supreme Court." *Id.*

resources that the federal government controls.[31] Despite seemingly expansive language delimiting the federal government's obligations,[32] the U.S. Supreme Court has significantly limited the extent and enforceability of these obligations over time.

Thus, though the trust relationship has served as a bulwark against state incursions into tribal sovereignty when the United States sues states on behalf of tribes, it has also been wielded to justify the U.S. Congress' all-encompassing "plenary power" over tribes.[33] Under this plenary power, Congress has virtually limitless power to unilaterally abrogate treaties.[34] Further, the extent to which tribes may sue the federal government for violations of their trust duties has been significantly diminished.[35] In this context, the "general trust relationship," though ostensibly binding the United States to "moral obligations of the highest responsibility and trust," may only impose those obligations upon the United States, which Congress "expressly accepts."[36] The heightened standards and jurisprudential ambiguity created by recent Supreme Court rulings is one reason that in the current era of federal Indian law, treaty rights claims against states may find much more success than claims against the federal government.

E. Trust Relationship in Claims Against States

Due to changes in the trust relationship discussed above, it has become increasingly difficult to enforce treaty rights against the federal government. However, the trust relationship between the United States and tribes still permits the federal government to sue on behalf of tribes when other entities—including states—violate treaty rights.[37] Thus, the federal government may still serve as a powerful ally to tribes, who may be unable to pierce a state's sovereign immunity. The federal government did just that in 1970, when after decades of conflict over tribal treaty fishing rights between tribes and the state of Washington, the United States sued the state to enforce these rights.[38] Before arriving at this case, however, it is helpful to understand the history of tribes in the Pacific Northwest.

II. Treaties, Fish Wars, and Culverts: Factual and Legal History of Tribal Fishing Rights in Washington State

A. Native Nations of the Pacific Northwest

Indigenous people thrived for well over 10,000 years in the Pacific Northwest before a European set foot in the region.[39] In what is now called the Puget Sound region of Washington State, the most prominent Indigenous group is the Coast Salish people.[40] The Coast Salish do not comprise one tribe or political entity—rather, they are a group of linguistically and ethnically related nations.[41] Though these different nations possess distinct cultures, a shared feature of these cultures is the importance of salmon.[42] In fact, so central are salmon that Pacific Northwest native nations often call themselves "Salmon People."[43]

This centrality is evident in the ceremonies, lifeways, and beliefs of Pacific Northwest tribes. Tribes throughout the region hold "first Salmon" ceremonies to mark the beginning of the salmon harvest and to honor the sacrifice of salmon.[44] Though Pacific Northwest tribes and nations share a general attitude of respect and gratitude toward salmon, tribes also hold many distinct beliefs about who salmon are and what they represent.

To the Skokomish Tribe of the Hood Canal region, for example, salmon embody "life's eternal cycle" and "all the life forces in the water."[45] To the Lummi Nation of present-

31. *See, e.g.*, Seminole Nation v. United States, 316 U.S. 286, 296-97 (1942) (holding that the U.S. government is to be held to "the most exacting fiduciary standards" concerning its management of a trust fund established on behalf of the Seminole Nation); United States v. Mitchell (*Mitchell II*), 463 U.S. 206, 225 (1983) (holding that "a fiduciary relationship necessarily arises when the [federal] Government assumes . . . elaborate control over forests and property belonging to Indians").
32. *Seminole Nation*, 316 U.S. at 297 ("[The federal government] has charged itself with moral obligations of the highest responsibility and trust. Its conduct, as disclosed in the acts of those who represent it in dealings with the Indians, should therefore be judged by the most exacting fiduciary standards.").
33. *Compare* Worcester v. Georgia, 31 U.S. 515, 531 (1832) (holding state law unconstitutional, in part, because the law "attempt[s] to regulate and control the intercourse with the said Cherokee nation, which, by the said Constitution, belongs exclusively to the Congress of the United States"), *and Fishing Vessel*, 443 U.S. at 669-70, 672 (in which the United States sued, on behalf of seven Indian tribes, to enjoin the state of Washington from violating tribal treaty fishing rights), *with* Lone Wolf v. Hitchcock, 187 U.S. 553, 565, 566 (1903) (holding that congressional plenary authority permits Congress "to abrogate the provisions of an Indian treaty").
34. *Lone Wolf*, 187 U.S. at 566.
35. *See* Arizona v. Navajo Nation, 599 U.S. 555, 564 (2023). (This case will be discussed further in Part VI, Challenges and Opportunities.).
36. *Id.* (quoting United States v. Jicarilla Apache Nation, 564 U.S. 162, 177 (2011)).
37. *See, e.g.*, *Washington VI*, 853 F.3d 946, 960 (9th Cir. 2017) (upholding a district court case in which the United States joined several tribes to seek an injunctive order imposing an affirmative duty upon the state of Washington pursuant to tribal treaty fishing rights).
38. *Washington I*, 384 F. Supp. 312 (W.D. Wash. 1974).
39. Burke Museum, *Coast Salish People & Languages*, https://www.burkemuseum.org/collections-and-research/culture/contemporary-culture/coast-salish-art/coast-salish-people (last visited Apr. 2, 2025). Though salmon was vital to tribes and nations outside of the Puget Sound region of the Pacific Northwest, the Puget Sound region will serve as the focus here. For more on the relationship between salmon and the tribes and nations in the Columbia Basin region, see Columbia River Inter-Tribal Fish Commission, *Tribal Salmon Culture*, https://critfc.org/salmon-culture/tribal-salmon-culture/ (last visited Apr. 2, 2025).
40. *See* Burke Museum, *supra* note 39. Though the term "Coast Salish" will be used in this Article, the Native Americans of the Puget Sound region have also been known as "Puget Salish," "Southern Coast Salish," and the "Lushootseed peoples." Coll-Peter Thrush, *The Lushootseed Peoples of Puget Sound Country*, Univ. Wash., https://content.lib.washington.edu/aipnw/thrush.html (last visited Apr. 18, 2025).
41. Morgan Guerin, *Coast Salish*, Am. Museum Nat. Hist., https://www.amnh.org/exhibitions/permanent/northwest-coast/coast-salish (last visited Apr. 2, 2025).
42. National Museum of the American Indian, *Puget Sound Region*, https://americanindian.si.edu/nk360/pnw-history-culture-regions/puget-sound (last visited Apr. 2, 2025).
43. *Id.*
44. *Id.*
45. D. Michael Pavel et al., *Too Long, Too Silent: The Threat to Cedar and the Sacred Ways of the Skokomish*, 17 Am. Indian Culture & Rsch. J. 53, 58 (1993).

day Whatcom County, as articulated by a former chairman of the nation, salmon are the fundamental source and throughline of cultural identity: "The salmon has sustained us since the beginning of time and it serves a great purpose for not just humans, but for the rivers, the trees, the eagles, the bears, the wolves. Everything points back to salmon. It's our identity, our culture, our everything."[46]

This respect and reverence are reflected by the harvest practices of Pacific Northwest "Salmon People." These tribes and nations sustainably harvested significant amounts of salmon for many millennia before the arrival of European explorers and colonists.[47] This was no accident. Tribal institutions actively facilitated information-gathering and -sharing, conflict resolution, and technological development of fishing methods, such that salmon could be effectively and collectively harvested by various tribes in perpetuity.[48] The centrality of salmon to Salmon People lifeways elucidates why, when the United States began to negotiate a treaty with Native Americans in the Puget Sound region, native negotiators held fast to their demand to retain certain fishing rights.

B. *The Stevens Treaties*

As settlers moved west into Washington Territory, the federal government tasked territorial governor Isaac Stevens with negotiating a treaty to "extinguish Indian claims to the land" around Puget Sound.[49] Negotiators sent by Stevens espoused the assimilationist goals of the U.S. government to compel Indians onto reservations and to take up agriculture.[50] Negotiations were conducted in Chinook jargon, a trade language that consisted of approximately 300 words, and the treaty terms were written in English.[51] The power asymmetry between the federal government and the Indian tribes and nations was clear to tribal negotiators, who were faced with a choice: "fight a war they could not win, or cede most of their land and live on reservations."[52]

Despite linguistic barriers and power imbalances, tribal negotiators adamantly expressed a condition of ceding their lands: retaining the right to fish for salmonids (salmon and steelhead) at their traditional fishing locations.[53] Ultimately, Governor Stevens came to understand the importance of salmon to the native nations and capitulated to their request. Stevens' understanding is embodied by his promise to the nations: "I want that you shall not have simply food and drink now but that you may have them forever."[54] This promise is cemented by the terms of all eight Stevens treaties, which each conferred upon the nations who signed the treaty the "right of taking fish, at usual and accustomed fishing places . . . in common with" all other citizens of Washington Territory. Of course, this right came at an immense cost: Native American parties to the Stevens treaties ceded more than 64 million acres to the federal government and retained fewer than six million acres as reservations.[55]

C. *Tribal Exercise of Fishing Rights and Washington State Violations of Tribal Treaty Rights*

In the years immediately following the signing and ratification of the Stevens treaties, tribes extensively and freely exercised their treaty fishing rights at usual and accustomed places.[56] This would not last for long. As settlers moved into western Washington in the late 1800s, the non-Indian fishing industry rapidly grew in size and harvesting capabilities.[57] At the same time, land use practices such as logging and agriculture began to degrade salmon habitat.[58] Consequently, salmon populations began to steadily decline.[59] Though industry clearly drove this decline, Indians were often blamed.[60]

As salmon populations fell, industry further restricted the ability of tribes to catch salmon by securing "locational advantages" and developing new technologies that would catch returning salmon before they reached traditional tribal fishing areas.[61] Washington State added insult to injury, banning off-reservation net fishing by Indians in the early 20th century, to the detriment of tribes and the benefit of industry.[62] Washington courts endorsed these restrictive policies. This support is epitomized by the 1916 Washington Supreme Court case *State v. Towessnute*, where the court described a Stevens treaty as a "dubious document" and flatly rejected an interpretation of it that

46. Richard Arlin Walker, *"It's Our Identity, Our Culture, Our Everything,"* Salish Current (Nov. 6, 2024), https://salish-current.org/2024/11/06/its-our-identity-our-culture-our-everything/.
47. Sarah K. Campbell & V.L. Butler, *Archaeological Evidence for Resilience of Pacific Northwest Salmon Populations and the Socioecological System Over the Last ~7,500 Years*, 15 Ecology & Soc'y 1-2, 15-16 (2010).
48. D. Bruce Johnson, *Salmon, Science, and Reciprocity on the Northwest Coast*, 14 Ecology & Soc'y 43, 44 (2009).
49. *Washington I*, 384 F. Supp. 312, 355 (W.D. Wash. 1974).
50. *Id.*; *compare with Indian Commissioner Medill on Indian Colonies and Indian Commissioner Mix on Reservation Policy*, *in* Annual Report of the Commissioner of Indian Affairs (1848), *reprinted from* Documents of United States Indian Policy 77-80, 92-94 (Francis P. Prucha ed., 2d ed. expanded 1990), *and reprinted in* Getches et al., *supra* note 10, at 171-74.
51. *Washington I*, 384 F. Supp. at 355.
52. Northwest Indian Fisheries Commission, Understanding Tribal Treaty Rights in Western Washington 1 (2014), https://nwifc.org/w/wp-content/uploads/downloads/2014/10/understanding-treaty-rights-final.pdf [hereinafter Understanding Tribal Treaty Rights].
53. *Washington I*, 384 F. Supp. at 355.
54. *Washington VI*, 853 F.3d 946, 961 (9th Cir. 2017).
55. Gabriel Chrisman, *The Fish-in Protests at Frank Landing*, Seattle C.R. & Lab. Hist. Project, https://depts.washington.edu/civilr/fish-ins.htm (last visited Apr. 2, 2025).
56. *Washington I*, 384 F. Supp. at 312.
57. Understanding Tribal Treaty Rights, *supra* note 52, at 2.
58. *Id.*; *see also* University of Washington Center for the Study of the Pacific Northwest, *Seeing the Forest for the Trees: Placing Washington's Forests in the Historical Context*, https://www.washington.edu/uwired/outreach/cspn/Website/Classroom%20Materials/Curriculum%20Packets/Evergreen%20State/Section%20II.html (last visited Apr. 2, 2025).
59. Understanding Tribal Treaty Rights, *supra* note 52, at 2.
60. *Id.*
61. Blumm, *supra* note 3, at 5-7.
62. *Id.* at 7; *Fishing Vessel*, 443 U.S. 658, 668-69, *modified sub nom*. Washington v. United States, 444 U.S. 816 (1979) ("It was as a consequence of [technological canning] developments, rather than of the treaty, that non-Indians began to dominate the fisheries and eventually to exclude most Indians from participating in it—a trend that was encouraged by the onset of often discriminatory state regulation in the early decades of the 20th century.").

would confer sovereignty or rights to native signees beyond mere occupancy of reservation lands.[63]

Occasionally, federal courts would intervene. An early example is the 1905 Supreme Court case *United States v. Winans*.[64] When a private fishing operation, licensed by the state of Washington, attempted to prevent Indians from crossing their private land to fish at "usual and accustomed" fishing grounds, the Supreme Court ruled that the state license "gives no power to [the private fishing operation] to exclude the Indians."[65] This conclusion was based on an interpretation of tribal treaty rights pursuant to the Stevens treaties. The Court applied an Indian Canon of Construction, namely that the Court "will construe a treaty with Indians as [the Indians] would have understood it."[66]

In applying this interpretive rule, the Court underscored the importance of salmon to Indian treaty signees:

> The right to resort to the fishing places in controversy was a part of larger rights possessed by the Indians, upon the exercise of which there was not a shadow of impediment, and which were not much less necessary to the existence of the Indians than the atmosphere they breathed.[67]

Because the treaty right to fish at usual and accustomed places—including at those locations outside of reservation boundaries—was and is vitally important to Indian treaty signees, and because the treaty contemplates future private ownership of the lands, the Court held that the treaty right could not be defeated by private ownership.[68] Instead, the Court concluded that Indians of the Yakama Nation may cross the private land to access their traditional fishing grounds, as "no other conclusion would give effect to the treaty."[69] Further, the Court held that treaty rights do not merely constrain federal action, but are also "continuing against . . . the state and its grantees."[70]

Though *Winans* served as a powerful affirmation of tribal treaty fishing rights, it did not prevent Washington State from curtailing such rights, usually under the auspices of regulating for "conservation" purposes, throughout most of the 20th century.[71] Though Washington's efforts were occasionally held as illegal by federal courts,[72] the state continuously found ways to regulate off-reservation fishing, leading to increasing tension between tribes and the state.[73]

These tensions culminated in an era of tribal civil disobedience and struggle known as the "Fish Wars."[74] During this time, Washington passed and enforced increasingly restrictive fishing laws, and several Native American groups resisted these laws through protests and direct actions, including civil disobedience interventions called "fish-ins" where tribes established off-reservation fishing camps in violation of state law.[75] Initially, these actions brought both negative and positive publicity to their cause, though public support decidedly shifted in favor of tribes after the arrests and trials of movement leaders and violent police attacks on fishing camps in the late 1960s and early 1970s.[76]

D. Washington I: *The "Boldt Decision"*

This conflict came to a head in the early 1970s, when the United States, on its own behalf and as trustee for several tribes located in western Washington, sued the state of Washington in the Western District of Washington to determine and enforce tribal off-reservation treaty fishing rights.[77] The plaintiffs sought declaratory relief, under 28 U.S.C. §2201, to determine (1) the scope of off-reservation treaty rights held by western Washington tribes who were parties to the Stevens treaties[78]; and (2) whether Washington State had violated these rights through direct regulation of off-reservation fishing by tribal members *and* by authorizing or failing to prevent "logging and other industrial pollution and obstruction of treaty right fishing streams."[79]

The court separated the "logging and other industrial pollution" issue from the initial litigation, and it will be discussed below in Section II.F. In addition to declaratory relief, plaintiffs sought injunctive relief to enforce their treaty rights under 28 U.S.C. §2202, particularly against violations by the state of Washington.[80] The plaintiffs' legal theory was simple: the tribes and the United States signed a treaty, treaties are the law of the land under Article VI, clause 2 of the Constitution, and the state of Washington violated the treaty.[81]

Concerning off-reservation "usual and accustomed" treaty fishing rights, the court issued what has become known as the "Boldt Decision." Judge George Boldt held that tribes who were parties to the Stevens treaties "shall have the opportunity to take up to [50%] of harvestable

63. 154 P. 805, 806 (Wash. 1916).
64. 198 U.S. 371 (1905).
65. *Id.* at 384.
66. *Id.* at 380.
67. *Id.* at 381.
68. *Id.*
69. *Id.*
70. *Id.*
71. *Compare* Puyallup Tribe v. Department of Game, 391 U.S. 392, 398 (1968) (ruling that "the manner of fishing, the size of the take, the restriction of commercial fishing, and the like may be regulated by the State in the interest of conservation, provided the regulation meets appropriate standards and does not discriminate against the Indians"), *with* Department of Game v. Puyallup Tribe, 414 U.S. 44, 46-47 (1973) (declaring that a state regulation that bars "all Indian net fishing" on the Puyallup River and that "grants, in effect, the entire [steelhead] run to the sports fishermen," discriminates against Indians in violation of their treaty rights). *See also* Understanding Tribal Treaty Rights, *supra* note 52, at 2 ("Despite earlier U.S. Supreme Court rulings acknowledging tribal treaties and broad tribal rights, the state of Washington continued to enforce its discriminatory laws against the tribes.").
72. *Puyallup Tribe*, 414 U.S. at 46-47.
73. Understanding Tribal Treaty Rights, *supra* note 52, at 2.
74. *Id.*
75. Chrisman, *supra* note 55.
76. *Id.*
77. *Washington I*, 384 F. Supp. 312 (W.D. Wash. 1974).
78. *Id.* at 327.
79. *Id.* at 327, 328.
80. *Id.*
81. *Id.* at 330.

fish" at "usual and accustomed grounds and stations,"[82] and enjoined the state of Washington from violating this right.[83] Specifically, the court held that this right permitted tribes to fish at every off-reservation location "where members of a tribe customarily fished from time to time at and before treaty times."[84]

In arriving at this decision, Judge Boldt employed the Indian Canons of Construction to interpret the Stevens treaties, relying heavily on the *Winans* Court's use of the canons to interpret the same treaties.[85] Judge Boldt did not close the litigation at this point. Rather, recognizing an ongoing need to adjudicate tribal treaty fishing rights claims, Judge Boldt declared: "The parties or any of them may invoke the continuing jurisdiction of this court in order to determine: . . . ," among other things, "disputes concerning the subject matter of this case which the parties have been unable to resolve among themselves;" or "such other matters as the court may deem appropriate."[86]

E. Washington v. Washington State Commercial Passenger Fishing Vessel Ass'n: *The Supreme Court Affirms the Boldt Decision*

The Boldt Decision ultimately made its way to the Supreme Court.[87] In *Fishing Vessel*, the Supreme Court affirmed Judge Boldt's holding and provided additional precedent pertinent to the claims that will be developed here. First, the Court rejected Washington State's claim that the treaty fishing right provides only *access* to fishing grounds and not any specified *amount* of fish.[88] As in the Boldt Decision, the Court applied the Indian Canon of Construction that treaty provisions should be construed as the Indians would have understood them.[89]

Accordingly, the Court reasoned that though Indian treaty fishing rights are held "in common with" territorial citizens, which could be construed as guaranteeing the mere *opportunity* to try to catch fish at usual and accustomed places, it is likely that Indian signees would have interpreted the treaty right as the right to actually *take* some of the fish at their usual and accustomed places.[90] Consequently, the Court held that "the purpose and language of the treaties are unambiguous; they secure the Indians' right to take a share of each run of fish that passes through tribal fishing areas."[91]

Second, the Court augmented the *Washington I* holding by articulating that in addition to the 50% maximum allocation of fish, the treaty fishing right creates a *minimum* allocation of fish.[92] A lack of a minimum allocation creates an issue exemplified at the extreme by this hypothetical: if salmon were so decimated that two fish remained, then the tribe could only catch one. In other words, what use is a treaty right to catch fish if it does not protect the existence of the fish? The Court responded to this issue by imposing a minimum standard: Indians are entitled to the *minimum* amount of salmon necessary "to provide the Indians with a livelihood—that is to say, a moderate living."[93]

In sum, *Fishing Vessel* stands for the following propositions: (1) the *maximum* allocation of fish articulated in *Washington I* is left intact and is expressly tied to number of fish rather than mere access to fishing locations; and (2) tribes are also entitled to a *minimum* allocation of fish based on the amount needed for a "moderate living." This moderate living standard ties directly to the "environmental issue" mentioned above, because it implicates a corollary issue: if tribes have a right to a minimum amount of fish, when a government takes actions that reduce the amount of fish available below the "moderate living" standard, have they violated the tribal treaty fishing rights?

---

82. *Id.* at 343.
83. *Id.* at 414.
84. *Id.* at 332. This case, along with subsequent subproceedings, established the following framework for determining what may be considered a "usual and accustomed" fishing location: a tribe must prove by a preponderance of the evidence that the asserted location was a "usual and accustomed" location "where members of the tribe customarily fished from time to time at and before treaty times," excluding "unfamiliar locations and those used infrequently or at long intervals and extraordinary occasions." *Id.* at 332, 348, 419. This standard is applied to the "historical evidence and expert testimony, and all reasonable inferences drawn therefrom." Order Granting Rule 52(c) Motion, United States v. Washington, No. C70-9213RSM, Subproceeding No. 17-3 (W.D. Wash. Dec. 30, 2022).
85. *Washington I*, 384 F. Supp. at 331, *aff'd and remanded*, 520 F.2d 676 (9th Cir. 1975).
86. *Id.* at 419.
87. *Fishing Vessel*, 443 U.S. 658 (1979). Though the Supreme Court is simply ruling on the validity of *Washington I*'s holding regarding tribal treaty fishing rights, it is by way of a complicated procedural history. A citizen suit challenged regulations adopted by the Washington State Department of Fisheries pursuant to an injunction issued in *Washington I*. *Id.* at 673. The Washington Supreme Court rejected *Washington I*'s interpretation of tribal treaty fishing rights and overturned the regulations, holding that the treaties do not give Indians a right to a share in fish runs. Puget Sound Gillnetters Ass'n v. Moos, 565 P.2d 1151 (Wash. 1977), *vacated sub nom*. *Fishing Vessel*, 443 U.S. 658, *modified sub nom*. Washington v. United States, 444 U.S. 816 (1979), *and overruled in later appeal*, 603 P.2d 819 (Wash. 1979).

    The District Court for the Western District of Washington then entered a series of orders enabling the court and federal law enforcement agencies to directly supervise the administration of its *Washington I* holding. United States v. Washington, 459 F. Supp. 1020, 1029-30 (W.D. Wash. 1978). These orders were affirmed by the U.S. Court of Appeals for the Ninth Circuit. Puget Sound Gillnetters Ass'n v. U.S. Dist. Ct. for W. Dist. of Wash., 573 F.2d 1123 (9th Cir. 1978), *vacated sub nom*. *Fishing Vessel*, 443 U.S. 658, *modified sub nom*. Washington v. United States, 444 U.S. 816 (1979). The Supreme Court then granted certiorari in the Washington State Supreme Court and federal cases, Washington v. United States, 439 U.S. 909 (1978), and delivered the *Fishing Vessel* opinion. 443 U.S. 658 (1979).
88. *Fishing Vessel*, 443 U.S. at 678-79.
89. *Id.*
90. *Id.*

    > In [the context of the Stevens treaty negotiations], it makes sense to say that a party has a right to "take"—rather than merely the "opportunity" to try to catch—some of the large quantities of fish that will almost certainly be available at a given place at a given time. . . . Because the Indians had always exercised the right to meet their subsistence and commercial needs by taking fish from treaty area waters, they would be unlikely to perceive a "reservation" of that right as merely the chance, shared with millions of other citizens, occasionally to dip their nets into the territorial waters.

91. *Id.* at 679.
92. *Id.* at 686.
93. *Id.*

F. Washington II *and* III: *The "Environmental Issue"*

As mentioned in the previous section, Judge Boldt did not address whether tribal treaty rights implicate a subsumed right to environmental protections for salmon habitat in "Phase I" of the treaty fishing rights litigation.[94] This issue was to be considered in "Phase II," in which the United States asked for "declaratory judgment clarifying the Tribes' rights with respect to . . . the 'environmental' issue."[95] Employing the "livelihood" and "moderate living" language used by the Supreme Court in *Fishing Vessel*, the district court held that the right to adequate fish to support a "moderate living" imposed a "correlative duty" upon Washington State "to refrain from degrading the fish habitat to an extent that would deprive the tribes of their moderate living needs."[96]

The U.S. Court of Appeals for the Ninth Circuit, sitting en banc, limited this holding.[97] Rather than affirming the bright-line rule applied by the district court in *Washington II*, the Ninth Circuit held that treaty rights violations relating to environmental degradation would be guided by fact-specific inquiries.[98] Thus, any environmental preservation rights, duties, and legal standards flowing from treaty fishing rights "will depend for their definition and articulation upon concrete facts which underlie a dispute in a particular case."[99]

G. Washington IV: *The "Culverts Case"*

Under the continuing jurisdiction granted by Judge Boldt in *Washington I*, this fact-specific inquiry would be applied for the first time in 2001, when 21 tribes and the United States filed a request for determination seeking to enjoin the state of Washington for certain actions that degraded salmon habitat.[100] The actions in question: the construction and maintenance of culverts.[101]

When roadways meet a stream, there are two primary options for crossing the stream: build a bridge across the stream or place a culvert under the road that will facilitate water flow. The state of Washington has often resolved this by building culverts. Certain culverts, called "barrier culverts," may "inhibit[ ] or prevent[ ] fish passage."[102] As the state of Washington admits, many state-owned roads cross state-operated barrier culverts.[103] These barrier culverts may reduce salmon populations and also prevent salmon from reaching off-reservation "usual and accustomed" fishing grounds where tribes are permitted to fish.[104]

This is because salmonids are anadromous species, which are born in freshwater, migrate to the ocean to live out most of their adult lives, and then return to reproduce in the streams where they were born.[105] At the beginning of the salmon life cycle, culverts may block important stream areas that may be used for feeding and escaping predators, while also preventing juvenile salmon from reaching the sea and maturing.[106] At the end of the salmon life cycle, culverts may prevent adult salmon from returning to spawn, thereby "render[ing] large stretches of streambed useless for spawning habitat, and reduc[ing] the number of wild salmon produced in that stream."[107] The environmental degradation caused by culverts has contributed to significant declines in salmon populations.[108]

Members of western Washington tribes continue to rely on salmon for subsistence, sport, and commercial purposes.[109] Additionally, salmon remain an important part of cultural identity for plaintiff tribes.[110] It is therefore no surprise that the court concluded that salmon decline impacts tribes and their members: "The depletion of salmon stocks and the resulting diminished harvests have harmed the Tribes and the individual members economically, culturally, and personally."[111] The question remains: by impacting salmon populations, has the state operation of culverts violated the treaty right to an amount of fish capable of supporting a "moderate living"?

The plaintiffs argued that it does. Based on the treaty right—as established in *Fishing Vessel*—to fish runs adequate to support a "moderate living," the plaintiffs argued that the state of Washington has a correlative duty to preserve such fish runs.[112] Culverts, the plaintiffs argued, violate this treaty right and Washington's correlative duty to preserve that right.[113]

The District Court for the Western District of Washington agreed. In arriving at its conclusion, the court applied the fact-intensive framework established in *Washington III*,[114] as well as the oft-quoted Indian Canon of Construction that "the treaty must . . . be construed . . . in the sense in which [its words] would naturally be understood by the Indians."[115] The court's findings of fact are explained above, which reveal that culverts degrade salmon habitat, reduce

94. *Washington I*, 384 F. Supp. 312, 328 (W.D. Wash. 1974).
95. United States v. Washington (*Washington II*), 506 F. Supp. 187, 194 (W.D. Wash. 1980).
96. *Id.* at 208.
97. United States v. Washington (*Washington III*), 759 F.2d 1353 (9th Cir. 1985) (en banc).
98. *Id.* at 1357.
99. *Id.*
100. Request for Determination, United States v. Washington, Civ. No. C709213 (W.D. Wash. Jan. 12, 2001).
101. *Washington IV*, 20 F. Supp. 3d 828, 891 (W.D. Wash. 2007).
102. *Washington VI*, 853 F.3d 946, 958 (9th Cir. 2017).
103. *Washington IV*, 20 F. Supp. 3d at 892.
104. *Washington VI*, 853 F.3d at 960.
105. National Park Service—Olympic National Park, *Anadromous Fish*, https://www.nps.gov/olym/learn/nature/anadromous-fish.htm (last updated Mar. 27, 2025); *Washington V*, 20 F. Supp. 3d 986, 1001 (W.D. Wash. 2013).
106. *Washington V*, 20 F. Supp. 3d at 1020-21.
107. *Id.*
108. *Id.* at 1021.
109. *Id.* at 1001 (quoting *Washington I*, 384 F. Supp. 312 (W.D. Wash. 1974), Finding of Fact 31).
110. *Id.*; *Washington VI*, 853 F.3d 946, 958 (9th Cir. 2017).
111. *Washington V*, 20 F. Supp. 3d at 1021.
112. *Washington IV*, 20 F. Supp. 3d 828, 890 (W.D. Wash. 2007).
113. *Id.* at 892.
114. 759 F.2d 1353, 1357 (9th Cir. 1985) (en banc).
115. *Washington IV*, 20 F. Supp. 3d at 896 (citing *Fishing Vessel*, 443 U.S. 658, 676 (1979)).

salmon populations, and reduce the number of salmon available at usual and accustomed fishing grounds.[116]

Concerning treaty rights, the court found that (1) the tribes would have understood that the Stevens treaties secured "the right to *take* fish, not just the right to fish"[117]; (2) the government and the tribes intended that the tribes would "be able to meet their own subsistence needs forever"[118]; and (3) these promises "would only be meaningful if they carried the implied promise that neither the negotiators nor their successors would take actions that would significantly degrade the resource."[119] Notably, on the third point, it is immaterial whether the treaty "specifically contemplated" culverts.[120]

Taken together, the court's findings of facts and law led to the conclusion that "the Treaties do impose a duty upon the State to refrain from building or maintaining culverts in such a manner as to block the passage of fish upstream or down, to or from the Tribes' usual and accustomed fishing places."[121] And the state of Washington "currently owns and operates culverts that violate this duty."[122] After several years of failed negotiations between the parties following this ruling, the district court ultimately held a bench trial to determine remedies.[123] In 2013, the court issued an injunction establishing new culvert standards to allow fish passage, as well as requiring Washington to remedy many of its barrier culverts.[124]

H. The Culverts Case on Appeal

The case was appealed to the Ninth Circuit, which affirmed the district court's conclusions of law and mechanisms of injunctive relief.[125] Like the court below, the court of appeals applied the Indian Canons of Construction to the Stevens treaties. The court found that the Indians reasonably understood the treaties to promise not merely the opportunity to catch some fish, but that "there would be fish sufficient to sustain them."[126] In support of this conclusion, the court cited Governor Stevens' promise to the tribe guaranteeing "food and drink . . . forever."[127] Even without Governor Stevens' promise, the court found that a promise of "sufficient salmon to provide a 'moderate living' to the Tribes" would be implicit in the purpose of the treaty.[128] This promise creates certain rights held by the tribes, and duties held by federal and state governments.[129]

Expounding upon the rule formulation first articulated in *Washington III* and applied in the district court, the court of appeals roughly sketched a slightly more concrete framework for determining the scope of these rights and duties.[130] This framework, in turn, has been interpreted and adumbrated by legal scholar Michael Blumm.[131] Synthesizing these sources, with most weight given to the Ninth Circuit's recent ruling, the rule may be outlined as follows: a federal or state government actor violates a Stevens treaty fishing right if the actor: (1) takes an affirmative action that (2) proximately causes (3) significant (and thus not de minimis) adverse effects on (4) a population of fish implicated in treaty rights, and (5) those effects, in turn, cause or contribute to an availability of salmon "not sufficient to provide a 'moderate living' to the tribes."[132]

Though the court of appeals does not explicitly outline these steps, the court's reasoning closely follows them. The court reasons that Washington State (1) "acted affirmatively to build and maintain barrier culverts," which (2) "block approximately 1,000 linear miles of streams suitable for salmon habitat"; and in doing so (3) prevent the passage of "several hundred thousand" salmon, (4) many of which the tribes could otherwise harvest, and (5) this contributes to numbers of salmon presently insufficient to provide a "moderate living" to the tribes by damaging tribal economies, reducing the ability of individual tribal members to "earn a living," and causing "cultural and social harm to the Tribes in addition to the economic harm."[133] Based upon these findings, the court concluded that by building barrier culverts with these impacts, "Washington has violated, and is continuing to violate, its obligation to the Tribes under the Treaties."[134] The court of appeals also upheld the district court's injunctive relief remedy.[135]

Pursuant to this precedent, tribes might successfully challenge past and future Washington State Department of Natural Resources (DNR) timber harvest sales on state lands. As will be demonstrated below, these actions have severely impacted salmon populations and will continue to threaten salmon populations into the future, especially as these actions contribute to climate change and reduce the climate resiliency of salmon habitat.

III. Salmon, Forests, and Climate Change

Salmon, forests, and the climate form a reciprocal web of give and take. Understanding and articulating these relationships is foundational to treaty rights claims that tribes might assert to challenge past and future timber sales. Before discussing the science behind these relationships, it is important to reiterate one critical fact about salmonids: they are anadromous species that begin and end their lives in freshwater but spend much of their lives in the ocean.

116. *Washington VI*, 853 F.3d 946, 960 (9th Cir. 2017).
117. *Washington IV*, 20 F. Supp. 3d at 897 (emphasis added).
118. *Id.*
119. *Id.* at 898.
120. *Id.* at 897.
121. *Id.* at 899.
122. *Id.*
123. *Washington V*, 20 F. Supp. 3d 986, 1001 (W.D. Wash. 2013).
124. *Id.* at 1023-25.
125. *Washington VI*, 853 F.3d 946, 979-80 (9th Cir. 2017).
126. *Id.* at 964.
127. *Id.*
128. *Id.* at 964-65.
129. *Id.* at 965-66.
130. *Washington III*, 759 F.2d 1353, 1356 (9th Cir. 1985) (en banc); *see Washington VI*, 853 F.3d at 965-66.
131. Blumm, *supra* note 3, at 31-32.
132. *See Washington VI*, 853 F.3d at 965-66 (citing *Fishing Vessel*, 443 U.S. 658, 686 (1979)); *Washington IV*, 20 F. Supp. 3d 828, 895 (W.D. Wash. 2007); Blumm, *supra* note 3, at 31-32.
133. *Washington VI*, 853 F.3d at 966.
134. *Id.*
135. *Id.* at 979-80.

The life cycle of salmon is as follows: salmon are born in freshwater and remain in freshwater during their early life stages (as "fry" and "smolt") in freshwater and tidal estuaries, before living most of their adult lives at sea and ultimately swimming upstream to reproduce and die in the same place where they were born.[136]

A. Salmon and Forests

Forests feed salmon; salmon feed forests. As young salmon fry mature in their natal streams, they require cool water, habitat, and sufficient food.[137] Forests—especially in the riparian zone bordering waterways—filter water before it enters the stream and provide shade that reduces the water temperature.[138] Additionally, trees in riparian zones drop branches into the water, providing habitat for young salmon, and food for aquatic macroinvertebrates, which, in turn, are eaten by young salmon fry.[139] As salmon return to these same streams to spawn, they require cool and clean water in sufficient quantities (flow levels) to flourish.[140]

At the end of their life cycle, salmon return their nutrients to these forest ecosystems. Species such as bears and corvids remove salmon from their aquatic ecosystem and carry the salmon into the forest to feed on them.[141] Salmon carcasses, which are rich in nitrogen—a limiting nutrient in many temperate forests—return their nutrients to the forest. Where salmon are dispersed, plant diversity increases and trees grow more quickly.[142] The benefits of salmon carcasses ripple through forest communities, impacting creatures as varied as terrestrial and freshwater invertebrates, fish, and even songbirds.[143] Unsurprisingly, the deep interrelatedness of forest ecosystems is not new knowledge to many Indigenous people of the Pacific Northwest; indeed, to tribes such as the Skokomish, this interrelatedness has long served "as the foundation for envisioning existence from a circular rather than a linear mindset."[144]

B. Impacts of Deforestation

Deforestation can disrupt these relationships and in doing so poses a significant threat to salmon populations. Deforestation can lead to decreased stream flow,[145] increased water temperature,[146] and habitat destruction,[147] all of which may negatively impact salmon. Generally, as forests are harvested, factors such as decreased soil moisture, increased evapotranspiration in young forests, and resulting "flashy" flow regimes may decrease the flow of cool water into streams in summer months.[148] Notably, decreased stream flow may occur *even if* a riparian buffer is retained along the banks of the waterway.[149] Timber harvests also generally increase water temperatures,[150] though riparian buffers may serve to mitigate temperature increases.[151]

Salmon are sensitive to such changes. Take the Chinook salmon, for example: lower stream flows may lead to mass mortality events; high stream flows may reduce survival rates of incubating eggs through habitat destruction; both flow extremes may negatively impact migration success; and warmer water may reduce the total distance that adult salmon are able to travel when migrating while increasing mortality rates along the way.[152] Decreased flow and high temperatures have been directly linked to mass mortality events in salmon populations.[153] Such an event recently occurred in the South Fork Nooksack River, adjacent to the Middle Fork Nooksack River watershed, which is the location of a recent DNR timber sale that will be discussed later in this Article.[154]

Though these impacts have been observed at specific sites, it is important to note that causal links between timber harvest and changed stream conditions, and the causal links between changed stream conditions and salmon health, are often complex and contextual, and thus the impact of forestry practices may be highly variable depending on the watershed.[155]

136. National Park Service—Olympic National Park, *The Salmon Life Cycle*, https://www.nps.gov/olym/learn/nature/the-salmon-life-cycle.htm (last updated July 22, 2019).
137. Washington State Recreation and Conservation Office, *Salmon Need Healthy Places to Live*, https://stateofsalmon.wa.gov/statewide-data/habitat/ (last visited Apr. 2, 2025).
138. *Id.*
139. Nooksack Salmon Enhancement Association, *Salmon and Their Habitat*, https://www.n-sea.org/salmon-and-their-habitat (last visited Apr. 2, 2025).
140. Washington State Recreation and Conservation Office, 2022 State of Salmon in Watersheds Executive Summary 16 (2022) [hereinafter Wash. St. RCO].
141. Thomas Edward Reimchen & Caroline Hazel Fox, *Fine-Scale Spatiotemporal Influences of Salmon on Growth and Nitrogen Signatures of Sitka Spruce Tree Rings*, 13 BMC Ecology art. 38, at 1, 1-2 (2013), https://doi.org/10.1186/1472-6785-13-38.
142. *Id.* at 2, 10, 11. This impact is estimated to extend at least 90 meters into the forest, and likely extends further.
143. Chris T. Darimont et al., *Salmon for Terrestrial Protected Areas*, 3 Conservation Letters 379, 380 (2010).
144. Pavel et al., *supra* note 45, at 58.
145. Catalina Segura et al., *Long-Term Effects of Forest Harvesting on Summer Low Flow Deficits in the Coast Range of Oregon*, 585 J. Hydrology art. 124749, at 9-10 (2020).
146. Sean M. Naman et al., *Forestry Impacts on Stream Flows and Temperatures: A Quantitative Synthesis of Paired Catchment Studies Across the Pacific Salmon Range*, 5 Ecological Sols. & Evidence 7 (2024).
147. Carl J. Cederholm et al., Cumulative Effects of Logging Road Sediment on Salmonid Populations in the Clearwater River, Jefferson County, Washington, Presentation at the Conference Salmon-Spawning Gravel: A Renewable Resource in the Pacific Northwest? (Oct. 6-7, 1980). *See also* Nooksack Natural Resources Department, Reach-Scale Plan: South Fork Nooksack River 1, 5, 8 (2017), https://www.sfnooksack.com/files/FINAL%20SFNR%20reach%20scale%20Plan%206-21-17.pdf.
148. Segura et al., *supra* note 145, at 9-10; Lummi Natural Resources Department, 2021 South Fork Nooksack River Chinook Mortality Event Overview and Conclusions 3 (2021), https://www.lummi-nsn.gov/userfiles/934_2021LNRSouthForkChinookMortalityEventUpdated020922.pdf [hereinafter Lummi NRD].
149. Segura et al., *supra* note 145, at 9-10.
150. Naman et al., *supra* note 146, at 7.
151. *Id.* at 10.
152. Washington Department of Fish and Wildlife, *Chinook Salmon (Puget Sound ESU)*, https://wdfw.wa.gov/species-habitats/species/oncorhynchus-tshawytscha-pop-15 (last visited Apr. 2, 2025).
153. *Id.*
154. *Id.*
155. Naman et al., *supra* note 146, at 6.

C. Climate Change, Forests, and Salmon

In addition to the direct impacts of timber harvest, harvesting timber also contributes to climate change. Deforestation releases carbon dioxide stored in trees and soil while also preventing the logged trees from sequestering more carbon dioxide.[156] The net increase in atmospheric carbon dioxide caused by deforestation then contributes to the so-called greenhouse gas effect that is driving climate change.[157] The impacts of deforestation are immense: since 1850, approximately 30% of all carbon dioxide emissions derive from deforestation.[158]

When forests are preserved instead of logged, they serve a vital function in reducing carbon emissions and increasing climate resiliency. Not only does keeping trees in the ground prevent the release of carbon dioxide, it also increases the capacity of forests to sequester carbon.[159] As forests grow older and trees increase in size, the ability of the forest to sequester carbon grows, and so does the total amount of stored carbon.[160] Thus, older forests will not only serve as vital capturers of carbon well into the future, but *already* serve the vital function of carbon storage.[161]

This trend is abundantly clear in the Pacific Northwest, whose older coastal forests are among the most carbon-dense ecosystems on the planet.[162] When older forests such as these are harvested, it might take decades—or even centuries—for replanted forests to recoup the losses in carbon storage represented by the older forests.[163] When it comes to avoiding temperature increases of 1.5-2 degrees Celsius (°C) (and the irreversible and severe consequences of such warming) in this century, such delayed sequestration is of little use. As revealed in the Intergovernmental Panel on Climate Change's Sixth Assessment Report, "[a]ll global modelled pathways that limit warming to 1.5°C (>50%) with no or limited overshoot, and those that limit warming to 2°C (>67%), involve rapid and deep and, in most cases, *immediate* greenhouse gas emissions reductions *in all sectors this decade*."[164] This timescale makes it all the more important to preserve forests that may be considered old growth forests or legacy forests.[165]

Climate change, in turn, poses a grave threat to salmon. Climate change has already effectuated deleterious impacts upon salmon,[166] and a warming climate would exacerbate these impacts.[167] For example, models predicting the impact of climate change on certain Snake River Chinook salmon predicted about a 90% decline in survival rates during the marine life stage alone.[168] As the Pacific Ocean warms, it becomes less hospitable for salmon.[169] Ocean acidification, which occurs as the ocean sequesters carbon dioxide and is exacerbated as global carbon dioxide emissions increase, threatens populations of plankton that serve as a food source for salmon.[170]

Streams, like the ocean, have already warmed and will warm further as climate change progresses.[171] Climate change is anticipated to reduce summer flows, amplifying the temperature increase of streams.[172] These temperature increases are likely to stress or even kill salmon, as expressed by the state of Washington: "Without actions to reduce water temperatures, there will be fewer salmon and fewer rivers where they can survive."[173] In addition to temperature changes, climate change is likely to decrease winter snowfall and increase winter rainfall, leading to habitat-damaging floods.[174]

The disruption of salmon fisheries, in turn, may impact the health of forests. As salmon decline, fewer will return to their spawning grounds, and the nutrient delivery to forests may decline, in turn leading to lower growth rates and, hence, less carbon sequestration.[175] Thus, a vicious cycle is created: deforestation contributes to climate change and salmon population decline; climate change exacerbates salmon decline; salmon decline decreases the health and carbon sequestration capacity of existing forests; less-healthy forests produce fewer climate resiliency benefits for streams where salmon live.[176]

156. Jerry Melillo, *Forests and Climate Change*, MIT Climate Portal (Oct. 7, 2021), https://climate.mit.edu/explainers/forests-and-climate-change.
157. *Id.*
158. *Id.* (citing Corrine Le Quéré et al., *Global Carbon Budget 2016*, 8 Earth Sys. Sci. Data 605 (2016)).
159. Nathan L. Stephenson et al., *Rate of Tree Carbon Accumulation Increases Continuously With Tree Size*, 507 Nature 90, 90 (2014).
160. *Id.*
161. William R. Moomaw et al., *Intact Forests in the United States: Proforestation Mitigates Climate Change and Serves the Greatest Good*, 2 Frontiers Forests & Glob. Change 1, 4 (2019).
162. Paul J. Chisholm & Andrew N. Gray, *Forest Carbon Sequestration on the West Coast, USA: Role of Species, Productivity, and Stockability*, 19 PLoS One 2 (2024).
163. Jim Pojar, Ancient Forest Alliance, Old-Growth Forests of Fairy Creek, Vancouver Island, British Columbia 12 (2021) (generally addressing "old coastal forests" of the Pacific Northwest and explaining: "Replacing old forests with young plantations will not recover carbon stores for a long time, if ever.").
164. Hoesung Lee et al., *Summary for Policymakers*, *in* Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II, and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change 1, 20 (H. Lee et al. eds., Intergovernmental Panel on Climate Change 2023) (emphasis added).
165. "Legacy forests," as will be discussed at further length, typically refers to forests composed mostly of trees that are roughly 80-175 years old. Under this definition, "legacy forests" are closely aligned with what scientific literature on Pacific Northwest conifer forests typically label "mature." *See* James R. Strittholt et al., *Status of Mature and Old-Growth Forests in the Pacific Northwest*, 20 Conservation Biology 363, 367 (2006). However, some activists have pushed back on this formulaic age-based metric, and instead define "legacy forests" as "forests that retain significant genetic, biological, structural, and functional legacies of the natural and old-growth forests that once dominated the Pacific Northwest." Nathan Gilles, *"Legacy" Forests. "Restoration" Logging. The New Jargon of Conservation Is Awash in Ambiguity. And Politics*, Inside Climate News (Oct. 14, 2024), https://insideclimatenews.org/news/14102024/new-conservation-jargon-awash-in-ambiguity-politics/(quoting Steve Kropp, founder of the nonprofit Legacy Forest Defense Coalition of Washington).
166. Wash. St. RCO, *supra* note 140, at 12.
167. Lisa G. Crozier et al., *Climate Change Threatens Chinook Salmon Throughout Their Life Cycle*, 4 Commc'ns Biology art. 222, at 5 (2021).
168. *Id.*
169. Wash. St. RCO, *supra* note 140, at 12; Crozier et al., *supra* note 167, at 6-8.
170. Wash. St. RCO, *supra* note 140, at 13.
171. *Id.* at 12.
172. *Id.* at 16.
173. *Id.* at 13.
174. *Id.* at 12, 16.
175. *See* Darimont et al., *supra* note 143, at 381-82; Stephenson et al., *supra* note 159, at 90.
176. Naman et al., *supra* note 146, at 9.

However, the same reciprocity between salmon and forests may also be utilized to the benefit of salmon, forests, and the people who depend on their bounty. Preserving forests may mitigate the impacts of climate change on watersheds and their inhabitants. Healthy, intact forests serve as buffers to impacts caused by a warming climate.[177] Forest canopies act as climate moderators, reducing the modulation of temperature and moisture levels.[178] Additionally, the enhanced biodiversity supported by healthy forests serves as a bulwark against potentially harmful ecosystem transformations.[179] Thus, preserving the relational links between forests and salmon would not only mitigate the severity of climate change, but also preserve and enhance the climate resiliency of these species.

D. *Tying It All Together*

Timber harvests, climate change, and salmon are all linked. Despite their inextricable connections, the state of Washington continues to log state trust lands near salmon streams, and in doing so threatens to exacerbate climate change and reduce salmon populations. These actions not only threaten salmon and forests; they also threaten the culture and livelihood of Pacific Northwest tribes and nations. In doing so, certain historic and future timber sales likely violate the tribes' fundamental treaty rights to a certain amount of fish. These sales, and a brief history of the timber harvest in Washington, will be explained in the next part.

IV. Timber Harvest and Salmon Decline in Washington

A. *Overview*

Throughout the late 19th century and early 20th century, at the same time Washington State was directly violating treaty rights through off-reservation regulation of Indian fishing, the state and federal governments were decimating the state's old growth and mature forests. The extent of logging in the Pacific Northwest is legendary. When Europeans arrived in the Pacific Northwest, old growth forest blanketed roughly two-thirds of the region.[180] Seventy-two percent of this old growth is now gone, largely due to logging and development.[181] Though much of this decimation was done on private and federal lands, the state of Washington notably contributed.

For more than a century, Washington has been cutting down trees on state-owned lands.[182] When Washington attained statehood in 1889, Congress granted the state millions of acres of lands to manage profitably to fund public resources and services.[183] Today, nearly three million acres of state land are classified as "state trust lands," and more than two million of these acres are forested.[184] A salient source of revenue on these lands is timber sales, whereby the state sells permits to companies to harvest timber on the lands.[185] Massive amounts of timber have been extracted from state trust lands.

Though data on the extent of timber harvest in the early years are scant, the University of Washington has calculated the more recent extent of harvest on state trust lands. Between 1965 and 2013, 31,925,092 thousand board feet (MBF) of timber were harvested on state trust lands.[186] Applying a very rough back-of-the-napkin calculation, this amounts to approximately 4,750,000 trees with a height of 180 feet and a diameter of four feet, which is about the size of a small old growth Douglas fir tree.[187] Though the extent of logging on state trust lands, as measured in MBF, is slightly less than that on federal lands and significantly less than that on private lands in Washington, it still represents trees numbering in the millions, which is more than enough to cause negative impacts on salmon health.[188]

Acknowledging that state trust land timber harvest may degrade salmon habitat and thereby reduce salmon populations, Washington has improved logging practices on state and private lands to decrease the negative ecological impacts of the timber harvest.[189] The primary source of these policies is the Salmon Recovery Act of 1999 and its pursuant regulations (in total, the "Forests and Fish

177. Polly C. Buotte et al., *Carbon Sequestration and Biodiversity Co-Benefits of Preserving Forests in the Western United States*, 30 Ecological Applications art. e02039, at 6, 8 (2020).
178. Pieter De Frenne et al., *Global Buffering of Temperatures Under Forest Canopies*, 3 Nature Ecology & Evolution 744, 744 (2019).
179. Buotte et al., *supra* note 177, at 8.
180. Stritholt et al., *supra* note 165, at 367. Though what is considered "old growth" varies by tree species and forest type, forests dominated by trees older than 150 years typically qualify. *Id.* at 363.
181. *Id.*
182. Lynda V. Mapes, *FOREST FEUD WA's Fight Over the Old Growth of Tomorrow*, Seattle Times (Oct. 15, 2024), https://www.seattletimes.com/seattle-news/climate-lab/was-fight-over-the-old-growth-forests-of-tomorrow/.
183. DNR, *Forest and Trust Lands*, https://www.dnr.wa.gov/managed-lands/forest-and-trust-lands (last visited Apr. 2, 2025).
184. *Id.*
185. *Id.*
186. University of Washington, Washington State Historic Timber Harvest: Summarized Volumes by Year and Owner Class, https://nrsig.org/projects/files/af83882e-286f-4e81-a8ce-0ae35e3de306/SummarizedVolumesByYearAndOwnerClass_20150901.xlsx. One board foot equals a piece of wood that is one foot long by one foot wide by one inch thick. Note that MBF only measures "the portion of a log recoverable as finished primary product (i.e., lumber) based on the small-end diameter" of the log. Steve Verrill et al., U.S. Forest Service, Estimating the Board Foot to Cubic Foot Ratio 1 (2004). Thus, this metric does not capture the entire volume of biomass (and thus carbon) removed from a forest.
187. This calculation was made by taking the lower end of the height and diameter of an old growth Douglas fir tree from DNR, applying these dimensions to a board feet calculator, which averaged that one tree of this size would contain 6,714.35 board feet, and then dividing the total MBF logged on state lands (times 1,000 to get the total board feet) by this number. DNR, *Plant the Right Tree Seedlings*, https://www.dnr.wa.gov/programs-and-services/forest-resources/webster-forest-nursery/plant-right-tree-seedlings (last visited Apr. 2, 2025); Georgette Kilgore, *How Many Board Feet in a Tree? Log Board Foot Calculator (Doyle Log Scale)*, 8 Billion Trees (Oct. 3, 2024), https://8billiontrees.com/carbon-offsets-credits/carbon-ecological-footprint-calculators/how-many-board-feet-in-a-tree/.
188. University of Washington, *supra* note 186.
189. *See* Wash. Rev. Code §222-30-010(2).

Rule").[190] The Forests and Fish Rule creates a regulatory framework that significantly reduces the harms of timber harvest by, among other things, requiring riparian buffers[191] and protecting *some* remaining stands of old growth on state trust lands and private lands.[192]

Though these policies are undoubtedly a step in the right direction, they do not go far enough and cannot undo much of the damage that has already been done. Old growth forests—which, as previously detailed, confer ecological benefits upon salmon and other organisms and provide ecosystem services such as carbon sequestration and water filtration—will, by definition, take more than a century to regenerate.[193] Further, as explained below, the Forests and Fish Rule does not cover all old growth forests, excludes other ecologically important forests that do not qualify for protections, and permits clearcutting.

The Forests and Fish Rule still allows the logging of "legacy forests." "Legacy forests" are forests in between the "young forest" and "old growth forest" classification. These forests are roughly 80 to 150-175 years old, though forests at the older edge of this range are often considered old growth.[194] Even though legacy forests usually fall short of old growth designation, they still provide numerous and valuable ecosystem services.[195] Moreover, these forests are, in essence, "the old-growth of tomorrow."[196] Current DNR policies protect "old growth," though they define "old growth" as "stands 5 acres and larger that originated naturally, before the year 1850."[197] Thus, forests classified as mature, as "legacy forests," or, under some definitions, even as "old growth," are excluded from protection if they are fewer than five acres or if they originate after 1850.[198]

Additionally, under the current scheme, clearcuts are still permitted on state and private lands.[199] As explained earlier, even when a riparian buffer is left between a logged area and a stream, where the logged area is a clearcut, the riparian buffer may not prevent critically low summer stream flows.[200]

In sum, the Forests and Fish Rule does not entirely preserve the ecosystem values provided by forests. The holes in this scheme permit the degradation of forest ecosystems and the fracturing of ecological relationships between forests and salmon. Thus, the laws fail to completely mitigate historical, present, and future harms to salmon caused by the timber harvest in Washington. These shortcomings are susceptible to legal challenge. Before outlining these legal challenges, the following sections will more specifically link the timber harvest to salmon decline and its impact on Coast Salish Indian tribes and nations.

B. Salmon Decline in the Pacific Northwest

Over the past century and a half, wild salmon populations have continuously declined in the Pacific Northwest.[201] Many salmon runs are less than 10% of their historical numbers, and some have disappeared altogether.[202] Many salmon species and populations are at or near their lowest numbers on record as salmon survival rates have plummeted.[203] A variety of factors, from the eradication of beavers by fur traders to commercial overfishing to the construction of dams, development, and, of course, logging, have led to this steady decline.[204]

As of 2022, 14 populations of salmonids in Washington are listed as either endangered or threatened under the Endangered Species Act (ESA).[205] This includes five populations that are classified as "in crisis" and five populations that are "not keeping pace" with recovery goals.[206] Notably for the purposes of the claims discussed later in this Article, Puget Sound Chinook and steelhead populations are listed as "in crisis."[207] Though two populations are "approaching goal" levels, no Washington State salmon population that has been added to an ESA list has ever been removed.[208]

C. Deforestation and Salmon Decline

Given the well-documented connections between forests, deforestation, and salmon, along with the history of logging in the Pacific Northwest, it is unsurprising that logging has been identified as a contributing cause to both historic salmon declines[209] and, more recently, to discrete salmon mass mortality events in the region.[210] As explained

190. DNR, *Forest Practices Rules and Board Manual Guidelines*, https://www.dnr.wa.gov/about/boards-and-councils/forest-practices-board/forest-practices-rules-and-board-manual-guidelines (last visited Apr. 2, 2025).
191. Wash. Rev. Code §§222-30-021, 222-30-023.
192. DNR, Policy for Sustainable Forests 34 (2006).
193. Strittholt et al., *supra* note 165, at 366 (defining mature conifer forests as 50-150 years old and old conifer forests as more than 150 years old). In this Article, "old conifer" is synonymous with "old growth conifer." *Id.*
194. Refer to the discussion on similarities and slight differences between "mature" forests and "legacy" forests, and their overlap with old growth forests, at Strittholt et al., *supra* note 165, at 367, *supra* note 180, at 363, and Gilles, *supra* note 165.
195. Gilles, *supra* note 165.
196. *Id.*
197. DNR, *supra* note 192, at 34.
198. *Id.* To be precise, at the time of publication (June 2025), a forest that is 174 years old, and thus having its natural origin in 1851, *would not receive* "old growth" protection under DNR policy. Compare this with the old growth threshold of 150 years employed by Strittholt et al., *supra* note 165, at 366.
199. *See, e.g.*, Wash. Rev. Code §§222-34-010(1)(a)(i), (4)(a), 222-22-100(2).
200. Segura et al., *supra* note 145, at 9-10.
201. Robert T. Lackey, *Salmon Decline in Western North America: Historical Context*, *in* Encyclopedia of Earth 2 (Cutler J. Cleveland ed., National Council for Science and the Environment 2009), http://osu-wams-blogs-uploads.s3.amazonaws.com/blogs.dir/2961/files/2017/07/Salmon-Decline-in-Western-North-America-Historical-Context.pdf.
202. *Id.*
203. Tony Schick & Irena Hwang, *The US Has Spent More Than $2B on a Plan to Save Salmon. The Fish Are Vanishing Anyway.*, Or. Pub. Broad. (May 24, 2022), https://www.opb.org/article/2022/05/24/pacific-northwest-federal-salmon-hatcheries-declining-returns/.
204. Lackey, *supra* note 201, at 3-4; Wash. St. RCO, *supra* note 140, at 14; Adam M. Sowards, *Salmon Recovery in Washington*, HistoryLink.org (Oct. 11, 2024), https://historylink.org/File/23069; Stillaguamish Tribe of Indians, *Timber, Fish & Wildlife (TFW) Program*, https://www.stillaguamish.com/natural-resources/environmental-program/tfw/ (last updated Feb. 17, 2022).
205. Wash. St. RCO, *supra* note 140, at 6.
206. *Id.* at 7.
207. *Id.*
208. *Id.* at 3.
209. Cheri Anderson & Sean Connolly, *Salmon . . . A Pacific Northwest Icon*, U.S. Fish & Wildlife Serv. (June 7, 2022), https://www.fws.gov/story/2022-06/salmona-pacific-northwest-icon.
210. Lummi NRD, *supra* note 148, at 3.

earlier, the impacts of timber harvest will likely be exacerbated by climate change, though preserving intact forests may serve as a climate change mitigating factor.[211]

D. Impact on Tribes

The decline of salmon culturally, spiritually, and economically harms the "Salmon People" of the Pacific Northwest. Salmon have served a fundamental role in "Salmon People" cultures and lifeways for many millennia.[212] Today, still, "salmon are critical for the livelihoods and cultural identities of the many Coast Salish Tribes."[213] For example, to the Lummi Nation—the original inhabitants of Washington's northernmost coast into southern British Columbia—"Pacific salmon are an integral part of the economy, ecology, and culture . . . Lummi Nation Fishers rely on the annual return of salmon for their financial and spiritual wellbeing."[214] Due to this central importance, it is no surprise that "Coast Salish Tribes are deeply impacted culturally and economically by salmon loss."[215]

The Salmon People Project, a group dedicated to storytelling, education, and advocacy regarding the connections between Coast Salish tribes and salmon, further articulates that the salmon decline is felt by Indigenous communities as "broken treaty promises and a devastating loss to Native Americans."[216] In terms of economic harm, in some areas, tribes have been unable to commercially fish certain stocks for many decades due to diminishing populations,[217] which has led to economic hardship.[218] Though these losses are often incalculable and irreducible to legal formulations, the Culverts Case court found them to be legally cognizable. The cultural, social, and economic harm caused by salmon decline was crucial to the court's holding.[219]

E. Recent Timber Sales and Their Nexus With Usual and Accustomed Fishing Rights

Despite the profound impact of salmon decline on tribes, and despite the scientifically validated connections between logging and salmon decline, the state of Washington continues to log forests on state lands, even when these activities may impact the ability of tribes to exercise their usual and accustomed treaty fishing rights. This is exemplified by recent timber sales, one of which will serve as the focus of the next part: the "Little Lilly" timber sale.

In November 2024, Washington auctioned off approximately 4,000 MBF of timber in Whatcom County in the Little Lilly timber sale.[220] The nearly 90-acre sale largely comprises mature forest, including some stands that are more than 150 years old—what some might call a "legacy forest" or even old growth.[221] However, because the stand did not originate before the year 1850, it may not be designated as old growth under DNR policies, and thus it was not exempted from these timber sales.[222] This majority of the Little Lilly sale sits on a hill above the Middle Fork Nooksack River.[223]

As determined in the Boldt Decision and subsequent litigation, the Middle Fork Nooksack River is part of the usual and accustomed fishing grounds for both the Lummi Nation[224] and the Nooksack Tribe.[225] Additionally, the Middle Fork Nooksack River is a designated critical habitat for Puget Sound Chinook salmon[226]—one of the populations considered to be "in crisis" by the state of Washington.[227] The critical status of this fish population is not without consequences for these tribes. For example, the "Lummi Nation and Nooksack Tribe have not had a commercial fishery directed on spring chinook for close to 40 years, due to diminishing returns."[228]

This is no isolated incident. The 92-acre "Next Contestant" sale in Mason County, auctioned at the same time as Little Lilly and also including legacy forest, faces opposition from the Skokomish Tribe and local climate advocacy groups.[229] This sale is proximate to Lilliwaup Creek, which is a usual and accustomed fishing ground for the Skokom-

211. De Frenne et al., *supra* note 178, at 744.
212. National Museum of the American Indian, *supra* note 42.
213. U.S. Environmental Protection Agency, *Chinook Salmon*, https://www.epa.gov/salish-sea/chinook-salmon (last updated Mar. 11, 2025).
214. Lummi Nation, *Salmon*, https://www.lummi-nsn.gov/Website.php?PageID=185 (last visited Apr. 2, 2025).
215. Children of the Setting Sun Productions, *Salmon People Project*, https://settingsunproductions.org/salmon-people-project (last visited Apr. 2, 2025).
216. *Id.*
217. Nooksack Indian Tribe Natural Resources Department, South Fork Nooksack River Watershed Conservation Plan 81 (2017) [hereinafter Nooksack NRD].
218. Washington Department of Fish and Wildlife, *supra* note 152.
219. *Washington VI*, 853 F.3d 946, 966 (9th Cir. 2017). Though this Article focuses on the importance of salmon, in great part because they are directly protected by treaty rights, it is also important to note that forests are vital to tribal livelihoods and cultural identities. For example, to the Skokomish Tribe, cedar trees, or "Cedar beings," are sacred and generous teachers of "vast spiritual and material value." Pavel et al., *supra* note 45, at 54. At the ecosystem level, old growth forests hold deep spiritual significance as the location where elders guide youth in their search for a "guardian spirit." *Id.* The timber harvest threatens to undermine these values and practices, which "are threatened because the forest is dwindling, the plants are dying, and few people respect our beliefs about such entities as water and animals." *Id.*
220. DNR, November 2024 Auction Results, https://www.dnr.wa.gov/publications/psl_ts_2411_results.pdf.
221. *Protect the Little Lilly Timber Sale From Clearcut Logging*, RE Sources (Aug. 7, 2024), https://www.re-sources.org/2024/08/protect-the-little-lilly-timber-sale-from-clearcut-logging/. Under the definition of "old growth" offered by Stritholt et al., *supra* note 165, stands exceeding 150 years old would often be considered "old growth."
222. *Id.* For old growth criteria regarding stands on state trust lands, see DNR, *supra* note 192, at 33.
223. Julia Tellman, *Little Lilly Timber Sale Approved by Board of Natural Resources*, Cascadia Daily News (Oct. 10, 2024), https://www.cascadiadaily.com/2024/oct/10/little-lilly-timber-sale-approved-by-board-of-natural-resources/.
224. *Washington I*, 384 F. Supp. 312, 360-63 (W.D. Wash. 1974).
225. United States v. Washington, 459 F. Supp. 1020, 1049 (W.D. Wash. 1978), *aff'd*, 645 F.2d 749 (9th Cir. 1981).
226. 50 C.F.R. §226.212(g)(ii).
227. Wash. St. RCO, *supra* note 140, at 6.
228. Nooksack NRD, *supra* note 217, at 81.
229. Nick Engelfried, *Washington Has Few Older Forests Left. Why Does DNR Keep Logging Them?*, Columbia Insight (Sept. 12, 2024), https://columbiainsight.org/washington-has-few-older-forests-left-why-does-dnr-keep-logging-them/.

ish Tribe.[230] Further, the creek is a designated critical habitat for Puget Sound steelhead[231] and summer run chum salmon,[232] the former of which is listed as "in crisis" by the state of Washington.[233] One advocate expressed worries that clearcutting this site "would impact historic and cultural sites and habitat for plants, *fish* and other wildlife."[234]

Though these sales concluded, the trees still stand, and one potential strategy for preserving these forests remains. The tribes, if they choose, may seek to prevent the logging of these valuable forests by suing the state of Washington. Under the Culverts Case framework, the tribes may be able to successfully argue that proceeding with logging forests such as those implicated in the Little Lilly and Next Contestant sales violates their treaty right to fish at their usual and accustomed places.

V. Timber Harvest as a Violation of Tribal Treaty Fishing Rights

A. *The Culverts Case Framework*

Under the Culverts Case framework, Coast Salish tribes may be able to seek relief for past logging and prospective relief to prevent future damages. This part will analyze how each requirement of the rule sketched by *Fishing Vessel* and the Culverts Case may be met for such claims against the state of Washington.

As a reminder, these cases prescribe a fact-intensive inquiry that roughly requires that a state actor (1) take an *affirmative* action that (2) proximately causes (3) significant (and thus not de minimis) adverse effects on (4) a population of fish implicated in treaty rights; and (5) those effects, in turn, cause or contribute to an availability of salmon "not sufficient to provide a 'moderate living' to the tribes."[235] For simplicity's sake, elements 2, 3, and 4 will be considered in one section.

B. *Past Timber Harvests*

1. Affirmative Action

Timber sales may reasonably be construed to represent an "affirmative action" by the state of Washington. In the case of timber sales, the state is not logging the land, but rather selling the timber to other actors and permitting them to enter state land to log the land. This fact pattern elicits the question: what is considered "affirmative action" for the purposes of environmental degradation treaty rights claims? Though the Culverts Case involved active construction and management by the state, the court did not say, and it should not be inferred, that less direct forms of habitat degradation could not be considered a treaty violation.[236]

Another well-established area of law deals with such ambiguity, and thus might prove persuasive for defining the contours of affirmative state action in these cases: Fourteenth Amendment "state action" jurisprudence. In the absence of direct state action, the Supreme Court has held that "a State normally can be held responsible for a private decision only when it has exercised coercive power or has provided such significant encouragement, either overt or covert, that the choice must in law be deemed to be that of the State."[237] Selling the right to harvest timber to a timber company is unquestionably "significant encouragement" to harvest the timber in question. Thus, assuming Fourteenth Amendment "state action" jurisprudence translates to an affirmative action in treaty rights claims, the private actions of harvesting timber may be attributed to the state of Washington.

Even if the private harvesting of timber cannot be considered an affirmative state action, the state's act of selling timber to private companies could easily be argued as such, especially because the state of Washington typically considers such actions sufficient to merit State Environmental Policy Act (SEPA) analysis.[238] That being said, the act of logging itself is the optimal target, as it would likely be easier to prove proximate causation between logging—rather than logging sales—and habitat degradation. In either case, claims targeting both past and future timber sales could likely satisfy this first element.

2. Proximate Causation

These elements—specifically, the proximate causation element—will likely pose the largest barrier to succeeding in a violation of treaty rights claim aimed at timber harvests. In the Culverts Case, this showing was simple: culverts directly prevented hundreds of thousands of salmon from leaving or returning to their spawning grounds, reducing salmon populations on numerous waterways that are usual and accustomed fishing grounds.[239] The connection between timber harvests and habitat degradation is less discrete.

However, plaintiffs could benefit from the court's more general causal reasoning in the Culverts Case. The court found the following causal chain to be sufficient to satisfy proximate causation: "A *primary* cause of [salmon decline] is habitat degradation," and "*[o]ne cause* of the degradation

230. *Washington I*, 384 F. Supp. 312, 377 (W.D. Wash. 1974), *aff'd and remanded*, 520 F.2d 676 (9th Cir. 1975).
231. 50 C.F.R. §226.212(u)(16)(i).
232. *Id.* §226.212(k)(2).
233. Wash. St. RCO, *supra* note 140, at 6.
234. Engelfried, *supra* note 229 (emphasis added).
235. *Washington VI*, 853 F.3d 946, 956-66 (9th Cir. 2017) (citing *Fishing Vessel*, 443 U.S. 658, 686 (1979)); *Washington IV*, 20 F. Supp. 3d 828, 895 (W.D. Wash. 2007); Blumm, *supra* note 3, at 31-32.
236. *Washington VI*, 853 F.3d at 966.
237. Rendell-Baker v. Kohn, 457 U.S. 830, 840 (1982) (quoting Blum v. Yaretsky, 457 U.S. 991, 1004 (1982)).
238. Wash. Rev. Code §43.21C.037 (2024); Wash. Admin. Code §332-41-833 (2024). SEPA is modeled after the National Environmental Policy Act. Washington State Department of Ecology, State Environmental Policy Act Handbook 6 (2018).
239. *Washington VI*, 853 F.3d at 966.

of salmon habitat is blocked culverts."[240] Though timber harvests do not pose the same clear-cut impact as culverts, plaintiffs could simply repeat the court's conclusion that habitat degradation is a primary cause of salmon decline, and then invoke scientific studies to prove that *one cause* of this degradation is timber harvest.

Luckily for tribal plaintiffs, as explained at length in Part III, there is significant science revealing that logging negatively impacts salmon habitat. However, plaintiffs would likely have to prove a more localized connection between logged areas and harm to salmon populations. In some instances, the science to support such a connection will likely exist. This is exemplified by the Lummi Natural Resources Department review of a recent Chinook salmon mortality event.[241]

In 2021, an estimated 2,500 adult Chinook salmon perished on the South Fork Nooksack River.[242] In reviewing the causes of the die-off, the Lummi Natural Resources Department pointed to "severely degraded habitat quality as the direct, primary cause of the mortality event."[243] One significant contributor to habitat degradation was timber harvest, including logging activity on Washington State lands.[244] Timber extraction in the watershed led to "flashy" flow regimes, characterized by "unnaturally high levels of discharge during wet months, and drought conditions during the summer months."[245] The tribe concluded that these flashy flow regimes, and particularly summertime lows, cause "direct impacts to both adult and juvenile salmonids," and especially to Chinook salmon.[246]

To augment the force of specific causation, tribes may point to the impacts of deforestation on climate resiliency and mitigation. As explained earlier, logging forests, and especially older forests, leads to less climate-change-resilient habitats.[247] Therefore, past logging has not only harmed salmon historically, but will continue to exacerbate harms to salmon as salmon streams are exposed to climate change without the protection that healthy, older forests provide. These future injuries are compounded by the fact that logging forests added more carbon dioxide to the atmosphere while likely reducing rates of carbon sequestration, doubly contributing to greenhouse gas emissions and thus a warmer, less hospitable climate for salmon.[248]

3. Effects of State Action Are "Significant"

After proving that timber harvest contributes to habitat degradation, a tribal plaintiff would need to prove that this contribution is significant. Though this requirement is vague, and only inferred from the court's reasoning, it seems clear that a challenged action must exceed de minimis effects on habitat degradation and, in turn, on salmon population declines.[249] Habitat degradation and other factors brought the South Fork Nooksack Chinook population "to the brink of extinction," and was saved by the Lummi Nation's intervention.[250]

The dire state of salmon on creeks such as the South Fork Nooksack reveals the extent of damage to salmon populations, and the mortality event demonstrates in a single instance how timber harvest has contributed to this decline. Though it is unclear whether this instance, on its own, would satisfy the "adverse effects" requirement, it need not. Rather, a tribal plaintiff could use this event as an example of a much broader problem. If a tribal plaintiff can point to broad studies or specific instances that reveal the causal connection between timber harvests and salmon population declines, they might be able to satisfy the adverse effects requirement.

4. Impacted Fish Populations May Be Fished by Tribes Pursuant to Treaty Rights

After proving adverse effects, a tribe must prove that the population affected is implicated in tribal treaty fishing rights. This will often be a simple determination. Tribal usual and accustomed rights are typically determined by watershed and many of these rights have already been adjudicated. For example, if the Lummi Nation or Nooksack Tribe sued the state of Washington for the impact of past timber harvest on South Fork Nooksack River salmon populations, they need simply point to existing case law that includes the Nooksack River and its tributaries among their usual and accustomed fishing places.[251]

5. Insufficient Salmonids to Support a "Moderate Living"

This element should be relatively easy to satisfy. The case law does not require that the challenged state actions brought the salmon population from a level sufficient to support a moderate living to a level that is insufficient. In the Culverts Case, the court determined that current salmon populations are insufficient to provide a "moderate living" to the tribes by damaging tribal economies, reducing the ability of individual tribal members to "earn a living," and causing "cultural and social harm to the Tribes in addition to the economic harm."[252] Because salmon numbers have not significantly recovered since the court made this determination, most tribes should be able to prove this element.

240. *Washington VI*, 853 F.3d 946 (quoting *Washington V*, 20 F. Supp. 3d 986, 1020 (W.D. Wash. 2013) (emphasis added)).
241. Lummi NRD, *supra* note 148.
242. *Id.* at 2.
243. *Id.*
244. Nooksack NRD, *supra* note 217, at 19.
245. *Id.* at 3.
246. *Id.*
247. *See supra* Section III.C.
248. *Id.*
249. Blumm, *supra* note 3, at 31-32.
250. *Id.* at 2.
251. For the Lummi Nation, see *Washington I*, 384 F. Supp. 312, 360-61 (W.D. Wash. 1974). For the Nooksack Tribe, see *United States v. Washington*, 459 F. Supp. 1020, 1049 (W.D. Wash. 1978), *aff'd*, 645 F.2d 749 (9th Cir. 1981).
252. *Washington VI*, 853 F.3d 946, 966 (9th Cir. 2017).

That said, tribes may improve their likelihood of success by invoking discrete economic, spiritual, and cultural harms. Tribes may further improve their likelihood of success if they argue that "[m]any members of the Tribes would engage in more commercial and subsistence salmon fisheries if more fish were available."[253] The district court and court of appeals found this fact to be notable in the Culverts Case, and thus it is advisable that tribes frame their harm as redressable by demonstrating how potential remedies would enhance the tribe and individual tribal members' ability to attain a "moderate living."[254]

6. Remedies

Though the legal remedies sought should be tied to tribal concerns and goals, here is a brief overview of potential remedies. First, like the Culverts Case, tribes would likely seek some sort of injunctive relief.[255] As culverts contributed to past salmon population declines and also threaten to cause future population declines, so do timber sales on state lands. Thus, tribes could seek prospective, injunctive relief to ameliorate future harms. Such relief will be explored in greater length at the end of the next section.

Injunctions would likely be the most valuable form of relief, because no amount of money may replace old growth forests and their conveyance of ecosystem, climate mitigation, and climate adaptation services to salmon. This reflects the argument of the tribes in the Culverts Case that monetary relief alone would likely prove inadequate to remedy the harms caused by salmon population declines caused by habitat degradation.[256]

That said, money could help. Thus, tribes could also seek compensatory damages. If a tribe can roughly calculate economic damage to the tribe caused by logging on state lands and consequential harm to salmon populations, then monetary relief could fund conservation efforts. Many tribes currently play an integral part in salmon rehabilitation efforts in Washington State.[257] If tribes could receive compensation for these efforts, or additional funding to expand these efforts, then monetary relief could benefit salmon populations and, therefore, could remedy injuries to treaty fishing rights.

C. Future Timber Harvests

1. Affirmative Action

Claims targeting future logging (i.e., timber sale has occurred but logging has not) concern the same actions as claims targeting past logging: either the timber sale itself or, if it can be attributed to the state of Washington, the very act of logging state trust lands. Thus, the analysis for the first element would be the same in both claims and need not be repeated here.

2. Proximate Causation

Like this element in the past-logging claims, the plaintiffs would need to invoke scientific data to prove this causal chain: timber harvest causes habitat degradation and habitat degradation causes salmon population declines. However, this claim does not have the benefit of hindsight—to establish that this same general relationship will apply to future logging, a tribe will likely need relatively thorough scientific data that the challenged timber harvests will create causation patterns analogous to those established in scientific literature. Because the impact of logging on streams may be highly variable based on location-specific factors,[258] the more local the scientific data presented, the better. In the best-case scenario, the tribe, the state, or other contracted scientists conduct a site-specific analysis that explains why a prospective logging operation would lead to habitat degradation in usual and accustomed waters.

Typically, the state of Washington will conduct site-specific analyses for timber harvest sales pursuant to SEPA.[259] This analysis may be used as a starting point. Further, if a tribe finds that this analysis is insufficient or contrary to studies they have conducted or discovered, it could serve as the basis for a SEPA claim, though this will not be discussed further here. As explained in Section B.2 addressing past-logging claims, a tribal plaintiff may strengthen the force of causation by invoking the contributions of logging to less climate-resilient habitats and a warmer climate. The guidance suggested here for subsection 2 largely extends to subsection 3, as the degree of causation is inextricably linked with the severity of the consequences.

3. Effects of State Action Are "Significant"

Prospective claims face the difficulty of proving that effects *will be* significant. Like subsection 2, this would likely require that either scientific data on a sufficiently analogous location are available, or that scientific analysis of the site in question could support a finding that the impacts of logging the land in question will cause "significant" impacts. As in Section B.3 addressing historic logging claims, documented mortality events that may be attributed, at least in part, to logging practices could serve to substantiate significant effects analysis.

Significant effects analysis could also be supported by proving that affected fish populations are already vulnerable. The recent timber sales highlighted earlier—the Little Lilly and Next Contestant sales—both permit logging of forested areas near waterways that are designated criti-

253. *Id.*
254. *Id.*
255. *Id.*
256. *Washington V*, 20 F. Supp. 3d 986, 1021 (W.D. Wash. 2013).
257. Wash. St. RCO, *supra* note 140, at 4 ("Tribes and the State co-manage salmon resources, and tribes have led salmon recovery efforts throughout the state.").
258. Naman et al., *supra* note 146, at 6.
259. Wash. Rev. Code §43.21C.037 (2024); Wash. Admin. Code §332-41-833 (2024).

cal habitat for endangered salmon populations.[260] When a fish population is already struggling, a tribe could argue that the impact of additional habitat degradation would be amplified.

Further, this is where a tribe can invoke the climate mitigation and adaptation benefits of intact forests. Climate change poses a grave threat to salmon. Tribes may thus strengthen their significant effects argument by explaining how intact, older forests mitigate climate change by sequestering and storing carbon, and help to reduce the negative consequences of climate change by providing invaluable habitat benefits to salmon. When healthy older forests are logged, however, these benefits dissipate, and without them salmon may be unable to thrive in a changing climate. In sum, for the elements in subsections 2 and 3, a tribe asserting an environmental degradation claim should present data revealing general patterns of causation and adverse effects together with data that support the conclusion that the targeted timber sale will match or amplify these general patterns.

4. Impacted Fish Populations May Be Fished by Tribes Pursuant to Treaty Rights

This analysis would duplicate the analysis for historic logging claims. Accordingly, a tribe seeking a Culverts Case claim should focus on fish they could catch at *already adjudicated* usual and accustomed fishing grounds.

5. Insufficient Salmonids to Support a "Moderate Living"

This analysis would also largely duplicate the analysis for historic logging claims. To improve the likelihood of success on this element, tribes should provide relevant statistical and anecdotal data that show that an inadequate supply of salmon causes social, cultural, and economic harm.[261]

6. Remedies

This claim is prospective. Because it concerns damage that has yet to be done, a tribe pursuing such a claim action would likely seek injunctive relief. At minimum, a tribe would likely seek to permanently enjoin the state from permitting the forest in question from being logged. In addition, tribes could seek more expansive injunctive relief to more generally protect usual and accustomed fishing grounds from habitat degradation caused by logging. This could include seeking a requirement of tribal consent for any timber sale that could harm treaty fishing rights or a requirement that the state may not proceed with any timber sale if it makes a determination that the sale would result in such harm. In any case, tribes will need to satisfy legal standards for injunctive relief, which are not discussed here.[262]

VI. Challenges and Opportunities

A. *Challenges*

Though there is a plausible path to legal success on these claims, tribes asserting either of these claims will face several barriers, two of which will be discussed here: causation and a recent Supreme Court ruling concerning implicit treaty rights.[263]

As explained in both the proximate causation and adverse effects sections, these claims will likely rely on the availability of persuasive science that either concerns the sites in question or sufficiently analogous sites. Where this does not exist, tribes might need to commission such studies, which would take time and money. Even then, it is possible that studies may not establish conclusive evidence of causation sufficient to satisfy a court. In the absence of good, supportive science, these claims are less likely to succeed.

Another challenge is presented by the recent Supreme Court case *Arizona v. Navajo Nation*, which asserted that the U.S. government may not have any affirmative duties to enforce treaty rights that are not explicitly stated.[264] Thus, the U.S. government had no affirmative duties to define the Navajo Nation's long-established implicit treaty right to certain water rights pursuant to *Winters v. United States*.[265] It is unclear whether this same limitation applies to assertions of treaty rights duties against states. If it does, then Washington could argue that the tribe's right to fish sufficient to support a "moderate living," and the state's correlative duty to *not* diminish fish runs below this threshold, is unenforceable because, like *Winters* water rights, it is an *implicit* right.

However, there are several ways that tribes could distinguish habitat degradation treaty fishing rights claims from *Arizona*. First, whereas *Arizona* concerns an affirmative duty by requiring the United States to *act* by adjudicating and delimiting the Navajo Nation's water rights, environmental degradation claims are typically asking the government to *refrain from acting* in a way that violates their treaty right. Second, the Supreme Court, which created the "moderate living" standard, has previously held that these treaty rights, at the least, are enforceable against

260. 50 C.F.R. §226.212(g)(ii) (concerning Puget Sound Chinook salmon in the Middle Fork Nooksack River, which is proximate to the Little Lilly timber sale); *id*. §226.212(u)(16)(i) (concerning Puget Sound steelhead in Lilliwaup Creek, which is proximate to the Next Contestant timber sale); *id*. §226.212(k)(2) (concerning Puget Sound summer run chum salmon in Lilliwaup Creek, which is proximate to the Next Contestant timber sale).

261. *Washington VI*, 853 F.3d 946, 966 (9th Cir. 2017).

262. For the applicable permanent injunction standard, see *Washington V*, 20 F. Supp. 3d 986, 1021 (W.D. Wash. 2013) (quoting Monsanto Co. v. Geertson Seed Farms, 561 U.S. 139 (2010)).

263. Arizona v. Navajo Nation, 599 U.S. 555 (2023).

264. *Id.* at 563-64.

265. *Id.* at 569-70 (citing Winters v. United States, 207 U.S. 564, 576-77 (1908)).

the state of Washington.[266] Unless the majority in *Arizona* sought to tacitly overturn *Fishing Vessel*, which is unlikely as the majority opinion fails to mention that decision, then *Fishing Vessel* is still good law.[267]

Third, whereas the *Arizona* Court reasons that water rights were neither mentioned in the treaty between the Navajo Nation and the United States nor discussed in any treaty negotiations present in the historical record, courts have repeatedly discussed the importance of fishing rights in treaty negotiations between Coast Salish tribes and the United States.[268] Thus, on many counts, tribes may distinguish their "moderate living" habitat degradation claims from those asserted by the Navajo Nation.

B. Opportunities

The legal precedent established by the Culverts Case creates many new opportunities to protect tribal treaty fishing rights. As suggested by legal scholars, tribes might employ this framework to challenge state and federal dams, water diversions, and land management policies that harm salmon habitat.[269] Additionally, tribes could employ a very similar theory to that articulated here to challenge permits granted by Washington State allowing timber harvest on private lands.

Though this Article focuses on timber harvest on state lands, more timber is harvested on an annual basis on private lands,[270] and consequently the private timber harvest poses a significant threat to salmon.[271] Because DNR must provide permits for many of these harvests, tribal plaintiffs could challenge state permitting actions as violative of treaty fishing rights when the timber harvest in question would negatively impact usual and accustomed salmon populations.

Additionally, the duty to refrain from degrading salmon habitat could serve as a basis for Clean Water Act, National Environmental Policy Act, and SEPA claims.[272] For example, plaintiffs recently succeeded on a SEPA claim in King County Superior Court challenging a state timber sale for inadequate analysis of climate change impacts resulting from the sale.[273] Similar claims could be lodged against the timber sales discussed here, and could be strengthened by invoking impacts on salmon populations and connecting them to the following language in the Washington State Code section on timber harvest watershed analysis SEPA review: "The department [DNR] shall continue to use its implementation and enforcement authority to prevent damage to fish . . . ."[274]

The Culverts Case precedent gives tribes a malleable tool for seeking restoration of their treaty right to an amount of fish necessary for a "moderate living," and is but one of many tools that tribal plaintiffs could use to challenge timber harvests impacting fish.

VII. Conclusion

The "Salmon People" of the Pacific Northwest face distinct challenges to their treaty fishing rights as habitat degradation, habitat loss, and climate change threaten salmon populations. As the legendary native fishing rights advocate Billy Frank Jr. put it, "The lack of action on protecting and restoring habitat has gotten to the point that we can no longer make up for declining salmon runs simply by reducing harvest."[275]

However, he followed this dire statement with another: "But despite everything that's thrown against them—dams, pollution, predators and much more—the salmon never stop trying to make it home. We can't stop either. We all need to work harder to make sure the salmon has a good home when he returns."[276] Hopefully, the argument developed here may be another tool that tribes and tribal advocates can use to help ensure salmon have a good home when they return.

266. *Fishing Vessel*, 443 U.S. 658, 686, 696-97 (1979) ("The federal court unquestionably has the power to enter the various orders that state official and private parties have chosen to ignore, and even to displace local enforcement of those orders if necessary to remedy the violations of federal law found by the court.").
267. *Arizona*, 599 U.S. 555.
268. *See* United States v. Winans, 198 U.S. 371, 381 (1905); *Washington I*, 384 F. Supp. 312, 331 (W.D. Wash. 1974); *Fishing Vessel*, 443 U.S. at 664-68; *Washington VI*, 853 F.3d 946, 964, 965 (9th Cir. 2017).
269. Blumm, *supra* note 3, at 30, 36.
270. University of Washington, *supra* note 186. Over the same period (1965-2013) that 31,925,092 MBF of timber were harvested on state trust lands, 168,574,710 MBF were harvested on private lands in Washington. Thus, in this time period, the amount of timber harvested on private lands exceeded the amount harvested on state lands by *more than fivefold*.
271. Pavel et al., *supra* note 45, at 54.
272. Richard Du Bey et al., *Tribal Treaty Rights and Natural Resource Protection: The Next Chapter United States v. Washington—The Culverts Case*, 7 Am. Indian L.J. 54, 69, 70 (2019).
273. Center for Sustainable Econ. v. Washington State Dep't of Nat. Res., No. 23-2-11799-9-KNT (Wash. Super. Ct. Mar. 28, 2024).
274. Wash. Rev. Code. Ann. §222-22-100(1).
275. Billy Frank Jr., *Don't Let First Salmon Become Last Salmon*, Nw. Treaty Tribes (June 3, 2013), https://nwtreatytribes.org/dont-let-first-salmon-become-last-salmon/.
276. *Id.*