Historic and Ongoing Impacts of Federal Dams on the Columbia River Basin Tribes

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Purpose

This report documents the historic, ongoing, and cumulative impacts of federal Columbia River dams on Columbia River Basin Tribes and provides recommendations for how the federal government can uphold its trust responsibilities to the Basin Tribes by acknowledging and addressing these impacts with future actions. This analysis fulfills a commitment made by the Department of the Interior (Department) in an agreement to stay litigation on the Columbia River System Operations (CRSO),¹ known as the Resilient Columbia Basin Agreement. On December 14, 2023, the United States, the State of Washington, the State of Oregon, the Confederated Tribes and Bands of the Yakama Nation, the Confederated Tribes of the Umatilla Indian Reservation, the Confederated Tribes of the Warm Springs Reservation of Oregon, the Nez Perce Tribe, and the National Wildlife Federation et al. plaintiffs in *National Wildlife Federation v. National Marine Fisheries Service*, 3:01-cv-640-SI (D. Or.), signed a Memorandum of Understanding (MOU) and filed a motion to stay litigation with the U.S. District Court for the District of Oregon. The court subsequently granted the motion.

The Department committed to completing the report by June 2024. Given the short timeframe, this report considers only a portion of the Basin's federal dams² and the Tribes most immediately impacted by those dams. It is necessarily written at a high level based primarily on existing synthesis documents, as well as prior submissions by and consultation with the Tribes. In particular and based on the MOU commitment, the analysis is informed in large part by the 1999 Tribal Circumstances Report, Meyer Resources, Inc., Tribal Circumstances and Impacts of the Lower Snake River Project on the Nez Perce, Yakama, Umatilla, Warm Springs, and Shoshone Bannock Tribes (1999), and the relevant Tribal Perspectives and comments submitted as part of the 2020 CRSO Environmental Impact Statement (EIS) process.³ The Department also relied on additional sources, including those provided by the Tribes during the drafting process. Appendix A lists plans, reports, multimedia, and other publications by Tribal Nations that are considered in this report and provide additional information. Based on the geographic scope of the report, the Department worked with staff from and held formal government-to-government consultation with a subset of Basin Tribes: Coeur d'Alene Tribe of Indians, the Confederated Tribes and Bands of the Yakama Nation, the Confederated Tribes of the Colville Reservation, the Confederated Tribes of the Umatilla Indian Reservation, the Confederated Tribes of the Warm Springs Reservation of Oregon, Shoshone-Bannock Tribes of the Fort Hall Reservation, and Spokane Tribe of Indians. The Nez Perce Tribal Executive Committee and staff also met with the Department but did not request a formal government-to-government consultation. We are grateful for the time and resources that the Tribes' leadership and staff committed to this effort.

¹ The Columbia River System Operations refers to operation of the 14 multipurpose hydropower dams on the Columbia River and its tributaries. For more information, see United States Army Corps of Engineers, Columbia River System Operations EIS, https://www.nwd.usace.army.mil/CRSO/.

² The report specifically considers the impacts from the four lower Columbia dams (Bonneville, The Dalles, John Day, and McNary), the two upper Columbia dams (Chief Joseph and Grand Coulee), the four lower Snake dams (Ice Harbor, Lower Monumental, Little Goose, and Lower Granite), and Dworshak Dam, located on the North Fork Clearwater River just upstream of the lower Snake River. The report focuses on the circumstances of the eight Tribal Nations most immediately impacted by those dams.

³ Tribal Perspectives are included in Appendix P of the CRSO Final Environmental Impact Statement, https://usace.contentdm.oclc.org/utils/getfile/collection/p16021coll7/id/14965.

The Department recognizes this report does not tell the complete story of the impacts that the Columbia River System and other federal dams have on the Basin Tribes. For one, due to the expedited timeline, this report does not include an analysis of all federal dams in the Basin or consideration of all affected Tribes. Secondly, even for those Tribes and dams included in the report, the analysis is based on limited sources and is by design written in a general manner, utilizing representative examples to support the conclusions. Accordingly, many of the report's conclusions may be applicable to other geographies as well. As we repeatedly heard in consultation, the government's work to better understand and incorporate Tribal perspectives into decision making must continue after the publication of this report. We provide policy recommendations in Section IV on how this work can and should continue, recognizing the Basin Tribes' roles as sovereigns in defining and implementing shared paths forward. As noted in that section, the Department could choose to revise or amend this report as resources allow to expand the research to other areas in the Columbia River Basin, such as the Upper Snake River subbasin and Upper Columbia River towards the headwaters, or to include further details for the impacts described herein.



Figure 1: Hanford Reach of the Columbia River. Source: National Park Service.

Executive Summary

Since time immemorial the Tribes in the Columbia River Basin have stewarded the Basin's plentiful natural resources, placing unique importance on the salmon but fully honoring other species as well, including Pacific lamprey, trout, elk, deer, grouse, roots, and berries. Tribal identities center around the Columbia River, its tributaries, and the salmon those waterways support. When federal dams altered the natural flow of the river, inundated hundreds of thousands of acres of land, and affected ecosystem functions, the Tribes were disproportionately harmed. The federal and non-federal dams on the Columbia River and lower Snake River transformed the river functions from those the Tribes rely on to those serving other economic ends, transferring wealth away from the Tribes. This transformation followed decades of significant degradation of the rivers and their resources by the Basin's burgeoning industries. Together with commercial activities and other consequences from settlement of the region by non-Indigenous people, the construction and operation of federal dams impacted salmon, steelhead, and other species in the Columbia River Basin, thus impeding the Tribes' ability to realize the benefits of their reserved rights, including treaty-reserved rights to harvest salmon at usual and accustomed places, on unoccupied lands, or within reservations. The devastation of once-abundant salmon, steelhead, and other species in the Columbia River Basin adversely and inequitably impacted Tribes' spiritual, cultural, physical, and economic health as well. Because these impacts continue today and face new threats from climate change, upholding the federal government's treaty and trust responsibilities to the Tribes includes working to protect these reserved rights and restore associated resources; improving the spiritual, cultural, physical, and economic wellbeing of Tribes; and advancing environmental justice.

This report begins in Section I with a discussion of the Tribes' enduring relationships to the Columbia River, including the First Foods traditions and fishing and hunting rights. It also summarizes more than a century of actions by the treaty Tribes to defend their treaty rights, even when faced with

physical harm, arrest, and imprisonment. Section II then provides a history of the federal development of dams in the Columbia River Basin, including a brief overview of mitigation efforts.

Section III provides the Department's examination and summary of the historic, ongoing, and cumulative effects of the federal hydropower dams on Tribes, based on the perspectives provided by the Tribes over the decades. These impacts include effects on Tribal villages and homesites; cultural resources and sacred sites; lands, fisheries, and other natural resources; Tribal harvest rights, including treaty rights; economies and livelihoods; and the resulting cumulative impacts from all of these adverse consequences on Tribal ways of life, well-being, and sovereignty. Section IV offers recommendations for how the government can, consistent with its treaty commitments and trust responsibilities, better address these impacts. These recommendations include specific ways the impacts described in this report should inform National Environmental Policy Act (NEPA) and other compliance analyses. The recommendations also include actions to strengthen Tribal sovereignty and restore healthy and abundant populations of salmon, fish, and other species, such as advancing Tribally led restoration initiatives and increasing co-stewardship agreements with Tribal Nations.

Although the report at times describes situations applicable Basin-wide, for the purpose of this analysis, the Department addresses impacts from eleven specific dams: the four lower Columbia dams (Bonneville, The Dalles, John Day, and McNary), the two upper Columbia dams (Chief Joseph and Grand Coulee), the four lower Snake dams (Ice Harbor, Lower Monumental, Little Goose, and Lower Granite), and Dworshak dam, located on the North Fork Clearwater River just upstream of a tributary to the lower Snake River.⁴

The report thus considers the particular circumstances of eight of the Basin's Tribal Nations most immediately affected by those dams: Coeur d'Alene Tribe of Indians, the Confederated Tribes and Bands of the Yakama Nation, the Confederated Tribes of the Colville Reservation, the Confederated Tribes of the Umatilla Indian Reservation, the Confederated Tribes of the Warm Springs Reservation of Oregon, Nez Perce Tribe, Shoshone-Bannock Tribes of the Fort Hall Reservation, and Spokane Tribe of Indians. Although many of these Tribal Nations represent multiple confederated Tribes or bands, the report refers to the name of the federally recognized Tribal Nation.

The Department acknowledges that federal dams and reservoirs in the Columbia River Basin impact all Basin Tribes, and that the eleven dams specifically considered in this report also affect more Tribes than those considered here. As noted in the Purpose section, the limited timeframe to complete the report necessitated a narrowed scope. That said, where the discussion or conclusions are more broadly applicable, the report references "Basin Tribes" to refer to the much broader group of Tribes that rely on the Columbia River, though recognizing each Tribal sovereign maintains an individual government-to-government relationship with the United States and distinct rights and interests. Section IV addresses approaches the Department could take to expand this report in the future, including to analyze impacts on other Tribes.

⁴ See infra Figure 10, Map of Columbia River Basin Dams.



Figure 2: Spring Chinook Salmon. Source: Michael Humling, U.S. Fish and Wildlife Service.

I. Columbia River Tribes' Relationships to the Columbia River

The Columbia River defines the Pacific Northwest region of the United States. The river is known in various regional Indigenous languages by names including "Nch'i-Wàna" (spoken by Yakama, Warm Springs, Palus, Chief Joseph Band of Nez Perce, and other tribes), "npk'wátkw" (Columbia Salish language, or nxa?amxčín, spoken by Wenatchee, Entiat, Moses-Columbia, and Chelan), and "nx'ntk''itk'" (Colville-Okanogan language, or nsəlxcin, spoken by Methow, Sanpoil, Okanogan, Nespelem, Colville, and Lakes) all meaning "Big River." The Nez Perce refer to the Columbia River as *q'alawn*. It drains approximately 244,000 square miles. The river's headwaters reach into the Rocky Mountains of British Columbia, Canada and its mouth empties into the Pacific where Oregon and Washington meet. Its largest tributary, the Snake River, exceeds 1,000 miles in length, reaching from its headwaters in the mountains of western Wyoming through Hells Canyon, North America's deepest river gorge, on to its confluence with the Columbia near what today is known as the Tri-Cities region of Washington.

⁵ See Dictionary of the Moses-Columbia Language (compiled by Marvin Dale Kinkade, Colville Confederated Tribes 1981).

⁶ See Colville-Okanogan Dictionary (compiled by Anthony Mattina, Occasional Papers in Linguistics, no. 5., Department of Anthropology, University of Montana 1987).



Figure 3: Columbia River Basin Map. Source: Columbia River Inter-Tribal Fish Commission.

Since time immemorial, a healthy Columbia River ecosystem allowed for the flourishing of species and resources, and in return, the flourishing of the region's Indigenous peoples and Tribes. This rich natural system supported clean water, salmon and other aquatic species, game, roots, and berries—known by some Tribes as First Foods—that sustained Tribes for millennia and defined their seasonal migration patterns and traditions. For most Tribes in the Columbia River Basin, their ways of life and identities centered around the Basin's many species of salmon, whose distinct life cycles and migratory patterns provided the Tribes sustenance throughout much of the year. The Tribes built camps and villages and buried family members throughout the Basin, but especially near the Columbia River and its tributaries. Tribal history, cultural practices, stories, and spiritual beliefs reflect the importance of the Basin's waterways and the abundance of these resources. After non-Indigenous settlement, salmon and the Basin's natural wealth suffered from industrial development but continued to support Tribal sovereignty and well-being. Under federal policy for the creation of Tribal reservations, Tribes generally retained hunting, fishing, and gathering rights that continued their connection to the resources that were culturally and physically important to them. Reservations created under the treaty-making process were retained as part of the Tribes' inherent rights to the land and resources that the Tribes reserved, along with all other rights or privileges not expressly ceded in the treaties.

⁷ For a description of the salmon life cycle, see Figure 17, Salmon Life Cycle.



Figure 4: Nez Perce Tribal Member, Elmer Crow, holding lamprey. Source: Nez Perce Tribe.

A. Common connection to and dependence on the river, as demonstrated in First Foods traditions

The Columbia River and its tributaries are at the heart of the Basin Tribes' religions, cultures, traditions, and survival. Their identities are inextricably tied to the Columbia River and its tributaries. As Yakama Chief Meninock testified:

God created this Indian country and it was like He spread out a big blanket. ...When we were created we were given our ground to live on, and from that time these were our rights. This is all true. ...My strength is from the fish; my blood is from the fish, from the roots and the berries. The fish and the game are the essence of my life.⁸

The First Foods traditions are rooted in the connection between the prosperity and well-being of Tribes and the Basin's resources. The First Foods are those that have been staples to Indian people for millennia and remain culturally significant today. Although each Tribe's particular First Foods vary depending on the geography, they include water as the sustainer of all life, salmon and other fish, big game, roots, and berries. A healthy Columbia River ecosystem provided these First Foods to the Tribes. According to some of the Tribes' creation stories, salmon and other beings sacrificed themselves for and promised to care for Indian people, and in return, the people promised to protect those species and resources. The First Foods culture acknowledges and respects this reciprocity.

⁸ Meyer Resources, Inc., *Tribal Circumstances and Impacts of the Lower Snake River Project on the Nez Perce, Yakama, Umatilla, Warm Springs, and Shoshone Bannock Tribes* 146 (1999) [hereinafter Meyer Report].

⁹ Eric J. Quaempts et al., Aligning environmental management with ecosystem resilience: a First Foods example from the Confederated Tribes of the Umatilla Indian Reservation, Oregon, USA, 23 Ecology and Society 3 (June 2018).

¹⁰ *Id.* at 4.

¹¹ *Id.*

Tribes honor these First Foods at ceremonial feasts. According to Umatilla Tribal tradition, the foods are served "in the order in which these foods promised to care for the Indian people." For many Tribes, salmon is of paramount importance. ¹³ According to one creation story:

When the Creator was preparing to bring humans onto the earth, He called a grand council of all the animal people, plant people, and everything else. In those days, the animals and plants were more like people because they could talk. He asked each one to give a gift to the humans—a gift to help them survive, since humans were pitiful and would die without help. The first to come forward was Salmon. He gave the humans his body for food. The second to give a gift was Water. She promised to be the home to the [S]almon. After that, everyone else gave the humans a gift, but it was special that the first to give their gifts were Salmon and Water. When the humans finally arrived, the Creator took away the animals' power of speech and gave it to the humans. He told the humans that since the animals could no longer speak for themselves, it was a human responsibility to speak for the animals. To this day, Salmon and Water are always served first at [T]ribal feasts to remember the story and honor the First Foods. 14

The Nez Perce Tribe describes this relationship as creating a covenant between the Nez Perce people and the salmon.¹⁵ For the Yakama:

Ranking first is our Creator's most precious gifts of water, and land--Mother Earth. These he gave us for our daily use, our sustenance, our survival.... Creator's second gift of life to the [Yakama] Indians is the Salmon. Salmon was placed in the Columbia and in its tributaries for us to harvest as the Creator said the salmon was to help nurture and sustain us. In return for the gift we are to care for the waters that sustain the salmon.¹⁶

According to some Tribal legends, salmon is a gift given to the people by Coyote.¹⁷ The Colville consider salmon "sacred relatives." Large ceremonies and rituals call and welcome migrating salmon back each year. At the same time, Tribes care for salmon and all First Foods by undertaking harvest practices that "emphasize and prioritize ecosystem resiliency over short-term maximization of resource extraction."

¹² *Id.*

¹³ See, e.g., Meyer Report, supra note 8, at 6; CRSO Final EIS, app. P: Tribal Perspectives (2020).

¹⁴ Columbia River Inter-Tribal Fish Commission, *Spirit of the Salmon: WY-KAN-USH-MI WA-KISH-WIT* (2014), https://plan.critfc. org/ (emphasis removed).

¹⁵ Covenant of the Salmon People (Swiftwater Films, Shane Thomas Anderson dir., 2023).

¹⁶ Meyer Report, *supra* note 8, at 136 (1999) (citing Aguilar, Florence L., 1995. Yakama Indian Nation, Cultural Resources Program. Memorandum to Johnson Meninick. May 29.).

¹⁷ The Kettle Falls Fishery (Christopher Horsethief, Skydog Records dir., 2003); See generally Confederated Tribes of the Colville Reservation History/Archeology Program, Upper Columbia River Book of Legends (2007).

The Confederated Tribes of the Colville Reservation, Comment Letter on Tribal Circumstances Analysis, at 2 (April 10, 2024).

¹⁹ See, e.g., The Kettle Falls Fishery (Christopher Horsethief, Skydog Records dir., 2003).

Quaempts et al., *supra* note 9, at 4. *See also* Alan Scholz et al., Upper Columbia United Tribes, Fisheries Technical Report No. 2, *Compilation of information on salmon and steelhead total run size, catch and hydropower related losses in the Upper Columbia River Basin, above Grand Coulee Dam 94 (Dec. 1985) (describing practice of allowing salmon to pass upstream to conserve the species and allow an adequate supply for Tribes living further upstream); Nez Perce Tribe Department of Fisheries Resources Management, Department Management Plan 2013-2028, at 13 (July 17, 2013) ("Fishing 'regulations' occurred at the local scale (tribal band/clan) according to traditional laws put in place to ensure that vital needs of the people were met and still allow fish to complete their life cycle").*

The salmon returned in large numbers for millennia, serving as the primary source of protein and other nutrients for the people who lived along and came to the salmon's migratory routes. The estimates of average total historical run-size of salmon and steelhead vary, with a low estimate of 5 million and a high estimate of 16.3 million.²¹ Millions of those salmon migrated upstream hundreds of river miles. The historic total average run of salmon and steelhead above what is now Grand Coulee Dam is estimated at 2.6 to 3.7 million.²² More than 1 million Spring/Summer Chinook are estimated to have returned annually to the Upper Snake River Basin, to say nothing of the Fall Chinook, steelhead, and sockeye that once migrated to the now blocked basin.²³

The Meyer Report estimates Tribal harvest for the treaty Tribes²⁴ before non-Indigenous settlement as ranging from 2.5 million to 5.6 million pounds annually depending on the Tribe and between 1.3 million and 2.4 million pounds in the mid-1800s.²⁵ The Shoshone-Bannock Tribes estimate that their "peoples consumed approximately 700 pounds of salmon per person annually, prior to the development of the [federal dams and reservoirs]."²⁶ The best available data for the Upper Columbia United Tribes²⁷ estimates that historically the total average annual consumption of salmon and steelhead was about 644,000.²⁸ The Spokane likely consumed around 132,000 salmon and steelhead annually (1.4 to 2.4 million pounds), with the Coeur d'Alene consuming around 124,000 salmon and steelhead annually (1.3 to 2.3 million pounds).²⁹ At the Kettle Falls area alone, it is estimated that the catch was between 90,000 and 120,000 fish annually and up to 10 tons of fish per day.³⁰

While salmon is the most significant First Food from a cultural and nutritional perspective for most Basin Tribes, other First Foods also are essential to Tribal identity and sustenance. The role of salmon does not take away from the importance of all First Foods and the endurance of the Tribes' commitments to care for these resources. As told by the Colville:

Since the beginning of time, the foods eaten by Indian people living along the rivers of the Northwest were common amongst all tribes. Fish, game, roots, berries, even moss and the living layer of some trees were a central part of life. The rhythms of life at that time were based on where and when these foods were available. [...] [Salmon] was the major food that people depended on for life, feeding the body, mind, and soul.³¹

²¹ National Marine Fisheries Service, Phase 2 Report of the Columbia Basin Partnership Task Force, Marine Fisheries Advisory Committee, *A Vision for Salmon and Steelhead: Goals to Restore Thriving Salmon and Steelhead to the Columbia River Basin* 44 (Oct. 2020) [hereinafter Columbia Basin Partnership Phase 2 Report].

²² Joint Paper of the Columbia Basin Tribes & First Nations: Fish Passage & Reintroduction into the U.S. & Canadian Upper Columbia Basin, app. Two at 33 (2015) (citing Scholz, et al., supra note 20).

²³ See Upper Snake River Tribes Foundation, Loss of Salmon and Steelhead in the Upper Snake River Basin Report 17 (May 31, 2023).

²⁴ The Confederated Tribes and Bands of the Yakama Nation, the Confederated Tribes of the Umatilla Indian Reservation, the Confederated Tribes of the Warm Springs Reservation of Oregon, the Nez Perce Tribe, and Shoshone-Bannock Tribes of the Fort Hall Reservation. See Section II(B)(i) for further information.

²⁵ Meyer Report, supra note 8, at 3.

²⁶ Shoshone-Bannock Tribes, Tribal Perspectives on CRSO Draft EIS, at 5 (2019).

²⁷ Coeur d'Alene Tribe of Indians, Confederated Tribes of the Colville Reservation, Kalispel Tribe of Indians, Kootenai Tribe of Idaho, and Spokane Tribe of Indians.

²⁸ Joint Paper of the Columbia Basin Tribes & First Nations: Fish Passage & Reintroduction into the U.S. & Canadian Upper Columbia Basin, app. Two at 33 (2015).

²⁹ Id. at 32.

³⁰ *Id.* at 33; General Land Office, Lewis P. Beach surveyor, Township 34 N. R 39 E. Willamette Meridian, Sept. 28, 1869 (scanned document provided by Guy Moura, Colville Tribes History & Archaeology Program).

³¹ Salmon and Our People: The Chief Joseph Dam Fishery Story (Mark Anderson dir., 2013).

The Columbia River ecosystem supported all First Foods, from fish and game to roots and berries, and the Tribes managed the complex ecosystem to ensure their survival. For instance, Pacific lamprey – an ancient species that evolved 450 million years ago – is another significant First Food. ³² Lamprey were once-abundant in the Columbia River and tributaries throughout much of the Basin. They were a staple of Tribal members' diets and included in feasts and ceremonies. "The [T]ribal people used the eel for food and medicine, and many stories and legends surrounding the eel were passed down from generation to generation." White sturgeon are another important First Food that are biologically tied to Pacific lamprey and hold cultural significance. Deer and different game provided Tribes with a source of subsistence, especially in the months when fish harvests were low, as well as material for Tribal clothing. Tribes also held annual ceremonies for roots and berries and travelled seasonally to dig and harvest. ³⁴ Dried roots and berries supplemented dried meats to provide a balanced sustenance of nutrients during the winter months. ³⁵ Still today, "the roots symbolize sustenance and connection to the land and are gathered in a manner deeply respectful of tradition and nature."

Seasonal rounds reflected the importance of these food sources and were a direct result of traditional science, resource management, and policies. Natural falls in the Columbia River and its tributaries, where salmon were easier to harvest, were cornerstones of the Tribes' cultural traditions, meeting places for the Basin's Tribes, and centers of trade. Two of the most important on the Columbia mainstem were Celilo Falls on the lower Columbia and Kettle Falls on the upper Columbia. Tribal fishers gathered at numerous falls on the tributaries as well. For example, fishing at Shoshone Falls, the historic upper reach of salmon on the Snake River, played important cultural roles for the Shoshone-Bannock and other regional tribes.³⁷

Celilo Falls was "a place of wonder. A symphony of nature, the river was in constant motion." Since time immemorial, "Native men climbed onto the wood scaffolds and reached into the river with long poles that had nets on the ends. Using these dip nets, they caught migrating salmon." The salmon and the act of harvest were grounded in tradition and spirituality. "Those who fished at Celilo were a community of people dedicated to their culture and to the common good of all." And at the same time, like other places where fishers gathered, it became much more than a fishing site.

Flores, Lola et al., Earth Economics, *The Value of Natural Capital in the Columbia River Basin: A Comprehensive Analysis* 95 (2017); The Lost Fish: The Struggle to Save Pacific Lamprey (Jeremy Monroe & David Herasimtschuk dirs., 2015).

³³ Columbia River Inter-Tribal Fish Commission, *Tribal Pacific Lamprey Restoration Plan for the Columbia River Basin*, at iii (2011).

³⁴ Ortolano, Leonard & Katherine Kao Cushing, *Grand Coulee Dam and the Columbia Basin Project USA, a case study for World Commission on Dams* 72 (2000). *See also* Jill-Marie Gavin, CRITFC Communications, *Annual Nixyaawii Root Feast Celebrated on Umatilla Indian Reservation* (Apr. 29, 2024), https://critfc.org/2024/04/29/annual-nixyaawii-root-feast-celebrated-on-umatilla-indian-reservation/ (describing the modern celebration of the "2024 Nixyaawii Root Feast, a deeply significant tradition for the Cayuse, Umatilla, and Walla Walla people").

³⁵ See, e.g., Ray, Verne F., Ethnic Impacts of the Events Incident to Federal Power Development on the Colville and Spokane Indian Reservations 41 (1977).

³⁶ Jill-Marie Gavin, CRITFC Communications, *Annual Nixyaawii Root Feast Celebrated on Umatilla Indian Reservation* (Apr. 29, 2024).

³⁷ Northwest Power Planning Council, *Compilation of Information on Salmon and Steelhead Losses in the Columbia River Basin* 62–63 (March 1986).

³⁸ Joseph C. Dupris, Kathleen Hill, & William H. Rodgers, *The Si'lailo Way: Indians, Salmon and Law on the Columbia River* 4 (2006).

³⁹ Id. at 10.

⁴⁰ *Id.*

The area "was a place of phenomenal pleasure and excitement, with plenty of food, conviviality, flirtation, gaming and gambling, trading and marketing." The travel, trade and commerce at Celilo Falls resulted in the area being described as the "Great Mart of all this Country" in the Lewis and Clark journals, and as the "Wall Street of the West" more recently.



Figure 5: Fishing at Celilo Falls. Source: Library of Congress.

At Kettle Falls, around 1,000 to 2,400 Indian people gathered seasonally to fish and participate in the activities at the falls.⁴³ Like Celilo and other natural falls on the rivers, Kettle Falls was a hub for all aspects of life, from spiritual tradition to social and economic activity. Each year, the First Salmon Ceremony took place at Kettle Falls, underscoring its spiritual importance. Salmon chiefs who were members of the Colville Tribe managed the fishery that was used by many Tribes, including the Spokane, Coeur d'Alene, and Kalispel.⁴⁴ "[A]ll people received their fair share of the salmon to be eaten fresh and to be dried for winter food."⁴⁵ Many other regional Tribes who did not partake in the fishing visited the site for trade.

Although the Tribes migrated seasonally across their vast aboriginal territories, countless generations lived, thrived, and later were buried on the banks of the Columbia River and its tributaries. As the Shoshone-Bannock explain, according to a Tribal reasoning of the cycle of life, the people are buried along the waterways of the salmon in order to give back what the people are made up of: water, salmon, roots, and berries. The historical record makes apparent the paramount importance of the rivers, as well as the natural resources reliant on the rivers, in each of the Tribes' original territories. This fact is no less obvious in the Tribes' negotiations with the United States in the 1800s and their reservation of fishing rights.

⁴¹ Id.

⁴² Journals of the Lewis and Clark Expedition (Gary E. Moulton, ed.), April 16, 1806, at https://lewisandclarkjournals.unl. edu/item/lc.jrn.1806-04-16#ln31041612 (last visited May 5, 2024); Expressing the sense of the House of Representatives concerning the 50th anniversary of the flooding of Celilo Falls, H. Res. 217, 110th Cong. (April 17, 2007).

⁴³ Scholz et al., *supra* note 20, at 27. The Confederated Tribes of the Colville Reservation History & Archaeology Department notes 2,400 was likely closer to median.

⁴⁴ Id. at 27.

⁴⁵ The Kettle Falls Fishery (Christopher Horsethief, Skydog Records dir., 2003).

B. Sovereign rights to access and harvest salmon and other natural resources

The federally recognized Tribal Nations in the Columbia River Basin are independent sovereigns with unique rights. Primary among these rights for the purposes of this report are Tribes' hunting, fishing, and gathering rights, as well as Tribal rights to manage and regulate these activities. Both treaty and executive order Tribes have the exclusive right to hunt and fish on their respective reservations, including Tribal regulation of these activities. Additionally, the treaty Tribes retained significant off-reservation hunting and fishing rights. Hunder the exercise of treaty rights to harvest, "the treaty Indians, having an absolute right to [the Indian fishery], are entitled to a fair share of the fish produced by the Columbia River system. The Yakama, Nez Perce, Warm Springs, and Umatilla are legally recognized as co-managers, with management interests equal to the interested state parties of the Columbia River Fishery. The Federal Government's relationship with Tribal Nations includes a general trust responsibility to protect each of these rights, and when appropriate, take action to ensure Tribes can fully exercise these rights.

i. Protected treaty rights, including rights to harvest on- and off-reservation

Six Tribes in the Basin signed treaties with the United States. Four of those Tribes—the Confederated Tribes and Bands of the Yakama Nation, the Confederated Tribes of the Umatilla Indian Reservation, the Confederated Tribes of the Warm Springs Reservation of Oregon, and the Nez Perce Tribe—signed treaties with the United States government in 1855 that reserved on- and off-reservation fishing, gathering, and hunting rights. ⁵⁰ In 1868, the Shoshone-Bannock Tribes also reserved on- and off-reservation rights in the Fort Bridger Treaty. ⁵¹ Although this report does not specifically address the Confederated Salish and Kootenai Tribes, they also reserved fishing, gathering, and hunting rights in the 1855 Hell Gate Treaty. ⁵²

The 1855 treaties include the exclusive right to take fish on and bordering reservations; the right to take fish at usual and accustomed places off-reservation in common with non-Tribal members; and the right to hunt and gather on open and unclaimed lands. The 1855 treaties contain nearly identical language:

⁴⁶ See, e.g., Treaty with the Yakima, June 9, 1855, art. III, 12 Stat. 951; see also Sohappy v. Smith, 302 F. Supp. 899 (D. Or. 1969); United States v. Washington, 384 F. Supp. 312 (W.D. Wash. 1974), aff'd, 520 F.2d 676 (9th Cir. 1975).

⁴⁷ Sohappy, 302 F. Supp. at 911.

⁴⁸ *Id.* at 912 (describing a basis for co-management status as the "state must recognize that the federal right which the Indians have is distinct from the fishing rights of other over which the state has a broader latitude of regulatory control and that the [T]ribal entities are interested parties to any regulation affecting the treaty fishing right"). Treaty-based fishery co-management was acknowledged in *United States v. Washington*, 384 F. Supp. 312, and sub-basin co-managers are identified in the *U.S. v. Oregon* fishery management agreements, *U.S. v. Oregon*, Civ. No. 68-513, Dkt. 2607-1 (D. Or.).

⁴⁹ *E.g.*, *Sohappy*, 302 F. Supp. at 904 (United States brought the companion case, *United States v. Oregon*, on its own behalf and on behalf of the treaty Tribes); *Northwest Sea Farms v. United States Army Corps of Eng'rs*, 931 F. Supp. 1515, 1518 (W. D. Wash. 1996) (upholding Army Corps' denial of private fish farm operator's permit that would have impinged Lummi Nation's treaty fishing rights).

Treaty with the Nez Perces, art. III, June 11, 1855, 12 Stat. 957; Treaty with the Walla-Walla, Cayuse, etc., June 9, 1855, art. I, 12 Stat. 945 (Confederated Tribes of the Umatilla Reservation); Treaty with the Yakima, June 9, 1855, art. III, 12 Stat. 951; Treaty with Indians in Middle Oregon, June 25, 1855, art. I, 12 Stat. 963 (Confederated Tribes of the Warm Springs Reservation).

⁵¹ Treaty with the Eastern Band Shoshone and Bannock, art. IV., July 3, 1868, 15 Stat. 673.

⁵² Treaty with the Flatheads, etc., art. III, July 16, 1855, 12 Stat. 975.

The exclusive right of taking fish in all the streams where running through or bordering said reservation is further secured to said Indians: as also the right of taking fish at all usual and accustomed places in common with citizens of the territory, and of erecting temporary buildings for curing, together with the privilege of hunting, gathering roots and berries, and pasturing their horses and cattle upon open and unclaimed land.⁵³

The following decade, the Shoshone-Bannock Tribes reserved in the Fort Bridger Treaty harvest rights on unoccupied lands:

The Indians herein named...shall have the right to hunt on the unoccupied lands of the United States so long as game may be found thereon, and so long as peace subsists among the whites and Indians on the borders of the hunting districts.⁵⁴

The Supreme Court of Idaho affirmed the express right to hunt in the Fort Bridger Treaty means both the right to hunt and fish, based on how the Shoshone-Bannock Tribes used the word "hunt" and would have understood it to mean during treaty negotiations.⁵⁵ The Fort Bridger Treaty, by establishing a reservation as the Tribes' permanent homeland, implicitly reserved exclusive harvest rights on-reservation for the Tribes.

These reserved rights were fundamental to the Tribal representatives' willingness to sign the treaties and limit their lands to reservations. Because the treaties and reservations massively reduced the Tribes' territories, the Tribes understood that retaining these rights "was essential to their material and cultural survival." A Nez Perce Tribal member reflected that their ancestors were not reserving specific rights as they are understood today, but rather preserving Tribal members' ways of life. As the United States Supreme Court affirmed, these rights "were not much less necessary to the existence of the Indians than the atmosphere they breathed." The Tribes sought reassurances regarding the extent of these rights during negotiations. In the words of Warm Springs leader Delbert Frank, Sr.:

The length of time a fishery's planned is mentioned in the negotiations of the treaties. They ask our people, 'How long?' when we said 'we are going to cede certain lands to you, but we are going to reserve which is ours already. Nothing you're giving me, but we're going to reserve what's there already, which is the salmon.' They named all the foods areas and the water. 'That we will reserve.' And they ask them, 'How long?' They said, 'Forever,' which is a very long, long time.⁵⁸

⁵³ Treaty with the Nez Perces, art. III, June 11, 1855, 12 Stat. 957. See also Treaty with the Walla-Walla, Cayuse, etc., June 9, 1855, art. I, 12 Stat. 945; Treaty with the Yakima, June 9, 1855, art. III, 12 Stat. 951; Treaty with Indians in Middle Oregon, June 25, 1855, art. I, 12 Stat. 963.

⁵⁴ Fort Bridger Treaty, art. IV., July 3, 1868, 15 Stat. 673.

⁵⁵ State v. Tinno, 94 Idaho 759, 763 (1972). See also Sammy Matsaw, Dylan Hedden-Nicely, & Barbara Cosens, Cultural Linguistics and Treaty Language, 50 Envtl. L. 415, 437 (2020) (describing a need for better understanding of Indigenous languages when interpreting treaties and quoting Fort Hall Business Council Member and then-Fish and Wildlife Manager Sammy Mastaw, noting that elders understood the Shoshone and Bannock words to mean "more than that, it meant to gather your things up, go out on the land, camp, and gather wild foods").

⁵⁶ Meyer Report, supra note 8, at 145.

⁵⁷ United States v. Winans, 198 U.S. 371, 381 (1905).

⁵⁸ Meyer Report, *supra* note 8, at 34 (quoting Delbert Frank, Sr.).

By the mid-1800s, when the first treaties in the Basin were ratified and reservations established, ancestors of Nez Perce, Yakama, Umatilla, and Warm Springs had long-established fishing spots and villages on the lower Snake River and throughout the lower and mid-Columbia areas, and the Shoshone-Bannock Tribes traditionally fished further up the Snake river and its tributaries, including below Shoshone Falls. ⁵⁹ The Tribes would not have sacrificed access to these stations and fisheries, and historical records make clear that treaty negotiators understood the importance of salmon and fishing to the Tribes and intended the Tribes to have continued access. ⁶⁰ According to the Umatilla, "[w] ithout the promise that these rights and resources would be protected, our ancestors would not have signed the Treaty." ⁶¹ Similarly, for the Shoshone-Bannock Tribes, "[e]xercise of these traditional use rights ... reaches to the essence of the Shoshone-Bannock culture and subsistence economy. These traditional activities remain sacred to the Shoshone-Bannock today, just as they were" thousands of years ago. ⁶²

The United States Constitution provides that these treaties are "the supreme Law of the Land."⁶³ Upholding the legal supremacy of these rights, however, did not come without significant work by and costs to the treaty Tribes. As non-Indigenous settlers and commercial fishing operations increased in the Pacific Northwest, the states, federal government, and private parties unlawfully restricted the 1855 Treaty Tribes' exercise of their reserved rights, including their rights to fish at their "usual and accustomed" places. The confrontations started not long after the treaties were signed, leading the Yakama Nation to bring a lawsuit to protect their fishing access in the late 1800s, and winning a seminal Supreme Court case upholding their treaty rights in 1905, *United States v. Winans*. ⁶⁴ The Court held that treaties represented a grant to the United States, and not the creation or grant of rights from the United States to a Tribe. ⁶⁵ In this way, each 1855 Treaty Tribe reserved the inherent right to access all their usual and accustomed fishing places, which under applicable federal law imposes a servitude on all lands ceded through treaty by the Tribe. ⁶⁶ Even so, a usual and accustomed fishing site need not be located in the treaty-territory ceded by the Tribe, as one Tribal member "likened the river to a great table where all the Indians came to partake."⁶⁷

⁵⁹ E.g., id. at 63–64; Hunn, Eugene, Anthropological Study of Yakama Tribe: Traditional Resource Harvest Sites West of the Crest of the Cascades Mountains in Washington State and below the Cascades of the Columbia River, 72–74 (2003) (describing usual and accustomed sites of the Yakama Nation).

⁶⁰ Sohappy, 302 F. Supp. at 904–906; Washington v. Washington State Commercial Passenger Fishing Vessel Ass'n, 443 U.S. 658, 676–677 (1979).

Meyer Report, *supra* note 8, at 37 (quoting Confederated Tribes of the Umatilla Indian Reservation, 1995. Identification of Trust Resources: System Operation Review. Department of Natural Resources, April 27, pp. 7-8.).

⁶² Id. at 115-116.

⁶³ U.S. Constitution Art. VI, cl. 2; cf. Winans, 198 U.S. at 382 (confirming state-issued land patents are subject to the Yakama Nation's treaty just like they are subject "to the other laws of the land").

⁶⁴ Fay Cohen, Treaties on Trial: The Continuing Controversy Over Northwest Indian Fishing Rights 54–55 (1986).

⁶⁵ Winans, 198 U.S. at 381.

⁶⁶ See, e.g., id.; Seufert Bros. v. United States, 249 U.S. 194, 199 (1919); Menominee Tribe of Indians v. United States, 391 U.S. 404, 411 (1968).

⁶⁷ Cohen's Handbook of Federal Indian Law, § 18.04[2][e][ii], at 1169-1170 (2012) (quoting *Seufert Bros. Co. v. United States*, 249 U.S. at 197). Specific to off-reservation usual and accustomed fishing sites, "some tribes may have primary rights in particular areas." *Id.* (quoting *United States v. Washington*, 626 F. Supp. 1405, 1486 (W.D. Wash. 1985)).

The court battles continued after *Winans*, as the states passed regulations refusing to recognize the treaty Tribes' rights and Tribal members stood firm in their fishing. In 1942, the Yakama Nation won again at the Supreme Court, in a decision that prohibited the state from subjecting treaty rights to license fees. In 1958, the Umatilla sued Oregon after the state arrested Tribal fishermen exercising their off-reservation rights, alleging violation of state regulation. The district and appellate courts sided with the Tribe and affirmed their treaty rights. Although the Tribes won other decisions, many represented incremental progress, and not all decisions went in their favor. On multiple occasions in the early 20th century, for example, the Washington Supreme Court upheld convictions of Yakama members for purported violations of state fishing laws. At times, the federal government was a roadblock to progress by taking positions in court that opposed the Tribes' arguments.



Figure 6: Oregon State Police seize a fishing net from Nez Perce Tribal member Ipsus Knute V. Source: Nez Perce Tribe.

The turmoil hit an apex in the 1960s and 1970s, as the salmon population declined markedly. State police targeted both Columbia River Basin and Puget Sound Tribal members exercising their fishing rights, including by tear gassing, beating, arresting, and jailing Tribal fishers. 72 The treaty Tribes held their ground, defying law enforcement and continuing to organize "fish ins" and other demonstrations that garnered public support.73 In 1968, after Oregon again arrested many Tribal fishermen, fourteen members of the Yakama Nation filed a lawsuit against the State of Oregon that would ultimately play a key role in validating the Tribes' reserved treaty rights.74 Federal court litigation in Washington followed quickly. The late Professor Charles Wilkinson captured the events:

The breakthrough came down in Oregon first. In the summer of 1968, as part of the extensive crackdowns by Oregon and Washington fish and game officials on Indian fishing, Oregon officers arrested thirteen Yakama fishermen, including David Sohappy, for fishing on the Columbia River

⁶⁸ Tulee v. State of Washington, 315 U.S. 681, 685 (1942).

⁶⁹ Maison v. Confederated Tribes of Umatilla Indian Reservation, 314 F.2d 169, 170 (9th Cir. 1963).

⁷⁰ See, e.g., State v. Towessnute, 89 Wash. 478, 481 (1916); State v. Wallahee, 143 Wash. 117 (1927). The Washington Supreme Court recently vacated these decisions. See, e.g., State v. Wallahee, 2024 Wash. LEXIS 251 (May 16, 2024).

⁷¹ Michael C. Blumm & Cari L. Baermann, *The Belloni Decision and Its Legacy: United States v. Oregon and Its Far-Reaching Effects After a Half-*Century, 50 Envtl. L. 347, 360–361 (2020).

⁷² See id at 363; Northwest Treaty Tribes, Looking Back at the Fish Wars 50 Years Later, https://nwtreatytribes.org/looking-back-at-the-fish-wars-50-years-later/ (Nov. 3, 2020).

⁷³ Michael C. Blumm & Cari L. Baermann, *The Belloni Decision and Its Legacy: United States v. Oregon and Its Far-Reaching Effects After a Half-*Century, 50 Envtl. L. 347, 363 (2020).

⁷⁴ Sohappy, 302 F. Supp. 899.

with gillnets contrary to state law. The individual Yakama [T]ribal members filed a lawsuit, *Sohappy v. Smith*, against Oregon State Fisheries officials to enjoin the arrests. In addition, and critically, during the mid-1960s United States Attorney for the District of Oregon Sid Lezak and George Dysart of the Interior Solicitor's Office in Portland had become greatly disturbed over the rapid increase of state arrests of Indian fishermen Their approach called for a court-ordered [T]ribal "fair and equitable share" of all fish harvested by [T]ribal members at their "usual and accustomed" off-reservation fishing places. And in September 1968, after working with Owen Panner and other [T]ribal attorneys, the United States brought the case, *United States v. Oregon*, as plaintiff and, as trustee, on behalf of the Warm Springs, Yakama, Umatilla, and Nez Perce tribes. The four tribes then filed to intervene on their own behalf and were recognized as parties in the litigation. *United States v. Oregon* was soon consolidated with *Sohappy v. Smith* because the issues in both cases were so similar.⁷⁵

In 1969, Judge Belloni agreed with the Tribal plaintiffs in *Sohappy* and recognized an "absolute right" of the Yakama, Nez Perce, Umatilla, and Warm Springs Tribes to a "fair share" of the harvestable fish. The court later clarified a "fair share" to match the presumptive 50% portion established as a matter of law in Judge Boldt's decision regarding the Puget Sound treaty Tribes. Additionally, proposed state or federal regulation of the treaty fisheries may only be imposed for reasonable and necessary fisheries conservation purposes; regulations may not discriminate against Tribal fishers and must utilize the least restrictive means available for the conservation purpose.

Judge Belloni's decision did not quell the controversy. The state agencies "resist[ed] implementation," and "in most years few salmon reached the [T]ribes. Some Oregon non-Indian fisherman and buyers defied the ensuing court orders that limited non-Indian fishing[.]" Judge Belloni also received severe criticism:

The media reported extensive and angry public opposition to it. The commercial fishing interests fueled the fire. The sportsfishermen were probably even more effective. The Northwest Steelheaders had articulate and hard-hitting representatives and wide influence with the media The public outrage was even greater in western Washington after the Boldt decision. Oregon never did go overboard nearly as much as Washington did, although numerous bumper stickers with a "Screw Boldt and Slice Belloni" message were popular in both states.⁸⁰

⁷⁵ Charles Wilkinson, The Belloni Decision: A Foundation for the Northwest Fisheries Cases, the National Tribal Sovereignty Movement, and an Understanding of the Rule of Law, 50 Envtl. L. J. 331, 341–342 (2021).

⁷⁶ Sohappy, 302 F. Supp. at 911. The Shoshone-Bannock Tribes have filed a complaint in intervention but have not taken any action on this complaint. See All Parties' Joint Motion and Stipulated Order Approving 2018-2027 United States v. Oregon Management Agreement at 6, No. 3:68-cv-00513-MO, ECF 2607-1 (D. Or. Feb. 26, 2018) [hereinafter 2018-2027 Management Agreement].

⁷⁷ See Fishing Vessel, 443 U.S. 686–687.

⁷⁸ See, e.g., Tulee v. State of Washington, 315 U.S. 681, 684 (1942); Maison v. Confederated Tribes of the Umatilla, 314 F.2d 169; United States v. Oregon, 302 F. Supp. 899; Puyallup Tribe v. Washington Game Dep't, 433 U.S. 165 (1977).

⁷⁹ Fay Cohen, Treaties on Trial: The Continuing Controversy Over Northwest Indian Fishing Rights 121–122 (1986).

⁸⁰ Charles Wilkinson, The Belloni Decision: A Foundation for the Northwest Fisheries Cases, the National Tribal Sovereignty Movement, and an Understanding of the Rule of Law, 50 Envtl. L. J. 331, 341 (2021).

The Columbia Basin fishery managers are those tribes and states with legal authority to regulate and manage fishery harvest in the Columbia River and its tributaries.⁸¹ In the years following the decision, "state management of the fish runs often occurred on a run-by-run basis. This ad hoc management forced the [T]ribes to ask the court for emergency injunctions[.]"⁸² Although the court ordered the parties to develop a cooperative fish management plan, decades of litigation and extensive negotiations on the plans followed.⁸³ In 2008, the parties agreed to a 10-year plan to further the co-management framework, and they again agreed to another similar plan from 2018 to 2027.⁸⁴

Thus, the courts have consistently affirmed and the current management plans make clear that treaty rights cannot be read as empty promises, nor as merely rights to equal opportunities. Instead, the Supreme Court and lower courts have sought to ensure fulfillment of the reserved fishing rights. In 2017, for example, the Ninth Circuit further held, and the Supreme Court affirmed, that the state of Washington could not render these rights meaningless by substantially degrading Tribal fisheries. The court of t

ii. Protected on-reservation harvest rights

The establishment of the Tribal Nations' reservations, whether through treaties or executive orders, preserved lands for their exclusive use, including retention of exclusive on-reservation hunting, fishing, and gathering rights.⁸⁸ This fact is true regardless of whether the documents establishing the reservation expressly preserves these rights.⁸⁹

In 1871, the United States decided to stop negotiating treaties with Tribes and instead used executive orders to establish reservations, again significantly smaller than the Tribes' original territories. Pursuant to this change in policy, executive orders set aside reservation lands to serve as homelands for the Colville, Spokane, and Coeur d'Alene. While the Tribes were forced to cede millions of acres of their aboriginal lands, the lands reserved for these Tribal homelands were in places that would support the survival of the Tribes, and each executive order provided the Tribes with exclusive on-reservation harvest rights. As a federal court explained, "[O]ne of the purposes for creating the Spokane Indian Reservation was to insure [sic] the Spokane Indians access to fishing areas and to fish for food." The Coeur d'Alene also negotiated with the United States specifically "to make adequate

⁸¹ See 2018-2027 Management Agreement, supra note 76.

⁸² Michael C. Blumm & Cari L. Baermann, *The Belloni Decision and Its Legacy: United States v. Oregon and Its Far-Reaching Effects After a Half-*Century, 50 Envtl. L. 347, 373 (2020).

⁸³ Id. at 374-376.

⁸⁴ *Id.* at 376–378; 2018-2027 Management Agreement, *supra* note 76.

⁸⁵ Fishing Vessel, 443 U.S. at 678–679 (rejecting proposition that the Tribes would view the treaty rights "as merely the chance, shared with millions of other citizens, occasionally to dip their nets into the territorial waters"); see also id. at 676 (finding it "inconceivable that either [treating] party deliberately agreed to authorize future settlers to crowd the Indians out of any meaningful use of their accustomed places to fish").

⁸⁷ United States v. Washington, 853 F.3d 946, 965 (2017), aff'd Washington v. United States, 584 U.S. 837 (2018). See also, e.g., United States v. Washington, 506 F. Supp. 187, 203 (W.D. Wash. 1980) ("The most fundamental prerequisite to exercising the right to take fish is the existence of fish to be taken.").

⁸⁸ See Cohen's Handbook of Federal Indian Law, § 18.03[1], at 1158–1159 (2012).

⁸⁹ *Menominee Tribe*, 391 U.S. at 405–406 (holding that the "language 'to be held as Indian lands are held' includes the right to fish and hunt"); *Parravano v. Masten*, 70 F.3d 539, 544 (9th Cir. 1995) (explaining "that the grant of hunting and fishing rights is implicit in the setting aside of a reservation 'for Indian purposes'").

⁹⁰ United States v. Anderson, 591 F. Supp. 1, 5 (E.D. Wash. 1982), rev'd on other grounds, 736 F.2d 1358 (9th Cir. 1984).

provision for fishing and other uses of important waterways."⁹¹ As explained by the Colville, "[w]e are salmon people, and our reservation was situated in this location in [1872] to serve as a homeland where we could always access the salmon on which our people relied for their culture, subsistence and economy."⁹² The Wenatchi Tribe, members of which are now among the constituent Tribes of the Confederated Tribes of the Colville Reservation, also have non-exclusive off-reservation fishing rights at Wenatshapam.⁹³

Boundary "adjustments," changes in federal law and policy, and subsequent agreements with the government often significantly reduced the Tribes' reserved land base and further diminished their access to salmon and other subsistence resources. Following the passage of the General Allotment Act in 1887, and through the early 1900s, the federal government systematically broke up the already-reduced Tribal lands, dividing reservations into parcels for individual ownership instead of collective control and offering the remaining land as "surplus" to non-Indians.⁹⁴ The Allotment Era was part of the government's policy aimed at dispossessing Tribes of their territories and assimilating Indian people, including by removing Indian children from their homes and reservations to attend government-supported boarding schools⁹⁵

By the end of the Allotment Era, Tribal land ownership on the Coeur d'Alene reservation was less than 20 percent of the Reservation. Additionally, in 1891, the United States obtained a cession of over a million acres of the northern part of the original Colville reservation to open the lands to private settlement, though the Colville reserved off-reservation rights to fish in common with non-Indians on unallotted lands in the ceded territory. The Allotment Era and boundary changes also affected the treaty Tribes. The Meyer Report concluded that together, the Nez Perce, Umatilla, Warm Springs, Yakama, and Shoshone-Bannock Tribes owned only 22% of the original lands reserved in their treaties, following allotment and other boundary changes. Losing ownership of these reservation lands had widespread consequences for Tribes that continue today, although all land within reservations regardless of ownership retains its status as "Indian County" under federal law. However, the status can complicate management of Tribal natural resources in some situations.

⁹¹ Idaho v. United States, 533 U.S. 262, 266 (2001). See also United States v. Idaho, 95 F. Supp. 2d 1094, 1106 (D. Idaho 1998) (United States delegation "understood that the capture of fish was an essential source of the Indians' food supply") (quoting Muckleshoot Indian Tribe v. Trans-Canada Enterprises, Ltd., 713 F.2d 455, 458 (9th Cir. 1983)).

Onfederated Tribes of the Colville Reservation, Comment Letter on the CRSO Draft EIS, at 2 (Apr. 13, 2020) (year modified for accuracy). See also Colville Confederated Tribes v. Walton, 647 F.2d 42, 47–48 (9th Cir. 1981) (observing that "the specific purposes of an Indian Reservation . . . are often unarticulated"; that "the general purpose, to provide a home for the Indians, is a broad one and must be liberally construed"; and that the Executive Order setting aside the Colville Reservation included agriculture and traditional fisheries purposes).

⁹³ United States v. Confederated Tribes of the Colville Indian Reservation, 606 F.3d 698, 714 (9th Cir. 2010).

⁹⁴ For a brief overview of the Allotment Era and subsequent attempts to remedy Indian land fractionation, see generally Department of the Interior, Indian Affairs, History of Indian Land Consolidation, https://www.bia.gov/guide/history-indian-land-consolidation (last visited May 28, 2024).

⁹⁵ For more information on Federal Indian boarding schools, see Bryan Newland, Assistant Secretary for Indian Affairs, Department of the Interior, Federal Indian Boarding School Initiative Investigative Report (2022), https://www.bia.gov/sites/default/files/dup/inline-files/bsi_investigative_report_may_2022_508.pdf.

⁹⁶ Coeur d'Alene Tribe, Tribal Perspective Document on the CRSO Draft EIS, at 3 (Apr. 30, 2019).

⁹⁷ Antoine v. Washington, 420 U.S. 194 (1975).

⁹⁸ Meyer Report, supra note 8, at 3.

^{99 18} U.S.C. § 1151.

Despite the tragic and disastrous history of dividing and reducing reservations, harvest rights retain legal force over time. The Indian Claims Commission, an independent body established by Congress to decide damages claims brought by Tribes against the government, ¹⁰⁰ found that the federal government acts contrary to its responsibility to Tribes where it has failed to adequately protect their on-reservation rights. The Colville asserted these rights as "claims based upon fair and honorable dealings that are not recognized by any existing rule of law or equity." ¹⁰¹ In its 1978 decision regarding the Colville's fisheries claim, the Commission found:

Claimants ability to subsist were dependent upon their right to fish, therefore, that right was of utmost importance in the establishment of a reservation for them. It thus became a moral obligation of the [federal government] inherent in its special relationship with these Indians to protect and maintain them in such a way that they might continue their fishing activities. [...] We hold as a matter of law that in the circumstances of this case, defendant was required to protect claimants' fishing right against all infringements.¹⁰²

C. Federal government's trust responsibilities to the Basin Tribes

The United States, "as a trustee for the Tribes, has a responsibility to protect their rights and resources." This means that each agency must "respect Indian [T]ribal self-government and sovereignty, honor [T]ribal treaty and other rights, and strive to meet the responsibilities that arise from the unique legal relationship between the Federal Government and Indian [T]ribal governments." These responsibilities adhere to express and implied rights and "extend to any federal government action." As the Solicitor of the Department of the Interior opined on actions relating to fisheries management, "as a general matter, all parties that manage the fishery, or whose actions affect the fishery, have a responsibility to act in accordance with the fishing rights of the Tribes. This may go beyond safeguarding their right to an appropriate share of the harvest on their reservation . . . to include a viable and adequate fishery from which to fulfill the Tribes' rights" 107

The United States must continue to make good on the promises that were foundational to the Basin Tribes and were secured and acknowledged in Treaties, legislation, and executive orders. Acting to protect Tribes' reserved rights remains consistent with the federal government's responsibilities under its treaty obligations and general trust responsibility to Tribes. The Department understands

¹⁰⁰ Indian Claims Commission Act, 60 Stat. 1049. The Indian Claims Commission existed from 1946 to 1978, after which undecided claims were transferred to the U.S. Court of Federal Claims. Although the Act provided broad grounds for recovery, the Commission's determinations were limited to monetary remedies.

¹⁰¹ Indian Claims Commission Act, § 2(5), 60 Stat. 1049, 1050.

¹⁰² Confederated Tribes of the Colville Reservation v. United States, 43 Ind. Cl. Comm. 505, 529 (1978). Congress ultimately ratified the Colville's settlement agreement. See Confederated Tribes of the Colville Reservation Grand Coulee Dam Settlement Act, Pub. L. 103-436 (Nov. 2, 1994).

¹⁰³ Klamath Water Users Protective Ass'n v. Patterson, 204 F.3d 1206, 1213 (9th Cir. 1999); see also Parravano, 70 F.3d at 549 (referring to the "recognized trust obligation to protect").

¹⁰⁴ Exec. Order No. 13175, § 3(a), 65 Fed. Reg. 67,249 (Nov. 9, 2000).

¹⁰⁵ Patterson, 204 F.3d at 1213 (referring to the responsibility in relation to implied reserved water rights); see also United States v. Adair, 723 F.2d 1394 (9th Cir. 1983) (confirming the existence and scope of implied reserved water rights of the Klamath Tribes, which were later at issue in Patterson).

¹⁰⁶ Pyramid Lake Paiute Tribe of Indians v. U.S. Dep't of Navy, 898 F.2d 1410, 1420 (9th Cir. 1990).

John D. Leshy, Solicitor, M-36979, *Opinion Regarding Fishing Rights of the Yurok and Hoopa Valley Tribes* 30 (1993) (internal citations omitted), https://www.doi.gov/sites/doi.opengov.ibmcloud.com/files/uploads/M-36979.compressed.pdf.

that honoring the government's trust responsibility and the sovereignty of Tribal Nations includes advancing equity and self-governance, correcting environmental injustices, and supporting Tribal Nations to ensure the spiritual, cultural, physical, and economic well-being of their members. For the Basin Tribes, this means prioritizing the restoration of the Columbia River Basin, its salmon, other First Foods, and plentiful natural resources that give meaning to these reserved rights and have sustained the Tribes since time immemorial.



Figure 7: Sockeye Salmon. Source: NOAA Fisheries.

II. Federal Dam Construction, Operations, and Mitigation Actions

In the late 1800s, settlers arrived in increasing numbers to the Columbia River Basin, and the resources the Tribes had relied on since time immemorial suffered under intensifying pressures. Industries built up to extract wealth from the Basin's resources, including salmon canneries, timber harvests, fur trading, hard-rock mining, and livestock grazing. Rapidly, these and other commercialized and extractive industries, including non-federal dam construction, degraded and took the resources upon which the Tribes depended for survival. Pederal construction of dams throughout the Columbia River Basin further damaged those resources, deepening the Tribes' loss for others' gain.

See, e.g., National Research Council, Managing the Columbia River 1, 27–28 (2004); Northwest Power and Conservation Council, *Columbia River History: Habitat*, https://www.nwcouncil.org/reports/columbia-river-history/habitat/ (last visited May 28, 2024).



Figure 8: Salmon canning. Source: Library of Congress.

A. Historical context

The influx of settlers to the region brought about radical change to the Tribes' homelands, ending abruptly the Tribes' careful use and stewarding of the rivers, lands, and natural resources to ensure long-term ecosystem health. 109 Commercial fishing started almost immediately, followed by widespread construction of canneries. By 1883, dozens of commercial canneries and 1,700 commercial fishing operations were converting Columbia River salmon to profit, often using extremely effective take methods such as fish wheels. 110 That year, the canneries shipped to market more than 30 million pounds of salmon.¹¹¹ Over the next three decades, the average annual harvest of Chinook in the lower Columbia River totaled 25 million pounds. 112 The Tribes and Tribal fishers consistently fought the encroachment of these developments on their rights, including before the United States Supreme Court. 113

At the same time, other entities began extracting different natural resources in the Columbia River Basin, often at levels that were detrimental to the rivers and the Basin's resources. Navigation interests started dredging the lower river in the 1860s. 114 Expansive logging of the forests changed many of the tributary streams and rivers that provided natal homes to salmon, sometimes causing impacts that remain today. 115 Mining also harmed important salmon bearing waterways, often in tandem with the logging that provided material to build the mining camps. At times, this mining had devastating effects on salmon habitat, especially through the practice of dredge mining. 116 And with non-Indigenous

See, e.g., Quaempts et al., supra note 9, at 4–6.

¹¹⁰ Northwest Power and Conservation Council, *Canneries*, https://www.nwcouncil.org/reports/columbia-river-history/canneries/ (last visited May 28, 2024); Northwest Power and Conservation Council, *Commercial fishing*, https://www.nwcouncil.org/reports/columbia-river-history/commercialfishing/ (last visited June 3, 2024) (noting that, "[o]f all the gear used to capture salmon and steelhead, the most notorious and efficient was the fish wheel").

¹¹¹ Northwest Power and Conservation Council, *Canneries*, https://www.nwcouncil.org/reports/columbia-river-history/canneries/ (last visited May 28, 2024).

¹¹² Id.

¹¹³ E.g., Winans, 198 U.S. 371; State v. Towessnute, 486 P.3d 111 (Wash. 2020).

United States Army, Chief of Engineers, Columbia River and Minor Tributaries, Vol. I, H. Doc. 103, 73d Cong., 1^{st} sess., at 25 (June 10, 1933) [hereinafter Columbia River 308 Report, Vol. I].

One logging practice—splash damming—had widespread and long-lasting effects on salmon habitat. The method entailed building a temporary dam to store water that, upon breach of the dam, would flush logs downstream. This method of transporting logs often had the effect of scouring rivers to bedrock, destroying the complex habitat salmon require to survive. See, e.g., U.S. Forest Service, Splash Dams and Log Drives: The Stream Remembers, https://www.fs.usda.gov/pnw/lwm/aem/docs/burnett/splash_dam_mapping_rmiller.pdf.

See, e.g., John Harrison, Northwest Power and Conservation Council, Once Dredged For Gold, The Yankee Fork is Making a Comeback (Sept. 10, 2015), https://www.nwcouncil.org/news/once-dredged-gold-yankee-fork-making-comeback/.

settlement came irrigated agriculture, including construction of small dams and ditches that blocked and entrained salmon. So began the dramatic decline of salmon and the consequent transfer of wealth from the Tribes to others.



Figure 9: Construction of Bonneville Dam. Source: Washington State University.

B. History of dam construction

As industry aggressively extracted profit from the Columbia River and its resources, the United States government began laying the groundwork to remake the river to serve purposes other than those on which the Tribes relied. Driven primarily by economic objectives both immediate and long-term, the United States designed and then constructed a system of dams of unprecedented scale. In less than a century, from the 1900s to 1970s, the system of dams forever modified the already stressed Columbia River ecosystem. The transformation from free-flowing river to a slow moving, regulated reservoir system further exacerbated the precipitous decline of Columbia River salmon returns that had begun in the early 1900s, culminating in the listing of numerous salmonid species under the Endangered Species Act (ESA) beginning

in the 1990s.¹¹⁷ Despite decades of efforts and an enormous amount of funding attempting to mitigate these impacts, salmon stocks remain threatened or endangered and continued operation of the dams perpetuates the myriad adverse effects.¹¹⁸

i. The Columbia River 308 Report

Damming the Columbia River began with President Theodore Roosevelt. In 1907, President Roosevelt appointed the Inland Waterways Commission to prepare "a comprehensive plan" for "the full and orderly development and control of the river system of the United States." His charge for the Commission: "every stream should be used to the utmost." 120

For a representation of the relationship between human population growth and salmon harvest, see Columbia Basin Partnership Task Force, Marine Fisheries Advisory Committee, Phase 1 Report, A Vision for Salmon and Steelhead 17, fig. 3 (2019).

See Confederated Tribes and Bands of the Yakama Nation, Confederated Tribes of the Umatilla Indian Reservation, Confederated Tribes of the Warm Springs Reservation, Nez Perce Tribe, State of Oregon, & State of Washington, *Columbia Basin Restoration Initiative* 17, n. 17 & 21, n. 19 (2023) [hereinafter Columbia Basin Restoration Initiative] (quoting Columbia River Inter-Tribal Fish Commission, *Overview of Columbia River USACE Fish Budget Needs* (2022), https://critfc.org/wp-content/uploads/2022/09/CRITFC-USACE-Fish-Budget_2022.pdf.).

¹¹⁹ See The Inland Waterways Commission, 25 Science: New Series 556 (Apr. 5, 1907) (reprinting Roosevelt's letter appointing members), https://www.jstor.org/stable/1633157?seq=1.

¹²⁰ U.S. Department of the Interior, Bureau of Reclamation, The History of Large Federal Dams 204 (2005) [hereinafter Large Federal Dams], (quoting U.S. Congress, Senate, Preliminary Report of the Inland Waterways Commission (Senate Docu-

While the Commission lasted only until the end of the Roosevelt Administration, in 1927, Congress furthered its charge by directing the U.S. Army Corps of Engineers to prepare surveys of rivers nationwide to determine the feasibility of developing hydroelectric power in combination with flood control, irrigation, and navigation. Known as the "308 Program," for the number of the House report that described the purpose of the surveys, these reports established the blueprints to transform river basins through the development of dams, including on the Columbia River and some of its major tributaries.

Consistent with Congress' directive and President Roosevelt's charge to the Inland Waterways Commission, the Columbia River 308 Report set forth a general plan to build dams to provide electric power and other services. ¹²² The Report proposed ten sites for the development of hydroelectric dams: Grand Coulee, Foster Creek, Chelan, Rocky Reach, Rock Island, Umatilla Rapids, John Day Rapids, The Dalles, and Warrendale. ¹²³ Each proposed development was unprecedented in scale and cost. ¹²⁴

Although hydroelectric power generation was the primary focus of plans for the Columbia River, the 308 Report also evaluated designs for navigation and irrigation. The authors described the potential for irrigation "on a large scale" that depended "on cheap power for pumping," meaning that irrigation itself would depend on hydroelectric power development. For navigation, the Report put forth what it called "Plan A," a proposal to develop progressively upstream navigation in tandem with the four lower most sites identified for hydroelectric power development. The Army Corps also prepared 308 reports for several major tributaries to the Columbia River, including the Snake, John Day, and Willamette, ach likewise charting plans to repurpose the rivers to serve other economic ends like power generation, navigation, irrigation, and flood control.

Despite their claimed comprehensiveness, the 308 reports for the Columbia River Basin did not consider Basin Tribes, their rights, or their reservations. The Columbia River 308 Report did not even acknowledge, for example, that construction of the dam at the Grand Coulee site would inundate lands of the Colville and Spokane Tribes, including portions of their reservations, let alone the sacred site of Kettle Falls. Nor did it recognize the numerous off-reservation villages, fishing locations, and burial sites that would be inundated elsewhere along the river. Tellingly, the only consideration given to Celilo Falls, another area of indescribable importance to the Yakama Nation, Nez Perce, Umatilla, and Warm Springs Tribes, was to recognize it as a "major obstacle to navigation." The report provided, at best, only scant attention to the fishery and other river resources that had for thousands of years served a critical role sustaining human life in the region. Across its nearly 2,000 pages, the Columbia River 308 Report hardly mentions fish, referring only to the importance of the commercial

ment No. 325), 60th Congress, 1st Session, 1908, iv-v).

¹²¹ Rivers and Harbors Improvements Act of 1927, Pub. L. 69-560, § 4 (Jan. 21, 1927).

¹²² Columbia River 308 Report, Vol. I, supra note 114, at 3, 6.

¹²³ *Id.* at 3, 12.

¹²⁴ *Id.* at 3.

¹²⁵ Id. at 12.

¹²⁶ *Id.* at 4.

¹²⁷ *Id.* at 9–10.

¹²⁸ United States Army, Chief of Engineers, Snake River and Tributaries, H. Doc. 190, 73d Cong., 2d sess. (Jan. 3, 1934).

¹²⁹ United States Army, Chief of Engineers, John Day River, Oregon, H. Doc. 84, 73d Cong., 1st sess. (June 10, 1933).

¹³⁰ United States Army, Chief of Engineers, Willamette River, Oreg., H. Doc. 263, 72d Cong., 1st sess. (Feb. 29, 1932).

¹³¹ Columbia River 308 Report, Vol. I, supra note 114, at 2.

salmon fishing industry to Oregon and Washington, and ultimately deferring any conclusion on "the question of the necessary provision for the passage of fish over the dams." The 308 Report for the Snake River, once the most productive salmon tributary to the Columbia River, considers fishery resources only in the form of a single line repeated in a table estimating \$100,000 in fishway costs at each of six proposed dam sites. Neither of the 308 reports for the John Day and Willamette rivers considers fishery resources at all.

Additionally, none of the 308 reports for the Basin considered the impacts of proposed developments on the Tribes, even though the government knew that the Tribes had sustained themselves since time immemorial on the rivers' resources. The reports did not discuss the inundation of homes, villages, graves, or sacred sites, let alone the consequent displacement of Indian people from these places they had known for generations. Nor did the reports consider the consequences for the rights and obligations the United States itself had ratified in treaties with Tribes. Despite President Roosevelt's mandate to use rivers "to the utmost," the 308 reports ignored altogether the Tribes' uses of the river, including those that were fundamental to the treaties and reservation executive orders.

ii. Early dam construction

Construction of dams in the Columbia River Basin began in the tributaries. In the upper reaches of the Snake River Basin in the late 1890s, private interests built a dam across the Bruneau River, just upstream from its confluence with the Snake, and blocked salmon passage upstream. Following an uproar, the dam was retrofitted with fish passage facilities. But in 1901, the Swan Falls Dam was constructed on the Snake River downstream. Although equipped with a fish ladder, the ladder proved ineffective and the dam blocked salmon and other fish from reaching the Snake River and its tributaries upstream.

In 1902, Congress enacted the Reclamation Act, creating a federally led program to develop dams and other infrastructure to support irrigation in the western United States. The upper Snake River and its tributaries would quickly become a focal point for the Reclamation program. The Boise River Diversion Dam in Idaho, originally constructed by a private company but acquired by the Bureau of Reclamation (Reclamation) in 1912, blocked the river of its namesake to returning salmon and other fish, a fact made more permanent by Reclamation's construction of Arrowrock Dam upstream in 1915. Four years later, an irrigation district constructed Warm Springs Dam in Oregon, in which Reclamation later acquired an ownership interest, that blocks salmon access to the upper reaches of the Middle Fork Malheur River. Then in 1924 Reclamation built Black Canyon Diversion Dam in Idaho, blocking the Payette River and thereby eliminating the only sockeye run in the upper Snake River, while also creating a hydroelectric power source to support further development.

¹³² *Id.* at 10; see also id. at 1474–75 (describing the Oregon and Washington fish canning industry to have annual sales of \$16.5 million, representing 10% of global canned salmon production).

¹³³ United States Army, Chief of Engineers, Snake River and Tributaries, H. Doc. 190, 73d Cong., 2d sess., at 70, tab. 7 (Jan. 3, 1934).

¹³⁴ Act of June 17, 1902, 32 Stat. 388 (codified at 43 U.S.C. § 391 et seg.)

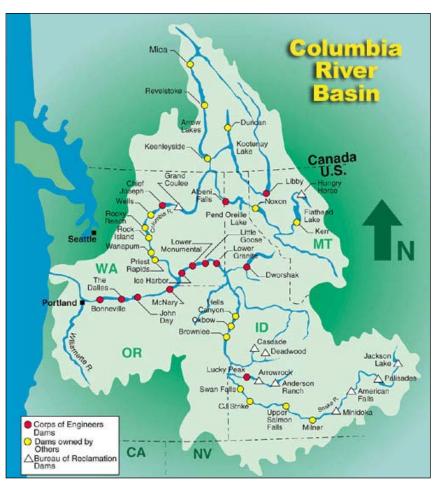


Figure 10: Columbia River Basin Dams. Source: Army Corps.

In 1927, Reclamation began construction of Owyhee Dam on the Owyhee River in Oregon, which by its completion in 1932 eliminated salmon access to yet another historic habitat. It also blocked them from reaching the Duck Valley Indian Reservation and the Shoshone-Paiute Tribe who settled there with the expectation they would have access to salmon. In 1932, Reclamation also completed Thief Valley Dam in Oregon, blocking fish passage on the Powder River. Three years later, Reclamation finished building Agency Valley Dam in Oregon, preventing fish from migrating through the North Fork Malheur River and inundating lands the United States once reserved for the Northern Paiute but subsequently released to the public domain.

By the late 1930s, Reclamation dams had blocked all the salmon tributaries in the Snake River above Hells Canyon except for the lower Malheur, Weiser, and Bruneau Rivers. These blockages resulted in the loss of approximately 75% of historic salmon habitat above Hells Canyon. Snake River salmon and steelhead runs, estimated once to have produced 1-2 million fish annually, plummeted 90%

See David Graves & Peter Galbreath, Columbia River Inter-Tribal Fish Commission, Chronology of Extirpation (and Restoration) of Chinook Salmon in the Columbia River Basin (2012), https://www.youtube.com/watch?v=KpDGDyDARFo.
 See Upper Snake River Tribes Foundation, Loss of Salmon and Steelhead in the Upper Snake River Basin: Dam Blockage

Over Time by the Federal Government and a Power Producer (Dec. 4, 2023), https://storymaps.arcgis.com/stories/bdb5512c-d0214e67a2cba17f7b6d329c; see also Idaho Power Company, Feasibility of Reintroduction of Anadromous Fish Above or Within the Hells Canyon Complex 3 (Dec. 2001), https://docs.idahopower.com/pdfs/relicensing/hellscanyon/hellspdfs/techappendices/Aquatic/e31_02_execsum.pdf.

by the mid-1900s.¹³⁷ Wild salmon returning to the Snake River Basin are 0.1-2% of the abundance at the time the United States entered into the 1855 Treaties with tribes.¹³⁸ Even in the undammed portions of the Snake River Basin, primarily on the Salmon River, salmon return at only a minute fraction of historical abundance.¹³⁹

This story was replicated throughout numerous tributaries to the Columbia River. On the Spokane River, the government allowed a private power company to construct a dam in 1911 blocking migrating salmon's access to part of the Spokane Tribe's reservation and all of the Coeur d'Alene Tribe's reservation. 140 On McKay Creek in the Umatilla River Basin, the government constructed a dam that extirpated salmon and steelhead from more than 100 miles of upstream habitat, eliminating a resource on which Umatilla treaty rights depend. It likewise built dams in the Yakima River Basin that eliminated salmon from their historic reaches, harming the Yakama Nation. Analogous consequences followed. For example, in the Yakima basin, historically the second most productive salmon tributary to the Columbia and the location of the Yakama Nation's reservation, salmon returns are a miniscule fraction of the historical runs that once approached nearly one million spawners per year. 141 On the Deschutes River, the Round Butte Dam, constructed on and adjacent to the Warm Springs Reservation in the 1960s, eliminated salmon passage upstream, blocked habitat access, and drastically reduced the salmon runs. 142

iii. Initial federal mainstem construction

The construction of mainstem dams began in the 1920s with the development of Rock Island Dam, a non-federal dam, by the Puget Sound Power & Light Company. 143 It was constructed in the middle reach of the Columbia River, upstream of the confluence with the Snake River, for the purpose of generating hydroelectric power. It originally included two fish ladders, one at each end, with a third later added to the middle of the dam to partially alleviate the damage to Chinook and steelhead runs from the dam. 144

Although the Columbia River 308 Report disclaimed any notion of Federal construction, the onset of the Great Depression changed that outlook as the nation sought to create jobs through public works. ¹⁴⁵ In other words, "[d]ams meant jobs." ¹⁴⁶ With the urgent need to create jobs leaving "little time for design," ¹⁴⁷ President Franklin Delano Roosevelt authorized the Army Corps to construct Bonneville Dam

¹³⁷ Meyer Report, *supra* note 8, at 122 (1999). *See also* National Marine Fisheries Service, National Oceanic and Atmospheric Administration, *Rebuilding Interior Columbia Basin Salmon and Steelhead* 8 (2022) (comparing abundance to historic levels).
138 National Marine Fisheries Service, National Oceanic and Atmospheric Administration, *Rebuilding Interior Columbia Basin Salmon and Steelhead* 8 (2022).

Adult returns are so low that Tribes can be required to invest significant resources to obtain Federal approval of Tribal harvest to ensure compliance with the Endangered Species Act. *See, e.g.*, Endangered and Threatened Species; Take of Anadromous Fish, 78 Fed. Reg. 4836 (Jan. 23, 2013) (approving the Shoshone-Bannock Tribes' 2010 plan for Snake River Spring/Summer Chinook salmon fisheries within the Salmon River sub-basin).

¹⁴⁰ See Scholz et al., supra note 20, at 99.

¹⁴¹ See Northwest Power and Conservation Council, Columbia River History: Yakima River, https://www.nwcouncil.org/reports/columbia-river-history/yakimariver/ (last visited May 22, 2024).

¹⁴² In 2009, after the Warm Springs Tribes became co-owners of the project, the dam was retrofitted with effective passage.

¹⁴³ Columbia River 308 Report, Vol. I, *supra* note 114, at 3, 51, 518-19.

U.S. Fish & Wildlife Service, Annual Fish Passage Report – Rock Island Dam 1965 at 1, https://spo.nmfs.noaa.gov/sites/default/files/legacy-pdfs/SSRF533.pdf.; *See also Confederated Tribes of the Colville Reservation v. United* States, 43 Ind. Cl. Comm. 505, 538–539 (1978) (discussing impacts to the Colville's fishing rights caused by Rock Island Dam).

¹⁴⁵ See Large Federal Dams, supra note 120, at 196.

¹⁴⁶ *Id.* at 194.

¹⁴⁷ *Id*.

under the 1933 Industrial Recovery Act. Located at the downstream end of the river area proposed for development in the 308 Report, the dam included a navigation lock to begin the development of barge navigation, along with a 1,000-foot-long powerhouse. Construction of the dam required removing nearly 750,000 cubic yards of material from the site and placing 1 million cubic yards of concrete at a total cost of \$83 million.

Before construction was complete, Congress enacted the Bonneville Project Act, ¹⁴⁸ laying the legal and administrative foundation for the 308 Report's vision of a vast hydroelectric power system. While the Army Corps understood from the outset that Bonneville Dam needed to include fish passage, ¹⁴⁹ the unprecedented nature of the dam meant experimentation for decades to come, rather than certainty of fish passage from the outset. The reservoir that developed behind the 171-foot tall Bonneville Dam created 20,000 acres of water surface and 150 miles of shoreline¹⁵⁰ and inundated numerous historic Tribal fishing sites. ¹⁵¹ Tribal fishermen quickly noticed and made known the impact on salmon, calling attention to changed behaviors, thermal alterations, and passage-related mortality, among other concerns. ¹⁵² As early as 1937–38, given the severity of the impacts observed, the Tribal fishermen predicted a loss of all salmon. ¹⁵³

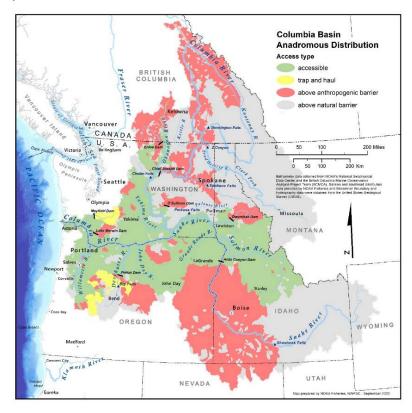


Figure 11: Map of Columbia Basin Anadromous Distribution. Source: NOAA Fisheries.

¹⁴⁸ Act of August 20, 1937, 50 Stat. 731 (codified at 16 U.S.C. § 832 et seq.).

¹⁴⁹ Large Federal Dams, supra note 120, at 202.

¹⁵⁰ U.S. Army Corps of Engineers, Bonneville Environmental Impact Study 3 (Aug. 1971), https://usace.contentdm.oclc.org/digital/collection/p16021coll3/id/919/rec/47.

See, e.g., Columbia River Inter-Tribal Fish Commission, Fisheries Timeline: Chronology of tribal fishing and fishing rights on the Columbia River, https://critfc.org/about-us/fisheries-timeline/ (last visited May 10, 2024).

Dupris et al., *supra* note 38, at 285–286 (describing the results of a 1937-38 survey of fishermen conducted by the Bureau of Indian Affairs, then known as the Indian Service).

¹⁵³ *Id.*

President Roosevelt also directed Reclamation to build Grand Coulee Dam on the upper reach of the Columbia River in central Washington. It was to provide hydroelectric power, irrigation water supply, flood control, navigation, and other beneficial uses. ¹⁵⁴ Unlike Bonneville, Grand Coulee would be a high-head dam, standing 550-feet tall, without any fish passage, because the "methods for preserving these runs would be extremely expensive, if they were possible." ¹⁵⁵ The Colville "protested vigorously... because of fear that the dam would destroy their right to fish at Kettle Falls and on the San Poil." ¹⁵⁶ The State of Washington also objected, arguing that "[t]he irrigation and power developments in connection with the Grand Coulee project are confiscating valuable prior rights to the river held by the fish and therefore by the commonwealth to which the fish belong." ¹⁵⁷ In response, the Department of the Interior granted Washington \$25,000 from the construction budget and six months to devise a solution. ¹⁵⁸

During the first few years of construction, fish ladders were maintained as slots in the dam. But fish passage to the upper Columbia ended in 1938, when construction blocked the river and entirely prevented salmon from reaching the Spokane Reservation and eliminated access to a significant portion of the Colville Reservation. ¹⁵⁹ Although it overlooked these consequences to the Tribes, the United States did recognize the value of the salmon "to the commercial and sports fisher[ies]." ¹⁶⁰ Thus, the federal government began trapping returning upper Columbia River adult salmon at Rock Island Dam and transplanting them to tributaries downstream of Grand Coulee. Those tributaries would eventually become sites for the Leavenworth National Fish Hatchery Complex.

The reservoir behind Grand Coulee Dam, known today as Lake Roosevelt, reaches 151 miles upstream with a surface area of more than 82,000 acres. It inundates well over 100 miles of salmon habitat on the mainstem, and dozens more on the Spokane, Kettle, and San Poil rivers, ¹⁶¹ and many small tributaries, along with Kettle Falls itself. The inundation of Kettle Falls was unmatched in significance and spurred the Ceremony of Tears, a gathering of at least 1,000 people, with representatives of multiple Tribes, to mourn the impending loss of the falls. ¹⁶² Notably, Lake Roosevelt also forced the relocation of many Tribal homes and burial sites due to inundation of portions of the Colville and Spokane reservations, lands that those Tribes just decades before had reserved from their vast ancestral territories. ¹⁶³

¹⁵⁴ Rivers and Harbors Improvements Act of 1935, § 2 (Aug. 30, 1935).

¹⁵⁵ Washington Department of Fisheries, Report of the Preliminary Investigations Into the Possible Methods of Preserving the Columbia River Salmon and Steelhead at the Grand Coulee Dam 2 (1938).

¹⁵⁶ Confederated Tribes of the Colville Reservation v. United States, 43 Ind. Cl. Comm. 505, 540 (1978).

¹⁵⁷ Washington Department of Fisheries, Report of the Preliminary Investigations Into the Possible Methods of Preserving the Columbia River Salmon and Steelhead at the Grand Coulee Dam 3 (1938).

¹⁵⁸ Ultimately, Washington and Interior settled on a series of downstream hatcheries to attempt to mitigate the impacts of the dam.

¹⁵⁹ See Northwest Power & Conservation Council, Columbia River History: Grand Coulee Dam, https://www.nwcouncil.org/reports/columbia-river-history/grandcouleeimpactsonfish/ (last visited May 22, 2024).

U.S. Department of the Interior, A Report Upon the Grand Coulee Fish Maintenance Project 1 (Nov. 1948), https://www.webapps.nwfsc.noaa.gov/assets/11/8950_11072016_160023_Fish.and.Hanavan.1949.pdf.

Northwest Power & Conservation Council, Intermountain Province Subbasin Plan 1–39 (May 2004), https://www.nwcouncil.org/media/filer_public/64/04/64044f3c-a634-4b12-80db-2242ab6b6cb5/General.pdf.

See, e.g., Northwest Power & Conservation Council, Ceremony of Tears, https://www.nwcouncil.org/reports/columbia-river-history/ceremonyoftears/ (last visited May 10, 2024). Some estimate that as many as 10,000 people attended the Ceremony of Tears. See, e.g., Cassandra Tate, Native Americans begin "Ceremony of Tears" for Kettle Falls on June 14, 1940, https://www.historylink.org/File/7276 (March 16, 2005).

See, e.g., An act for the acquisition of Indian lands for the Grand Coulee Dam and Reservoir, and for other purposes, Pub. L. 76-690 (June 29, 1940).

iv. Full federal development

The government continued the rapid development of dams on the mainstem Columbia River through the 1950s, despite continuing opposition from the Tribes and concerns from fishery officials. At the start of the decade, the Army Corps started building Chief Joseph Dam downstream of Grand Coulee for the purpose of generating hydroelectricity. Because Grand Coulee Dam lacked fish passage and efforts were beginning to transplant blocked salmon to lower tributaries, the Army Corps decided not to install fish passage facilities at Chief Joseph, concluding the dam "will not affect the salmon industry." Although the Army Corps recognized "[c] onstruction of dams on the main stem and tributary spawning grounds has raised a serious problem concerning the preservation of the valuable salmon industry," Chief Joseph Dam rendered inaccessible to salmon another 50 miles of the river, further removing salmon from the Colville reservation and placing them further out of reach for other Tribes living in the upper basin.



Figure 12: Construction of The Dalles Dam Spillway. Source: Washington State University.

While construction of Chief Joseph
Dam was underway, the Army Corps broke
ground on The Dalles Dam, located at the
upstream edge of the reservoir created
by Bonneville Dam. Like Bonneville Dam,
The Dalles Dam would serve hydropower
and barge navigation and included only
experimental fish passage as part of the
original design. The reservoir behind the
dam, known as Lake Celilo, eliminated
by inundation Celilo Falls, which was an
economic and cultural hub of Indigenous
peoples and one of the oldest continuously
inhabited sites in North America. Tribes

voiced powerful opposition to the dam for years. ¹⁶⁶ While the Army Corps was developing its recommendations for Congress, representatives from multiple Tribes implored the Army Corps not to move forward with the dam. ¹⁶⁷ Even after Congress appropriated funds for construction, leaders from the Yakama Nation testified in front of Congress seeking a halt to the project. ¹⁶⁸ Emblematic of the government's lack of concern for this result, one federal representative separately asserted that "drown[ing] out the Indian Celilo fishing sites" would "be an important boon to fish conservation." ¹⁶⁹

Report on Columbia River at Foster Creek, Washington (Chief Joseph Dam), H. Doc. 79-693 at 50 (June 28, 1946).

¹⁶⁵ Id.

See Dupris et al., supra note 38, at 364–373. In 1952, Army Corps wrote a report as part of its drive to settle claims at Celilo Falls. Although the language and parts of the report are problematic, it is a contemporaneous government document summarizing the Tribes' repeatedly-voiced opposition, as well as hesitation by the federal government. Portland District, Corps of Engineers, Special Report on Indian Fishery Problem: The Dalles Dam (March 10, 1952).

¹⁶⁷ Dupris et al., *supra* note 38, at 365–371.

Meyer Report, *supra* note 8, at 147–149 (citing Watson Totus, 1952, in, a Presentation on Behalf of the Yakima Tribe, to the U.S. Senate Sub-Committee on Civil Functions of the Army, May 12. Printed Hearings, pp. 434-435.).

¹⁶⁹ Col. T.H. Lipscomb, District Engineer, Portland District, Report on The Dalles Dam Construction Made to the Columbia Basin Interagency Committee January 24, 1952, Reprinted in Hearings Before the Senate Subcommittee of the Committee on Appropriations on H.R. 7268, at 559 (1952).

Ultimately, the reservoir created a surface area of 9,400 acres and inundated spawning and rearing areas for fall Chinook salmon. Prior to construction, the United States already recognized that "any additional burden [on salmon] is bound to result in a diminution of the populations," ¹⁷⁰ a concern the government repeated as it considered construction of additional dams. ¹⁷¹

In 1958, the Army Corps began construction of both McNary Dam and John Day Dam further up the Columbia River, each located at the upper edge of the reservoir created by a downstream dam. The lower, John Day Dam, created a reservoir extending 76 miles upstream to the foot of McNary Dam, which in turn forms a reservoir that extends 64 miles upstream to what would become the bottom dam on the lower Snake River. Both dams have significant hydroelectric power production and navigation facilities. Both dams also include fish passage facilities. Like dams built before, both inundated ancestral Tribal lands, historic Tribal housing, fishing, cultural, and burial sites, and salmon habitat, including the bottom nine miles of the John Day River. Understanding these impacts before they occurred, members of the Yakama Nation sought to stop construction of McNary Dam by suing the construction company for trespass, but the lawsuit was unsuccessful.

Around the same time, the Army Corps started to build Ice Harbor Dam, the first of four dams it would construct on the lower Snake River, the upper reaches of which Reclamation and private entities had mostly dammed decades earlier. Here too the government moved forward despite significant controversy. ¹⁷⁶ The Army Corps finished Ice Harbor in 1961 and would build and complete Lower Monumental Dam, Little Goose Dam, and Lower Granite Dam throughout the next 14 years, each dam creating a pool extending to the foot of the next upstream dam. Like the four lower Columbia River dams, the four lower Snake River dams were constructed to generate hydroelectric power and support river barge navigation. The four dams on the lower Snake River enable barge transportation from Lewiston, Idaho to the Tri-Cities, with the four mainstem Columbia River dams enabling barge transportation from the Tri-Cities to Pacific commercial ports, together converting over 300 miles of river into a slow-moving transportation route for crops and other commercial products. ¹⁷⁷ Each of the lower Snake River dams, like the lower Columbia River dams, was constructed with fish passage facilities, while nevertheless inundating Chinook salmon spawning habitat. The dams also flooded historical Tribal housing, fishing, cultural, and burial sites. Construction of the dams coincided

¹⁷⁰ Report on Columbia River in Vicinity of The Dalles, Oreg., S. Doc. 79-89 at vi (Sept. 19, 1945).

¹⁷¹ Report on John Day Dam, Columbia River, Washington and Oregon, S. Doc. 85-10 at xii (Aug. 9, 1956) (Assistant Secretary of the Interior writes to the Army Corps about the negative impacts to fish "by the construction of another dam below the mouth of the John Day River...").

U.S. Army Corps of Engineers, The Dalles, John Day & Willow Creek Dams at 3, https://usace.contentdm.oclc.org/digital/api/collection/p16021coll11/id/426/download.

U.S. Army Corps of Engineers, *Fact Sheet: McNary Lock and Dam* 1, https://usace.contentdm.oclc.org/utils/getfile/collection/p16021coll11/id/5614.

Oregon Water Resources Department, The Lower John Day Basin Integrated Water Resource Plan 7 (May 2022), https://www.oregon.gov/owrd/Documents/LowerJohnDay_FinalPLan_May2022.pdf. *See also* U.S. Army Corps of Engineers, John Day Lock and Dam Master Plan 4-24 (July 1976) (explaining that Warm Springs and Umatilla people previously inhabited the inundated lands); U.S. Army Corps of Engineers, McNary Master Plan 46 (2023) (explaining the McNary pool inundated the homelands of multiple Tribes).

¹⁷⁵ See Dupris et al., *supra* note 38, at 371–373.

¹⁷⁶ See generally Northwest Power & Conservation Council, Navigation, https://www.nwcouncil.org/reports/columbia-river-history/navigation/ (last visited May 10, 2024).

¹⁷⁷ Id.

with "precipitous declines in abundance" of spring/summer Chinook salmon in the Snake River's largest tributary, the Salmon River, which previously supported one of the Basin's largest returns of that species.¹⁷⁸

In 1962, the year after the Army Corps commenced construction on the lower Snake River dams, Congress authorized construction of Dworshak Dam on the North Fork Clearwater River, just upstream of the confluence of the Clearwater and Snake rivers on the Nez Perce Reservation. Construction of the dam, completed in 1973, inundated 16,970 acres, 179 including lands within the Nez Perce Tribe's Reservation and lands the United States holds in trust for the benefit of the Tribe. 180 Dworshak Dam blocked salmon access to the river and extirpated the steelhead fish run from part of the Nez Perce Tribe's Reservation and the cultural territories of the Coeur d'Alene Tribe. 181

For decades following construction, the federal dams on the mainstem Columbia River, lower Snake River, and North Fork Clearwater River have been operated for hydroelectric power generation and, varying by project, navigation, flood risk management, and irrigation. These dams represent the primary elements of the largest hydroelectric power system in the world, with Grand Coulee the largest hydropower producer and largest electric powerplant by nameplate capacity in the United States. Some of the dams provide protection from floods for downstream economic centers, including Portland, Oregon. Some supply water to more than 700,000 acres of irrigated agriculture producing high value crops. And some support a transportation system for the largest source of U.S. wheat exports, allowing for barge shipment instead of shipment by truck or rail.

In serving these interests, the dams also transformed the ecosystem, flooded and destroyed Tribal villages and sacred sites, and forced monumental changes to Tribal ways of life, already threatened by U.S. government policies. Through the 1970s, an estimated 15 to 20 percent of juvenile salmon perished at each dam and reservoir complex, with up to 30 percent mortality per dam in adverse water conditions. In 1980, over four decades after the construction of Bonneville Dam, Congress responded with legislation designed in part as an effort to prevent and avoid listing salmon under the ESA and promising "equitable treatment" of salmon and dams. Yet salmon populations continued to decline

¹⁷⁸ Coykendall, D. Katharine et al., *Improving Abundance Estimates of Spring-Summer Snake River Chinook Salmon for Fisheries Management*, North American Journal of Fisheries Management 2 (2022); *see also* Shoshone-Bannock Tribes, Tribal Resource Management Plan: Snake River Spring/Summer Chinook Salmon Fisheries within the Salmon River Sub-Basin at vii (Dec. 28, 2010).

¹⁷⁹ Northwest Power & Conservation Council, Columbia River Chronology, https://www.nwcouncil.org/reports/columbia-river-history/chronology/ (last visited May 10, 2024); see also Hannah Mitchell, US Army Corps of Engineers Walla Walla District, Larger than life: A history of Dworshak Dam (July 18, 2023), https://www.nww.usace.army.mil/Media/News-Stories/Article/3460199/larger-than-life-a-history-of-dworshak-dam/ (describing approximately 15,000 acres inundated).

Hilary C. Tompkins, Solicitor, M-37033, *Opinion Regarding the Status of the Bed of the Clearwater River within the 1863 Treaty Boundaries of the Nez Perce Reservation (Idaho)* (2016).

¹⁸¹ Coeur d'Alene Tribe, Tribal Perspective Document on the CRSO Draft EIS, at 4 (Apr. 30, 2019).

The Columbia Basin Project, which draws water from the reservoir behind Grand Coulee, irrigates more than 670,000 acres. *See*, *e.g.*, Bureau of Reclamation, Columbia Basin Project, https://www.usbr.gov/pn/grandcoulee/cbp/index.html (Oct. 24, 2023). Water withdrawn from the storage pools in the Tri-Cities region serve approximately 50,000 acres. *See*, *e.g.*, *Lower Snake River Dams: Benefit Replacement Report* 57 (2022), https://governor.wa.gov/sites/default/files/2022-11/LSRD%20Benefit%20Replacement%20Final%20Report_August%202022.pdf (Murray-Inslee Report). Additional acres are served with water from The Dalles and Chief Joseph reservoirs.

¹⁸³ Northwest Resource Info. Ctr. v. Northwest Power Planning Council, 35 F.3d 1371, 1376 (9th Cir. 1994).

^{184 16} U.S.C. § 839b(h)(11)(A) ("Federal agencies responsible for managing, operating, or regulating Federal or non-Federal hydroelectric facilities located on the Columbia River or its tributaries shall exercise such responsibilities...to adequately

and the government could not avoid listing most of the remaining salmonid stocks in the Columbia River Basin as threatened or endangered.¹⁸⁵



Figure 13: Spring Chinook in the holding tank at Winthrop National Fish Hatchery. Source: Chris Pasley/U.S. Fish and Wildlife Service.

C. Efforts to mitigate effects on salmon

As the Columbia and Snake Rivers were transformed from free flowing to a series of reservoirs serving other purposes, the annual returns of salmon to the Columbia River Basin dwindled. In some ways, early federal policy expected this outcome, reflecting both pessimism that salmon could survive the transformation of the river and the narrow view that salmon should be valued only as a commercial fishery. As a result, early mitigation efforts focused mostly on building hatcheries to breed and raise salmon for release into the lower Basin, below Bonneville Dam, to support the commercial fishing industry. The Colville and Shoshone-Bannock share that an intra-basin inequity has persisted, with upriver Tribes experiencing the total elimination of salmon while mitigation has been concentrated in the lower Basin. The Colville and Shoshone-Bannock salmon while mitigation has been concentrated in the lower Basin.

protect, mitigate, and enhance fish and wildlife, including related spawning grounds and habitat, affected by such projects or facilities in a manner that provides equitable treatment for such fish and wildlife with the other purposes for which such system and facilities are managed and operated"). See also Lorraine Bodi, The History and Legislative Background of the Northwest Power Act, 25 Envtl L. 365 (1995).

Northwest Resource Info. Ctr. v. Northwest Power Planning Council, 35 F.3d at 1381. See also Affiliated Tribes of Northwest Indians, Resolution #2021-23 (May 2021) (noting "the Northwest Power Act and its promise of 'equitable treatment' for energy and fish and wildlife did prevent the mid-Columbia fall chinook from being listed under the Endangered Species Act (ESA) but failed to prevent the subsequent listings of salmon and steelhead under the ESA").

See generally Cain Allen, Replacing Salmon: Columbia River Indian Fishing Rights and the Geography of Fisheries Mitigation, 104 Oregon Historical Quarterly 196, 201 (2003); see also Northwest Power and Conservation Council, Columbia River History: Lower Columbia River Fishery Development Program, https://www.nwcouncil.org/reports/columbia-river-history/lower-columbiafishdevplan/ (last visited May 8, 2024); NOAA Fisheries, How the Mitchell Act Supports Fisheries 2 (2022), https://media.fisheries.noaa.gov/2022-03/mitchell-act-fact-sheet.pdf.

¹⁸⁷ See also, e.g., Northwest Power and Conservation Council, Doc. 2020-9, 2014/2020 Columbia River Basin Fish and Wildlife

Over time, hatcheries became the predominant method of attempting to mitigate the impacts of Federal dam construction and operation, even though government officials were informed there was "no data available to indicate that hatcheries ... could possibly supplant the hundreds of miles of natural spawning area of the main river and its tributaries." Each anadromous fish hatchery in the Columbia River Basin was constructed and is funded as mitigation for the development of the Columbia River system—most to mitigate specifically for the federal dams. In addition to the early hatcheries created under the Mitchell Act and still today funded by the United States, 189 the Department of the Interior constructed three hatcheries, one each in the Entiat, Methow, and Wenatchee river basins, to mitigate for the loss of salmon resulting from Grand Coulee Dam blocking passage. 190 Reclamation built a fourth hatchery within the Spokane Reservation near Ford, Washington, on land taken from the Tribe and leased to the State of Washington, with an initial focus of raising game fish that could be released in Lake Roosevelt and other waters for sports fishing. 191 In the Snake Basin, the United States created and still funds multiple hatcheries under the Lower Snake River Compensation Plan, as well as the Kooskia National Fish Hatchery, and the Warm Springs National Fish Hatchery.

Despite decades of investment and iteration, adult returns from federal hatchery programs have been below their mitigation goals and have not returned salmon abundance to anywhere near the levels upon which the Tribes' rights are predicated. ¹⁹³ Many of the hatchery programs have not met their identified mitigation responsibilities: the Lower Snake River Compensation Plan spring Chinook mitigation objective has not been met, nor has the John Day mitigation objective. ¹⁹⁴ Recent abundance goal setting has relied on "interim goals" out of acknowledgement that decades of implementation have yet to generate actual fishery abundance in the Basin. ¹⁹⁵ The failure to meet abundance goals contributes to salmon harvest deficits. At no point since the beginning of Columbia River Basin development have Tribal fishers been able to harvest more than a fraction of their historic share of salmon returns. ¹⁹⁶

Program 38 (Oct. 20, 2020), https://www.nwcouncil.org/sites/default/files/2020-9.pdf (noting that "[t]hese losses have been severely under-addressed and under-mitigated through the Northwest Power Act" and recommending "[increasing] significantly the level of mitigation for these losses without compromising the substantive protection and mitigation activities elsewhere in the hasin")

¹⁸⁸ Testimony of the Fish Commission of the State of Oregon, House Subcommittee of the Committee on the Merchant Marine and Fisheries, Columbia River Fisheries: Hearings, 79th Cong., 2nd sess., at 23 (Aug. 14, 1946).

¹⁸⁹ Mitchell Act, Pub L. 75-502, 52 Stat. 345 (1938).

¹⁹⁰ See, e.g., U.S. Department of the Interior, A Report upon the Grand Coulee Fish-Maintenance Project 1939-1947 (Nov.

^{1948),} https://www.webapps.nwfsc.noaa.gov/assets/11/8950_11072016_160023_Fish.and.Hanavan.1949.pdf.

¹⁹¹ See, e.g., Washington Department of Fish and Wildlife: Hatcheries Division, Ford Hatchery 2003 Annual Report at ii (Dec. 2003), https://digital.library.unt.edu/ark:/67531/metadc932764/m1/1/.

¹⁹² For a map of the hatcheries, see Anadromous Fish Propagation Facilities of the Columbia River Basin, https://www.salmonrecovery.gov/Images/Hatchery/Hatchery%20Map.pdf.

¹⁹³ Northwest Power and Conservation Council, Doc. 2020-9, 2014/2020 Columbia River Basin Fish and Wildlife Program 11 (Oct. 20, 2020) (aiming to reach a 10-year rolling average of 5 million adult returns and noting that "five million is an interim program goal that began in the 1987 Program's commitment to 'double the runs.' This total abundance target is lower than the Council's estimates of the losses of anadromous fish due to the development and operation of the Columbia River hydroelectric facilities.").

Nathan Wiese, Lower Snake River Compensation Plan Office, United States Fish and Wildlife Service, *LSRCP 2032*, *5, https://www.fws.gov/sites/default/files/documents/Day_3_01_Nate_LSRCP_2032_12_07_2022.pdf; Letter from Eric Stricklin, Project Management Branch Chief, Army Corps of Engineers, to The Honorable Shannon Wheeler, Chairman, Nez Perce Tribe (April 29, 2024) (noting 15-year average fall Chinook salmon return below John Day Mitigation Program goals).

Northwest Power and Conservation Council, Doc. 2020-9, 2014/2020 Columbia River Basin Fish and Wildlife Program 11 (Oct. 20, 2020) (aiming to reach a 10-year rolling average of 5 million adult returns and noting that it is an interim goal).

¹⁹⁶ Northwest Power Planning Council, Columbia River Basin Fish and Wildlife Program, Appendix D § 1.1 at 4 (1987); Sho-



Figure 14: Spring Creek National Fish Hatchery. Cheri Anderson/ U.S. Fish and Wildlife Service.

Additionally, the hatchery programs have not received adequate annual operation and maintenance funding, and maintenance and infrastructure upgrades for hatcheries has been deferred—in contrast to maintenance and infrastructure upgrades at the dams (e.g., turbines). The Yakama, Umatilla, Warm Springs, and Nez Perce continue to identify backlogs in authorized and recommended but historically underfunded maintenance, repair, and operation actions. ¹⁹⁷ Known as the "Billion Dollar Backlog," these deferred repair, operations, and maintenance actions ultimately impede the ability of mitigation efforts to succeed in restoring salmon populations in the Columbia Basin. ¹⁹⁸

There also remains some spatial disconnect of failing to provide mitigation where the effects arise. Most mitigation hatcheries were originally located downstream of the dams they were intended to mitigate, exacerbating inequities resulting from the construction of the dams in the first place. As a result of these decisions, while nearly 90 percent of adults returning to the Columbia River originated above Bonneville Dam in the 1850s, that number fell to less than 50% by the 1980s. ¹⁹⁹ This too frustrates the ability of Tribal fishers to make a "moderate living." Many are no longer able to practice a subsistence lifestyle or have substandard living conditions if they do. Additionally, the hatchery within Spokane's reservation continues to be operated by the State of Washington and produces resident fish for locations outside of Lake Roosevelt. This highlights another inequity in the government's mitigation strategy: the hatchery uses a Tribe's resources to provide mitigation to non-Tribal interests off the Reservation.

shone Bannock Tribes, Tribal Perspectives Document on CRSO Draft EIS, at 15 (April 2019) ("[Sawtooth Fish Hatchery], which produces Chinook salmon available for [T]ribal members to harvest, [is] now not meeting the production goals to provide salmon for future generations"). See generally Columbia Basin Partnership Phase 2 Report, supra note 21, at 44, n.13 (citing the NPPC 1986 Program to estimate historic salmon runs between 9.6–16.3 million fish).

¹⁹⁷ See Columbia Basin Restoration Initiative, supra note 118, at 9.

¹⁹⁸ *Id.* at 17, n. 17 & 21, n. 19 (2023) (quoting Columbia River Inter-Tribal Fish Commission, *Overview of Columbia River USACE Fish Budget Needs* (2022), https://critfc.org/wp-content/uploads/2022/09/CRITFC-USACE-Fish-Budget_2022.pdf).
199 Lower Columbia River Treaty Tribes, Tribal Perspectives Document on the CRSO Draft EIS, at 11 (June 10, 2019) (citing Northwest Power Planning Council, Columbia River Basin Fish and Wildlife Program, app. E, table 6 (1987)).

Of sixteen once existing salmonid stocks, four have been extirpated—Mid-Columbia River Coho, Mid-Columbia River Sockeye, Upper Columbia River Coho, and Snake River Coho.²⁰⁰ In addition, numerous tributary runs were extirpated, such as salmon and steelhead in the Umatilla River. In 1990, the Shoshone-Bannock Tribes petitioned the National Marine Fisheries Service (NOAA Fisheries) to list Snake River sockeye as endangered under the ESA. NOAA Fisheries granted that petition and now has listed as endangered or threatened all but five of the remaining salmon stocks in the interior Columbia River Basin.²⁰¹ Those listings, while necessary, further constrain Tribal harvest.²⁰² Bull trout, which reside throughout the Basin, are listed as threatened, as are multiple other resident species.²⁰³ Over half of the historical populations of anadromous fish (salmon, steelhead, lamprey) that inhabited the Snake Basin are now extirpated; the remaining populations are in dire condition with many existing below a quasi-extinction threshold.²⁰⁴

With the listings of salmon came a renewed focus on the impacts of federal dams on the species. Unlike the act of constructing the dams, which almost entirely predated the existence of environmental laws such as that National Environmental Policy Act and the ESA,²⁰⁵ the continued discretionary operation of the dams is subject to these laws. As a result, the listings required the Army Corps, Reclamation, and the Bonneville Power Administration to consult over dam operations with NOAA Fisheries and the U.S. Fish and Wildlife Service under Section 7(a)(2) of the ESA.

The biological opinions resulting from those consultations became the focal point for decades of litigation. The courts repeatedly found the analyses of operation of the federal Columbia River dams failed to show compliance with the ESA.²⁰⁶ Over time, the federal agencies began pursuing myriad mitigation actions across the Basin, including altering the configuration of the dams and associated fish passage structures to improve fish passage, while striving to maintain the congressionally authorized purposes of the dams.²⁰⁷ Other mitigation actions have included lethal take of pinnipeds that feed on returning adult salmon below Bonneville Dam; funding a cash reward program for anglers to catch and kill northern pikeminnow, which feed on out-migrating juvenile salmon; restoring

²⁰⁰ National Marine Fisheries Service, National Oceanic and Atmospheric Administration, *Rebuilding Interior Columbia Basin Salmon and Steelhead* 8, tab. 2 (2022).

²⁰¹ Id.

²⁰² See, e.g., Shoshone Bannock Tribes, Tribal Perspective Document on CRSO Draft EIS, at 7 (April 2019) ("After the listing of the Snake River Sockeye the Tribes were precluded from harvesting these fish in any meaningful manner. Our perspective at the time was that ESA listing would help these anadromous fish populations recover over the next few decades ... Unfortunately, populations remain roughly in the same condition as they were during the listing decisions almost thirty years ago."); see also Shoshone-Bannock Tribes, Tribal Resource Management Plan: Snake River Spring/Summer Chinook Salmon Fisheries within the Salmon River Sub-Basin (Dec. 28, 2010).

²⁰³ See generally U.S. Fish & Wildlife Service, Columbia River Fish and Wildlife Conservation Office: Featured Species (last visited May 28, 2024), https://www.fws.gov/office/columbia-river-fish-and-wildlife-conservation/species.

National Marine Fisheries Service, National Oceanic and Atmospheric Administration, *Rebuilding Interior Columbia Basin Salmon and Steelhead* 22 (2022) (citing Storch, A.J., H.A. Schaller, C.E. Petrosky, R.L. Vadas, B.J. Clemens, G. Sprague, N. Mercado Silva, B. Roper, M.J. Parsley, E. Bowles, R.M. Hughes, & J.A. Hesse. 2022. A review of potential conservation and fisheries benefits of breaching four dams in the Lower Snake River (Washington, USA). Water Biology and Security. 100030, ISSN 2772-7351, https://doi.org/10.1016/j. Watbs.2022.100030. (https://www.sciencedirect.com/science/article/pii/S2772735122000440)).

²⁰⁵ Only construction of the last of the dams to be built, Lower Granite, underwent NEPA review.

See, e.g., Nat'l Wildlife Fed'n v. Nat'l Marine Fisheries Serv., 184 F. Supp. 3d 861, 869–872 (D. Or. 2016) (describing the history of the litigation)

²⁰⁷ Id.

tributary and estuary habitat; and updating hatchery management practices and facilities. Many of these actions have been carried out in tandem with broader fish and wildlife programs implemented under the Northwest Power Act. More recent agreements to further restoration of salmon runs and the Basin's ecosystems, as well as recommendations for further action, are included in Section IV.

Despite multiple changes to dam configurations and operations and expansive offsite mitigation efforts, those mitigation efforts remain insufficient and the plight of most Columbia River salmon remains perilous, continuing the negative impacts on Tribes.



Figure 15: Casey Baldwin, Confederated Tribes of the Colville Reservation, releases juvenile Chinook for P2IP study. Source: Bureau of Reclamation.

III. Federal Columbia River and Lower Snake River Dams' Effects on Tribes

The Tribes and Indian individuals suffered from the damming of the Columbia and Snake Rivers and their many tributaries. Consistently, Tribal advocates have warned of the numerous and significant consequences of the dams in the Columbia River Basin—consequences that the Tribes inequitably shoulder. Beyond the importance of salmon to Tribal identity and spirituality, these impacts include the destruction of housing and displacement of individuals living near the water; ruination and inundation of cultural and religious sites, Tribal lands, and other natural resources; diminishment of Tribal members' ability to exercise their treaty and executive order harvest rights; and economic deprivation. The lack of abundance or absence of salmon meant the loss of many people's primary source of sustenance. The transformation of the once free flowing river and reshaping of the hydrograph affected species and resources, as well as transportation routes across and down the rivers. Together, these consequences and others the dams catalyzed by fostering industrial development threaten Tribes' and their members' well-being, ways of life, and sovereignty.

Although some mitigation efforts existed from the outset, as noted in the previous section, they fail to fully offset the impacts, both on Tribes directly and on the river ecosystem. ²⁰⁸ The Army Corps constructed some dams with fish passage, though passage was often ineffective for salmon and was not designed for other important migrating species like lamprey and white sturgeon. For other dams, the government turned to measures such as trap-and-haul and hatcheries, primarily to mitigate impacts on commercial fisheries. For some treaty-protected fishing sites submerged by the reservoirs, the government eventually created replacement locations, known as "in-lieu sites," but they were inadequately built and resulted in sub-standard and unsanitary conditions during the fishing seasons. Many of the cumulative impacts of the federal dams and reservoirs remain virtually unmitigated, and Tribes continue to bear a disproportionate burden of the harm caused.

A. General effects of the dams on the river itself and aquatic species

Construction and operation of the dams transformed the river the Tribes had known for millennia, from a free-flowing river to a continuous series of slow-moving reservoir pools. That conversion from river to reservoirs altered the river ecosystem in myriad ways, including changing water temperatures, 209 slowing water velocity, 210 and at times introducing petroleum pollutants from the dams themselves.²¹¹ The dams also facilitated barge transportation, which depends on continued dredging of the river,²¹² and itself can result in the release of pollutants into the river.²¹³ Irrigation diverts water from the elevated reservoir pools, depleting the river's flow.214



Figure 16: Coho Redd. Source: U.S. Fish and Wildlife Service.

²⁰⁸ See, e.g., Columbia Basin Partnership Phase 2 Report, supra note 21, at 142 ("The region has dedicated tremendous energy to the identification and implementation of effective remedies for dam impacts. These investments have clearly produced substantial improvements in fish survival in many areas, but impacts remain significant[.]").

²⁰⁹ See U.S. Environmental Protection Agency, Columbia and Lower Snake Rivers Temperature Total Maximum Daily Load 2 (Aug. 2021) (summarizing temperature effects of Columbia and Snake River dams).

²¹⁰ U.S. Army Corps of Engineers, *Columbia River Basin Dams*, https://www.nwd.usace.army.mil/CRWM/CR-Dams/ (last visited May 8, 2024).

²¹¹ See, e.g., U.S. Army Corps of Engineers, *Turbine at The Dalles Dam spills up to 200 gallons of oil, Corps deploys booms, skimmers and removes unit from service*, https://www.nwd.usace.army.mil/Media/News-Releases/Article/2436325/turbine-at-the-dalles-dam-spills-up-to-200-gallons-of-oil-corps-deploys-booms-s/ (Dec. 3, 2020).

²¹² See, e.g., U.S. Army Corps of Engineers, Lower Snake River Programmatic Sediment Management Plan Final Environmental Impact Statement (Aug. 2014).

²¹³ See, e.g., Washington Department of Ecology, Barge company fined \$18,000 for spilling liquid fertilizer to Columbia and Snake Rivers (March 19, 2018), https://ecology.wa.gov/about-us/who-we-are/news/2018/barge-company-fined-for-spilling-liquid-fertilizer; U.S. Department of Justice, Owner of 'Davy Crockett' Barge Sentenced to Prison for Clean Water Act Violations for Oil Spill on Columbia River (March 18, 2013), https://www.justice.gov/usao-wdwa/pr/owner-davy-crockett-barge-sentenced-prison-clean-water-act-violations-oil-spill.

²¹⁴ See generally Northwest Power & Conservation Council, *Irrigation*, https://www.nwcouncil.org/reports/columbia-river-history/irrigation/ (last visited May 28, 2024).

Even when built with fish passage, dams impact aquatic species in multiple ways, including: eliminating or degrading habitat required for key life stages, including spawning; lengthening the time it takes for and increasing threats to migration through the river, including through predation from introduced species such as walleye and smallmouth bass; making more difficult or blocking upstream and downstream passage; and interfering with key biological processes, such as smoltification (the process by which salmon transition from living in freshwater to saltwater), that depend on energetic, physiological, and environmental cues. Dams affect salmon both early in life as juvenile fish migrating to the ocean and as surviving adults returning to the river a few years later to spawn. Dams without passage abruptly end the existence of salmon in areas they historically occupied. The lack of abundant riverine species in the Basin's habitats has ripple effects. Salmon, for example, are a keystone species that are essential to ecosystem health, carrying important nutrients with them from the ocean to their spawning beds.²¹⁵ Other significant threats, such as climate change, non-Tribal commercial fishing, and impacts from industrialization of the Basin, augment and often intensify these adverse impacts.²¹⁶

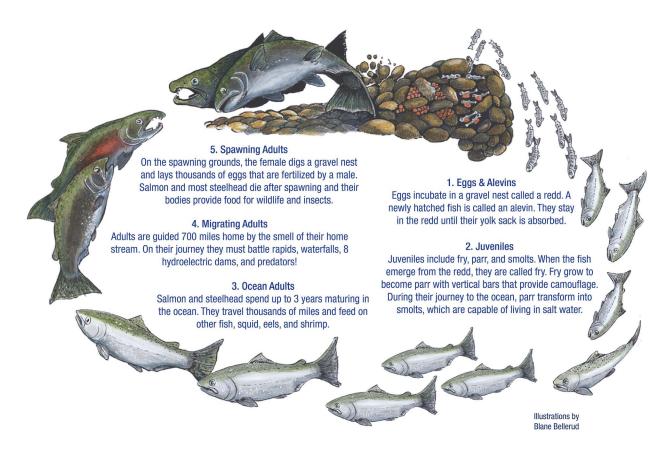


Figure 17: Salmon Life Cycle. Source: NOAA.

²¹⁵ NOAA Fisheries, *Ecosystem Interactions and Pacific Salmon*, https://www.fisheries.noaa.gov/west-coast/sustain-able-fisheries/ecosystem-interactions-and-pacific-salmon (last visited May 28, 2024).

²¹⁶ Columbia Basin Partnership Task Force, Marine Fisheries Advisory Committee, Phase 1 Report, *A Vision for Salmon and Steelhead* 17, fig. 3 (2019).

B. On Tribal villages, fishing sites, and other cultural sites, properties, and resources

The reservoirs destroyed Tribal villages and homesites, forcing families and individuals to relocate. They also inundated hundreds of important cultural and religious sites throughout the Basin, degrading those sites that remain beneath the water. One of the biggest impacts was the loss of important fishing sites and their related villages. Numerous Tribes and Indian individuals lived at, visited, and practiced cultural traditions at fishing locations throughout the Basin. For unflooded upland areas, the altered landscape changed the nature of hundreds more sites by affecting viewsheds or the vegetation and species in the area.²¹⁷ These impacts continue today: fishing, cultural, and religious sites remain transformed or under water; many Tribes face high levels of housing insecurity; and the reservoirs' changing levels can cause exposure and erosion of burial sites and cultural properties near the water line. Importantly, the Tribes have a broader perspective on what the government calls cultural resources and view the transformed landscapes as continuing impacts to their identities and ways of life, which are inseparable from the places they and their ancestors have lived since time immemorial.

Displacement of people

The reservoirs flooded entire fishing villages and towns, displacing and forcing people—and disproportionately Native American people—to relocate. As the Columbia River Inter-Tribal Fish Commission notes, "[m]ost [T]ribal housing along the river was destroyed to make way for the Columbia River dams." For many villages inundated by the dams, the government did not address Tribal housing and relocation. ²¹⁹

For example, before the construction of Grand Coulee Dam, the largest population centers were along the Columbia River and the majority of the inhabitants were Tribal members. ²²⁰ The federal government did not provide for relocation. Instead, people or communities were left to determine their own plan, resulting in many people having no viable option but to live far removed from the place and people they had called home. ²²¹ There was a noted "disregard" by Reclamation for the toll this would take. ²²² In one Tribal town on the Colville Reservation, Inchelium, Reclamation allowed the reservoir to fill before the town managed to move their school, resulting in water coming up to the floor of the building and Reclamation needing to lower the pool again to allow the trucks to move the building. ²²³ It took decades to get telephone services in one of the new towns where people moved. ²²⁴ Describing the pain felt by Tribal members forced to move their homes after the construction of Grand Coulee Dam, Virginia ("Tootie") Mason, a Colville Tribal member, recalled, "our people at that time

²¹⁷ Confederated Tribes of the Colville Reservation, Tribal Perspective on the CRSO Draft EIS, at 11–16 (2019).

²¹⁸ Columbia River Inter-Tribal Fish Commission, Spirit of the Salmon: WY-KAN-USH-MI WA-KISH-WIT 56 (2014)

²¹⁹ See generally United States Army Corps of Engineers, Portland District, Cooper Zietz Engineers, Inc., Columbia River treaty fishing access sites, Oregon & Washington: Fact-finding review on tribal housing (Nov. 2013); Molly Harbarger, Decrepit fish camps built on broken promises, The Oregonian (March 11, 2016), https://www.oregonlive.com/pacific-northwest-news/page/tribal_housing_a_run_of_broken.html.

²²⁰ Ray, supra note 35, at 47-49.

²²¹ *Id.* at 52–53.

²²² *Id.* at 76.

²²³ Id. at 49-50.

²²⁴ Id.

were very, very quiet. If they had hurt and pain in their heart, they more or less kept it to themselves. Because it was devastating to a lot of people that had to give up their home to move to higher ground on account of the raising of the water. It was a quiet sadness."²²⁵

The dams in other parts of the Basin similarly submerged homes and displaced communities. When constructing the lower Columbia River dams, the government spent millions moving residents of seven mostly white towns, but only a tiny fraction of that relocating Tribal members. ²²⁶ Those harms remain largely unmitigated. ²²⁷ Nez Perce Tribal members spoke of grandparents whose families were separated because of the construction of Dworshak Dam, and the lack of compensation paid to those family members. There remain unsafe and substandard living conditions at the fishing villages along the lower and mid-Columbia River. ²²⁸

Although the government provided compensation narrowly tied to the loss of fishing stations at Celilo Village and Congress provided some funding for relocation, the assistance was severely insufficient and replacement housing was substandard.²²⁹ Residents fought for decades for the government to make good on its legal responsibility and trust obligations to rehabilitate the town. Eventually, Congress provided funding, and the Army Corps began redevelopment of Celilo Village in the early 2000s—more than sixty years later.

While the improvements at Celilo and other efforts to begin remedying the decades-long displacement are necessary, no replacement housing or monetary amount could fully compensate displaced residents for the loss of their homes, property, and ways of life. The lack of adequate Tribal housing along the Columbia River makes it more difficult for the Yakama, Umatilla, Warm Springs, and Nez Perce to "sustain the [T]ribes' fishing way of life."²³⁰ As stated by the Coeur d'Alene, "the dam building era marks a decades long progression during which the Coeur d'Alene Tribe was systematically removed from the anadromous resources that were available to their ancestors."²³¹ For the Nez Perce, some families whose members had to relocate to different communities during the construction of Dworshak Dam remain separated. Today, the Yakama Nation and other Tribal leaders continue to connect the persistent housing insecurity and related challenges on their reservations and at in-lieu sites to the historic displacement of people, including those more recently displaced in the 20th Century when the dams destroyed their homes.

²²⁵ Building Grand Coulee Dam: A Tribal Perspective (Christopher Horsethief, Skydog Records dir., 2007) (quote edited for clarity).

²²⁶ Molly Harbarger, *Decrepit fish camps built on broken promises*, The Oregonian (March 11, 2016), https://www.oregonlive.com/pacific-northwest-news/page/tribal_housing_a_run_of_broken.html.

²²⁷ Dylan Brown, *Tribes displaced by dams wait for homes promised in 1937*, E&E News: Greenwire (Jan. 5, 2016), https://www.eenews.net/articles/tribes-displaced-by-dams-wait-for-homes-promised-in-1937/.

²²⁸ Molly Harbarger, *Decrepit fish camps built on broken promises*, The Oregonian (March 11, 2016), https://www.oregonlive.com/pacific-northwest-news/page/tribal_housing_a_run_of_broken.html.

²²⁹ See Dupris, supra note 38, at 343. See generally United States Army Corps of Engineers, Portland District, Cooper Zietz Engineers, Inc., Columbia River treaty fishing access sites, Oregon & Washington: Fact-finding review on tribal housing (Nov. 2013); United States Army Corps of Engineers, Portland district, Post Authorization Change for Celilo Village Redevelopment 1 (May 2003).

²³⁰ Columbia River Inter-Tribal Fish Commission, Spirit of the Salmon: WY-KAN-USH-MI WA-KISH-WIT 56 (2014).

²³¹ Coeur d'Alene Tribe, Tribal Perspective on CRSO Draft EIS, at 4 (2019).

ii. Alteration and inundation of fishing sites

Damming the rivers destroyed and significantly altered fishing sites that were critical to Tribal cultures. Tribal fisheries are place-based, and while these fishing places are never completely gone, the dams' impacts have ongoing effects on communal and societal activities associated with these places. This makes more difficult the Tribes' intergenerational transmission of culture. Every day this situation persists makes the Tribes' cultural link to the salmon and these places harder to maintain. This loss of connection to fishing places is felt whether it results from inundation, by the reshaping of the hydrograph and river, or the impacts to juvenile and adult salmon as they migrate through the hydrosystem. As the Nez Perce note, even for fishing sites that were not inundated, the low salmon returns have impacted their connection with these fishing places and the time spent at these places, as in many cases the returns to these fishing places support no or limited harvest.



Figure 18: Kettle Falls before Grand Coulee Dam. Source: Library of Congress.



Figure 19: Kettle Falls after Grand Coulee Dam. Source: Library of Congress.

Among the many fishing locations permanently altered by the dams, two iconic fishing sites, Kettle and Celilo Falls, were submerged and are representative of the cultural harm suffered by this outcome. Archeological evidence dates fishing at and continuous occupation of Kettle Falls back at least 9,000 years.²³² Kettle Falls featured in Tribes' legends, hosted the annual First Salmon Ceremony, spurred cultural development, and supported entire village sites.²³³ Kettle Falls was a critical source of salmon for many members of the Colville, Spokane, Coeur d'Alene, Kalispel, and other Tribes in the area.²³⁴

²³² Scholz et al., supra note 20, at 26.

²³³ The Kettle Falls Fishery (Christopher Horsethief, Skydog Records dir., 2003).

²³⁴ Scholz et al., *supra* note 20, at 32–36; Casey Baldwin, Conor Giorgi, and Thomas Biladeau, *Cultural and educational releases of salmon in areas blocked by major hydroelectric projects on the Columbia River*, 25 Aquatic Ecosystem Health & Management Society 16, 20 (2022).

The construction of Grand Coulee and filling of Lake Roosevelt directly destroyed this cultural icon. The losses that resulted from this destruction are far-reaching and ongoing, spreading well beyond the loss of fishing access. According to one reflection:

So much history has happened here, but there is hardly anything left to be observed by the naked eye. The Indian cemeteries, the village sites, the drying racks have all vanished. People driving across the bridge can't see the rocks below them under the water where men fished for thousands of years. But the descendants of the people who fished there have never forgotten and still remember the importance of this place. So although we can no longer fish for salmon at Kettle Falls, our ancestors have never left and remain a constant presence around the fishery. We don't forget. We pass the knowledge on from generation to generation.²³⁵

The Dalles Dam similarly erased from view Celilo Falls and transformed the Dalles-Celilo reach—the cornerstone of fishing and gathering for many of the regional Tribes. For millennia, thousands of people would meet at Celilo Falls to fish, trade, and gather. According to one reflection:

Prior to the inundation of Celilo Falls in 1957, Celilo was the heart of our fishing community and the economic center for the River People. For at least fourteen hundred generations, my family and my people traveled to Celilo to harvest the salmon we needed in order to maintain our life and our culture. Celilo was the center of our salmon culture and our traditional economy.²³⁶



Figure 20: Celilo Falls before The Dalles Dam. Source: Library of Congress.



Figure 21: Celilo Falls after The Dalles Dam. Source: National Park Service.

The dams silenced these sites that for thousands of years were filled with the noise of rushing water and people communing, praying, fishing, trading, and celebrating. As Yakama Tribal members and others expressed in consultation, all that remains now are the memories of those who once lived there, stripping future generations of the opportunity to witness and experience some of the most important places for Tribal fishing and culture. Although it is difficult to describe catastrophic loss, one Yakama Tribal member compared the loss of Celilo Falls to what it would be like for the United States to lose New York City because of their similar societal roles as centers of culture, trade, history, and tradition.

²³⁵ The Kettle Falls Fishery (Christopher Horsethief, Skydog Records dir., 2003).

²³⁶ Charles F. Sams III, Wakanish Naknoowee Thluma: 'Keepers of the Salmon', in Remembering Celilo Falls, 108 Oregon Historical Quarterly 586, 646 (2007).

And yet, Celilo and Kettle Falls are only the largest and busiest fishing sites flooded by the federal dams. The reservoirs throughout the system destroyed many other important fishing locations. Grand Coulee itself flooded multiple sites on significant tributaries that supported thousands of fishers from the Upper Columbia Tribes.²³⁷ Bonneville Dam flooded multiple fishing grounds, including those important to the Warm Springs, Yakama Nation, Umatilla, and Nez Perce.²³⁸ In fact, the flooding of fishing sites behind Bonneville Dam spurred the Warm Springs and others to advocate for in-lieu sites.²³⁹ The lower Snake River dams similarly flooded fishing sites of the treaty Tribes,²⁴⁰ and the Nez Perce note that Dworshak Dam flooded one of the most important Chinook salmon fisheries, much like each other dam in the system forever transformed local fisheries.

iii. Destruction or degradation of other cultural resources

The importance of the Columbia River and its tributaries to the flourishing of the Basin Tribes means that many of the most important sites for cultural and spiritual practices, including burial grounds, were located along the banks of the rivers. As the Yakama state, "entire lifeways, villages, economies, ancestral burials and customs were lost through the federal manipulation of the Columbia River."²⁴¹ In the areas that Grand Coulee Dam affects, hundreds of traditional cultural properties have been identified.²⁴² Although the initial flooding of these resources occurred rapidly after the dams' gates closed, the dams and reservoirs continue to affect the Tribes' ability to hold religious ceremonies, properly care for their ancestors' graves, and carry out cultural practices. Despite the damage and destruction done to many cultural resources, most sites remain significant to Tribal members who remember what was and provide hope for restoration in the future.

On the lower Snake River, the Meyer Report notes the four dams effectively "inundate most substantial aspects of cultural, material and spiritual life along the lower Snake River for affected [T]ribal peoples – and separate the [T]ribal peoples from them."²⁴³ In 1999, the Meyer Report found that the four lower Snake River reservoirs alone cover "more than 600-700 locations where they were accustomed to live; fish; hunt; harvest plants, roots and berries; conduct cultural and religious ceremonies; and pursue other aspects of their normal traditional lives."²⁴⁴ The impacted Tribes did not receive mitigation for these inundated locations. As a Warm Springs cultural resources staff emphasized, efforts since then, including actions ongoing today, make clear that the number of locations is higher.²⁴⁵ The continued identification of and need to protect affected cultural resources, which stems from an initial lack of concern for such impacts prior to construction of the dams, is one of the ongoing harms that Tribes experience.

²³⁷ Casey Baldwin, Conor Giorgi, and Thomas Biladeau, *Cultural and educational releases of salmon in areas blocked by major hydroelectric projects on the Columbia River*, 25 Aquatic Ecosystem Health & Management Society 16, 19–20 (2022).

²³⁸ See United States Army Corps of Engineers, Portland District, Cooper Zietz Engineers, Inc., Columbia River treaty fishing access sites, Oregon & Washington: Fact-finding review on tribal housing 5–6 (Nov. 2013).

²³⁹ Dupris et al., supra note 38, at 320.

²⁴⁰ See, e.g., Meyer Report, supra note 8, at 184 (discussing Umatilla's impacted sites); id. at 92 (describing Nez Perce's impacted sites).

²⁴¹ Yakama Nation, Comments on the CRSO Draft EIS, at 28 (2019).

²⁴² Confederated Tribes of the Colville Reservation, Tribal Perspective on the CRSO Draft EIS, at 11 (2019).

²⁴³ Meyer Report, *supra* note 8, at 12.

²⁴⁴ *Id.* at 13.

²⁴⁵ See also U.S. Army Corps of Engineers, McNary Master Plan 49–50 (2023) (noting "likely hundreds of unrecorded archaeological sites" flooded by the reservoir behind McNary Dam).

The government's timeline for construction of the dams did not allow for adequate protection of cultural resources. To take one example of many—following concerns voiced by Upper Columbia Tribes about Lake Roosevelt flooding ancestral burial grounds, there was a hasty effort to identify and relocate graves. While over 1,000 were relocated, thousands more were flooded before they could be relocated, often appearing exposed today due to erosion and changing reservoir levels. ²⁴⁶ Even if the relocation happened under adequate timelines and using proper techniques, the choice faced by Tribal members hardly offered a solution: relocate the remains of ancestors or accept the flooding of those burial sites. The effects to burial sites were "[o]ne of the most emotionally disturbing of all the consequences of the flooding[.]"²⁴⁷

The consequences to sacred sites and cultural resources continued for decades after the reservoirs formed and are ongoing today. The Nez Perce note that to suggest inundation of the lower Snake River protects cultural resources by keeping them covered by water does not account for the fact that the Tribe's culture depends on the salmon and the life source of the lower Snake River. Additionally, the reservoirs' existence and constant inundation of other sites and properties effectively means unending damage to those resources, and for those locations that are not permanently destroyed by the water, prohibition of access by Tribal members.

Furthermore, in a way that fits directly into the lens through which the government views cultural resource protection, erosion continues to damage archeological sites and has newly exposed burial remains.²⁴⁸ The impoundment of sediment behind dams exacerbates the erosion of these sites. Locations where the rivers deposited sediment for millennia have been transformed into erosional environments.²⁴⁹ Disappearing river islands and sand dunes, steep cut banks, and eroding shorelines throughout the system are the result of this transformation.

More holistically, Basin Tribes generally maintain a much broader view of cultural resources that is not expressed in federal legal frameworks. According to the Shoshone-Bannock Tribes:

Plainly speaking, a cultural resource is any material, resource, or practice of a cultural nature. The unique relationship of a Tribal member and the environment influences a worldview where the geographic location, the equipment used to harvest, the oral history and songs, and the species sought by that member are all one cultural resource that defines our Tribal existence. The fish is as inseparable from the river as a cultural resource as it is in a biological sense; each of these relationships define our culture, they make us who we are as Shoshone and Bannock peoples.²⁵⁰

²⁴⁶ Kathryn L. McKay & Nancy F. Renk, National Park Service, *Currents and Undercurrents: An Administrative History of Lake Roosevelt National Recreation Area* 359–360 (2002).

²⁴⁷ Ray, *supra* note 35, at 53.

²⁴⁸ Confederated Tribes of the Colville Reservation, Tribal Perspective on the CRSO Draft EIS, at 7 (2019); Kathryn L. McKay & Nancy F. Renk, National Park Service, *Currents and Undercurrents: An Administrative History of Lake Roosevelt National Recreation Area* 360–361 (2002); Spokane Tribe of Indians, Comment Letter on CRSO Scoping, at 3 (Feb. 7, 2017).

²⁴⁹ G. Mathias Kondolf, et al., *Sustainable Sediment Management in Reservoirs and Regulated Rivers*, 2 Earth's Future 256 (2014), https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1002/2013EF000184.

²⁵⁰ Shoshone-Bannock Tribes, Comment Letter on the CRSO Draft EIS, at 5 (Apr. 13, 2020).

Thus, as one Umatilla staff member noted, "[w]hen the [Umatilla] look at Ice Harbor and Lower Monumental reservoirs, they see a system of cultural resources that is entirely out of balance." While the various Tribes use differing definitions, the definitions are based in Tribal understanding of the reciprocal connection between nature and human existence and are broader than the government's definition. The Nez Perce refer to these resources as "life sources."

The Tribes' perspectives on the interconnection of these resources underscore the all-encompassing cultural impact that the dams continue to have on Basin Tribes. The natural foundation for Tribal understanding of identity, history, culture, and even the future remains transformed. The impacts from this alteration of Tribal connection to the resources they have stewarded since time immemorial is lasting and enormous, something not easily—if ever—captured in federal protections for cultural resources.



Figure 22: Mainstem of the Clearwater River adjacent to Dworshak National Fish Hatchery. Source: U.S. Fish and Wildlife Service.

C. On Tribal lands and management of fisheries and other natural resources

Changes to water levels, flow, and quality, inundation, and other transformations of the Columbia River and its tributaries, including the depleted fish runs, brought about by the dams affect the water, lands, and resources Tribes have stewarded since time immemorial.

The reservoirs behind Chief Joseph, Grand Coulee, and Dworshak all inundate reservation lands and natural resources. "With the building of Grand Coulee and Chief Joseph Dams the rivers became Stillwater lakes; the banks and low-lands disappeared under water. And the vast and productive acreage of Grand Coulee was largely turned into a sheet of water." Under authority from Congress to purchase lands for the project, the government took around 20,000 acres of Tribal and allotted land.

²⁵¹ Meyer Report, *supra* note 8, at 231.

²⁵² Ray, *supra* note 35, at 61.

²⁵³ Kathryn L. McKay & Nancy F. Renk, National Park Service, Currents and Undercurrents: An Administrative History of Lake

Similarly, Dworshak Dam and a portion of its reservoir is located on the Nez Perce Reservation and Nez Perce land, covering the land and transforming the ecosystem. The reservoir further floods the Nez Perce Tribe's usual and accustomed harvest locations. The flooding by these dams has ripple effects on the resources Tribes steward. The land adjacent to both rivers provided important habitat on Tribal lands for elk and deer,²⁵⁴ as well as significant spawning habitat for salmon and steelhead. Grand Coulee and Chief Joseph dams cut off approximately 1,000 miles of mainstem and tributary habitat, and Dworshak Dam blocks access to habitat on the North Fork Clearwater River.

The sweeping and complex changes to the ecosystems and resulting low salmon abundance throughout the Basin affect the fisheries the Tribes manage and co-manage as well, including the Columbia River Basin treaty and non-treaty fisheries co-managed by the Nez Perce, Umatilla, Warm Springs, Yakama Nation, and the states of Oregon, Washington, and Idaho.²⁵⁵ Management decisions must account for the degraded status quo conditions and the dams' ongoing impacts on juvenile and adult salmonid survival, including the consequences of species remaining listed under the ESA. For example, in years with low numbers of returning salmon, the Tribes sometimes must make difficult decisions to close Tribal fisheries despite the impacts to Tribal fishers.²⁵⁶

These same challenges affect each Tribe's unique fishery management plans and strategies. For example, the Umatilla stress that they face difficult fisheries management decisions due to degraded conditions in tributaries on and off their reservation, including in their usual and accustomed areas. These management challenges are common across the Tribes. For many decades, the Tribes have had to severely reduce harvest on their tributaries because of the weak salmon runs. ²⁵⁷ In these situations, the treaty Tribes forgo exercising their treaty harvest rights to conserve salmon stocks and ensure sufficient fish can spawn. The Basin Tribes also have and continue to put immense time and resources into efforts to restore fish species or reintroduce those that were eliminated from their territories. ²⁵⁸ Yet as the Coeur d'Alene emphasize, the loss of anadromous species meant Tribal members had to increase their harvest of resident species, which has threatened those species and at times forced stringent conservation measures. Like salmon, those species have been adversely affected by industrial activities, resulting in fish consumption health advisories in many parts of the Basin.

Roosevelt National Recreation Area 35 (2002); Ray, supra note 35, at 64 (1977).

Hannah Mitchell, US Army Corps of Engineers Walla Walla District, *Larger than life: A history of Dworshak Dam* (July 18, 2023), https://www.nww.usace.army.mil/Media/News-Stories/Article/3460199/larger-than-life-a-history-of-dworshak-dam/ (describing approximately 15,000 acres inundated); Ray, *supra* note 35, at 44.

In addition, the 2018-2027 Management Agreement, *supra* note 76, states that the Shoshone-Bannock Tribes are "deemed a management entity" for purposes of certain portions of the Salmon River sub-basin. 2018-2027 Management Agreement at 67. The Shoshone-Bannock Tribes also have joined Part I of the 2018-2027 Management Agreement, which sets the framework for how the co-managers will work together to manage the fishery, and they participate in committees established pursuant to Part I.

See, e.g. Columbia River Inter-Tribal Commission, 2024 Spring Fisher Closure FAQ, https://critfc.org/fishery-announce-ment/2024-spring-fisher-closure-faq/ (last visited May 28, 2024).

²⁵⁷ See e.g. Confederated Tribes of the Umatilla Indian Reservation, Columbia River Salmon Policy 5 (1995); Nez Perce Tribe Department of Fisheries, Resources Management Department Management Plan 2013-2028, at 9 (July 17, 2013) (noting decisions to voluntarily reduce fishing of salmon and steelhead in decline).

²⁵⁸ E.g. Columbia Basin Partnership Phase 2 Report, *supra* note 21, at 39–40; Clearwater River Basin Coho Restoration Project (March 4, 2024), https://storymaps.arcgis.com/stories/34170c31bab647dca89adda6c1a7b4b4; Yakama Nation, *2021 Status and Trends Annual Report* (2022).

Additionally, irrigation pumping from reservoirs, electricity generation and transmission, and other industrial uses have fragmented habitat and converted the Tribes' aboriginal territories, including Basin-wide harvest locations, treaty-reserved usual and accustomed sites, and once unoccupied lands, into agricultural land and other habitat that do not support First Foods. For example, pumping from the reservoir behind Grand Coulee dam facilitated the conversion of shrub grass habitat in the Colville's traditional territories into agricultural land, just as agricultural development elsewhere eliminated camas prairies, diminishing Tribal members' ability to harvest and gather important species in those areas. ²⁵⁹ Changes to the Basin, including the construction of transmission lines and changes in the river course and depth, "forever changed the migration patterns and range use of wildlife species." ²⁶⁰ The landscape scale conversion of native habitats to settlement, enabled by the abundant electricity the dams provide, depleted a multitude of resources on which the Tribes rely.



Figure 23: Leonard Dave scaffold fishing on Klickitat. Source: CRITFC, https://www.flickr.com/photos/critfc/7977605377/in/album-72157631514421799/.

D. On fishing, gathering, and hunting rights

The dams frustrate the exercise of Tribal harvest rights by contributing to the diminishment of salmon runs and wildlife abundance and blocking access to or altering fishing locations. The reservoirs covering important fishing spots prevent Tribal members from the Nez Perce, Umatilla, Yakama Nation, and Warm Springs from exercising their off-reservation treaty-reserved harvest rights in those locations. On the lower Snake River, for example, the Meyer Report states that "[t]he four reservoirs preempt 140+ miles of Treaty-protected [T]ribal fishing, hunting, and harvesting of roots, plants and berries at usual and accustomed stream side locations." At fishing locations that the treaty Tribes retain on and off-reservation, including the Shoshone-Bannock Tribes' traditional fishing areas further upriver, salmon runs have plummeted. For example, above the four lower Snake River dams, where migrating salmon have passed through eight federal dams—and non-federal dams block

²⁵⁹ See The Confederated Tribes of the Colville Reservation, Comment Letter on Tribal Circumstances Analysis, at 5 (April 10, 2024).

²⁶⁰ Coeur d'Alene Tribe, Comment Letter on CRSO Draft EIS (Apr. 13, 2020).

²⁶¹ Meyer Report, *supra* note 8, at 12.

access to much of the Snake River Basin—salmon harvest is less than 1% of the harvest levels before non-Indigenous settlement.²⁶² At the same time, on the Colville reservation below Chief Joseph Dam, Tribal fishers experience similar depleted fishing conditions, while the Spokane and Coeur d'Alene no longer have even the opportunity to exercise their on-reservation harvest rights to catch salmon and other anadromous fish because the dams block salmon from reaching the reservations.

i. Impacts on abundance

Salmon runs have plummeted since the signing of the treaties and reservation executive orders that would protect the Tribes' harvest rights. Today, around two million salmon and steelhead return to the Columbia Basin annually, with hatchery-origin fish making up two-thirds of that total.²⁶³ "The current return of naturally produced salmon and steelhead…is less than 10 percent of the historical run."²⁶⁴ The percentage of natural-origin salmon and steelhead returning to spawn today compared to historic levels is even smaller;²⁶⁵ wild-origin returns of salmon to the Snake Basin are 0.1-2% of their historical abundance,²⁶⁶ with many populations at or below a quasi-extinction threshold.²⁶⁷

Because of the severe lack of fish, the Basin Tribes cannot exercise their harvest rights to the same extent they could at the time the rights were reserved in treaties or in executive orders. The Shoshone-Bannock estimate that the current annual harvest for the Tribes provides an average of 1.1 pounds of salmon per Tribal member, down from 700 pounds historically. The 1855 Treaty Tribes reserved the right to up to 50% or the fair share, of the harvest "measured at the fully functioning production levels" of the river at treaty times. The Meyer Report charted similar dramatic shifts in comparative harvest numbers for each of the treaty Tribes, with the Umatilla, Warm Springs, and Nez Perce estimated as losing 90% or more of treaty-period salmon harvest.

While myriad factors undisputedly contribute to the depletion of salmon, and climate change is exacerbating the situation, the federal dams play a significant role, especially for certain stocks. Specifically, among other impacts, degraded tributary habitat, the lack of access to quality habitat and other ecological processes, and direct and indirect impacts from dams and reservoirs threaten salmon runs. These impacts are demonstrated through the estimated benefits of dam breach.

²⁶² Id. at 229.

²⁶³ Columbia Basin Partnership Phase 2 Report, supra note 21, at 42.

²⁶⁴ Id. at 44.

²⁶⁵ Id. at 47, Tab. 8.

National Marine Fisheries Service, National Oceanic and Atmospheric Administration, *Rebuilding Interior Columbia Basin Salmon and Steelhead* 8 (2022).

²⁶⁷ *Id.* at 22 (2022) (citing Storch, A. J., H. A. Schaller, C. E. Petrosky, R. L. Vadas Jr., B. J. Clemens, G. Sprague, N. Marcado-Silva, B. Roper, M. J. Parsley, E. Bowles, R. M. Hughes, and J. A. Hesse. 2022. A review of potential conservation and fisheries benefits of breaching four dams in the Lower Snake River (Washington, USA), at 3-4, Water Biology & Security 1(2). Doi.org/10.1016/j.watbs.2022.100030).

²⁶⁸ See Shoshone-Bannock Tribes, Tribal Perspectives Document on CRSO Draft EIS, at 8 (2019). Although the 2019 Tribal Perspective document cites 1.2 pounds of salmon per Tribal member, Shoshone-Bannock staff informed the Department the number is now 1.1.

²⁶⁹ Sohappy, 302 F. Supp. at 911; Fishing Vessel Ass'n, 443 U.S. at 686–687.

²⁷⁰ Meyer Report, supra note 8, at 8, 218.

²⁷¹ Meyer Resources Inc., Executive Summary: Tribal Circumstances & Impacts from the Lower Snake River Project 3 (1999).

²⁷² See generally Columbia Basin Partnership Phase 2 Report, supra note 21, at 57–77.

²⁷³ See id. at 60, fig. 13; National Marine Fisheries Service, National Oceanic and Atmospheric Administration, Rebuilding Interior Columbia Basin Salmon and Steelhead 11–12 (2022).

According to NOAA Fisheries, breaching the lower Snake River dams as part of a comprehensive suite of actions presents the greatest opportunity for restoring Snake River stocks.²⁷⁴ NOAA Fisheries also concluded that "[b]reaching the lower Snake River dams would directly improve floodplain connectivity, natural sediment distribution and riparian habitat conditions benefiting both aquatic and terrestrial species, improve spawning habitat for species such as white sturgeon, and restore free-flowing migratory corridors for several aquatic species including bull trout, lamprey and sturgeon."²⁷⁵

Additionally, above Chief Joseph Dam, with the exception of limited releases for cultural purposes, abundance is effectively zero, meaning that the Spokane and Coeur d'Alene, whose on-reservation access to salmon and steelhead was cut off by an earlier dam, do not have the ability to harvest salmon and steelhead on their reservations. These circumstances narrow the Tribes' exercise of their exclusive on-reservation fishing rights to other species. As written by the Spokane, "failure of Grand Coulee Dam and Chief Joseph Dam to provide fish passage robs the Upper Columbia River Region of the once-abundant salmon, steelhead, and lamprey that were cornerstones of the Tribe's culture and sustenance."

The dams also impact abundance of other species of importance to Tribes through factors including loss or degradation of habitat and turbine entrainment.²⁷⁸ The Fish and Wildlife Service concluded in 2020 that "[h]istorical and recent trends in populations of biologically, socioeconomically, and culturally important aquatic species," such as Pacific lamprey, white sturgeon, and freshwater mussels, "have mirrored the declining trends of Pacific salmon fisheries."²⁷⁹ Lamprey used to be so plentiful that "the river at Celilo Falls was often black with eels[,]"²⁸⁰ but many of the rivers now have very few or no lamprey at all. Harvestable populations of white sturgeon are generally limited to below Bonneville Dam,²⁸¹ and operations of Grand Coulee Dam impact native Redband Trout, a species significant to the Spokane, Coeur d'Alene, and other cultures around Lake Roosevelt.²⁸² Without significant populations of these aquatic species, the exercise of harvest rights in most areas is severely curtailed.

Similarly, impacts expand beyond aquatic species. While Dworshak Dam blocked anadromous fish, it also inundated thousands of acres of habitat for elk and deer. Because of the transformation

²⁷⁴ National Marine Fisheries Service, National Oceanic and Atmospheric Administration, *Rebuilding Interior Columbia Basin Salmon and Steelhead* 17 (2022).

²⁷⁵ Id. at 26.

See, e.g., Baldwin, Casey, Conor Giorgi, & Thomas Biladeau, *Cultural and educational releases of salmon in areas blocked by major hydroelectric projects on the Columbia River*, 25 Aquatic Ecosystem Health & Management Society 16, 21 (2022).

²⁷⁷ Spokane Tribe of Indians, Comment Letter on CRSO Scoping, at 3 (Feb. 7, 2017).

²⁷⁸ See generally United States Fish and Wildlife Service, Fish and Wildlife Coordination Act Section 2(b) Report on the Columbia River System Operations (2020).

²⁷⁹ Id. at 29.

²⁸⁰ Columbia River Inter-Tribal Fish Commission, *Tribal Pacific Lamprey Restoration Plan for the Columbia River Basin*, at iii (2011).

²⁸¹ United States Fish and Wildlife Service, Fish and Wildlife Coordination Act Section 2(b) Report on the Columbia River System Operations, app. F at F-6, Fig. F1 (2020).

²⁸² Spokane Tribe of Indians, Comment Letter on CRSO Scoping, at 9–10 (Feb. 7, 2017). See also Kinkead, B.A., and T. J. Biladeau, Coeur d'Alene Tribe, *Progress Report 2010-2011: Hangman Creek Fisheries Restoration*, 5/1/2010 – 04/30/2012 Annual Report, 2001-032-00 (April 2013).

of habitat around Grand Coulee due to irrigation pumping facilitated by the dam, "Colville Tribal members have significantly less access to traditional gathering areas and less opportunity to exercise traditional hunting practices because game has significantly declined. For example, the sharp-tailed grouse is almost extinct due to the loss of shrub steppe habitat." The lack of anadromous fish "also had cascading effects throughout the ecosystem on the local wildlife populations. The lack of nutrients and available food that these fish would supply to the region has effects on species such as stream invertebrates, bald eagles, grizzly bears, and orca whales." As mentioned earlier, increased harvest of resident species to make up for the lack of salmon has strained those species. In some cases, Tribes must limit or prohibit harvest to conserve the species. Further, the transformation of habitat in the Basin can favor invasive species, including smallmouth bass, walleye, and northern pike, and the operation of the dams has the potential to spread invasive species throughout the Basin. 285

ii. Impacts on fishing, hunting, and gathering locations

As discussed above, the dams submerged and altered fishing sites and traditional riverside harvest locations across the Basin, altering the Tribes' exercise of their fishing rights.

The lower Columbia and lower Snake River dams make impossible access to certain usual and accustomed places and sites on unoccupied lands, which were both the basis for the treaty Tribes' reserved rights to harvest salmon off-reservation and the reason Tribal leaders for those Tribes ultimately signed treaties with the federal government. While these locations remain flooded, the treaty Tribes cannot exercise their rights in the same manner available to them at the time of the treaty signing. Although the exclusive Tribal fishing sites on the lower and mid-Columbia are intended to provide to the Warm Springs, Umatilla, Yakama, and Nez Perce fishing locations in place of those lost to the dams, they cannot fully replace those traditional sites, and the fishing experience at the current sites is greatly transformed by the low runs of fish. Similarly, for other usual and accustomed places, fishing continues but is restricted. As written by one Umatilla Tribal member:

After the inundation of fishing sites by The Dalles and other dams on the Columbia River, Native fishermen modified their traditional dipnetting into rapids to dipnetting along the shoreline. Today, you will see many of the same families who have fished along the edges of the Big River for thousands of years. You still see scaffolds that look like ones that were at Celilo but are now just a few feet above the slack waters of the interlocking reservoir lakes. The dipnets are made from large hoop frames and are set adrift in the currents that run up and down the river's edge.²⁸⁸

The Confederated Tribes of the Colville Reservation, Comment Letter on Tribal Circumstances Analysis, at 5 (April 10, 2024).

²⁸⁴ Coeur d'Alene, Comment Letter on CRSO Draft EIS (Apr. 13, 2020).

²⁸⁵ United States Fish and Wildlife Service, Fish and Wildlife Coordination Act Section 2(b) Report on the Columbia River System Operations 58–59 (2020).

²⁸⁶ See, e.g., Meyer Report, supra note 8, at 184 (discussing fishing stations shared by the Nez Perce and Umatilla).

²⁸⁷ See Columbia River Inter-Tribal Fishing Commission, *In-Lieu/Treaty Fishing Access Sites*, https://critfc.org/for-tribal-fishers/in-lieutreaty-fishing-access-sites/ (last visited May 28, 2024) (explaining the two types of fishing sites).

²⁸⁸ Charles F. Sams III, Wakanish Naknoowee Thluma: 'Keepers of the Salmon', in Remembering Celilo Falls, 108 Oregon Historical Quarterly 586, 646–647 (2007).

Yet using these methods, Tribal members catch significantly fewer salmon now. For the Shoshone-Bannock exercising their rights on unoccupied lands:

While attempts to fish, hunt and gather off-reservation continue, success is now low – and the extensive trade in salmon and game once conducted by the Shoshones and Bannocks has now disappeared – with such meager harvests as can be obtained retained for subsistence purposes. Even more adverse, where access to such resources is obtained by the Shoshone-Bannock, they often find that their traditional resources have been destroyed – for example, above Hells Canyon, and at Duck Valley, where the salmon that used to swim up the Bruneau and Owyhee Rivers are gone. This conversion of the land and water of the Shoshone-Bannock treaty territory to non-Treaty uses has a long history – starting with the destruction of camas grounds at Camas Prairie in the 1800's, continuing through the shutting off of salmon from extensive areas of Shoshone-Bannock fishing territory in the 1950s and 60s, and incorporating extensive use of waters – depended on by Shoshone-Bannock – as waste depositaries for agriculture and industry in the present day.²⁸⁹

The dams also impair on-reservation locations for harvesting salmon and other species. For the Colville, "Tribal salmon fisheries below Chief Joseph Dam have been severely depleted by the construction, operation and management of nine dams on the mainstem Columbia below the Reservation." The extirpation of anadromous fish from reservations in the blocked areas means that while traditional on-reservation fishing locations may remain viable for harvesting other species, they do not provide access to salmon, steelhead, and lamprey. This loss is especially significant when viewed through the historic perspective of Tribal members' ancestors who were compelled to move to the reservations and cede land to the United States.

Additionally, the dams and reservoirs impact Tribal hunting and gathering locations throughout the Basin. For example, by making the crossings much more difficult, the impounded river behind Grand Coulee made impractical the full use of other hunting and gathering areas. Traditional grounds for gathering camas and different roots south of the Columbia River became inaccessible after the formation of Lake Roosevelt.²⁹¹ "The prairies that were cut off by the flooding of the river were among the most useful forage areas."²⁹² Similar impacts occurred throughout the Basin, with construction of the hydrosystem inundating thousands of acres of habitat for multiple terrestrial species.²⁹³ In other parts of the Basin, such as the Umatilla River subbasin, the influx of settlement and rapid development that coincided with construction of the dams restricted hunting and gathering to the point of eliminating the traditional ways of hunting, gathering, and fishing.²⁹⁴

²⁸⁹ Meyer Report, *supra* note 8, at 125–126.

²⁹⁰ Confederated Tribes of the Colville Reservation, Tribal Perspective on the CRSO Draft EIS, at 6 (2019).

²⁹¹ Ray, *supra* note 35, at 42–43.

²⁹² Id at 43

Northwest Power and Conservation Council, 2014 Columbia River Basin Fish and Wildlife Program 148–151 (Oct. 2014). Over the past three decades, much of the wildlife habitat losses have been mitigated, though not in place. Northwest Power and Conservation Council, Columbia River Basin Fish and Wildlife Program: 2020 Addendum 21 (Oct. 2020).

See Confederated Tribes of the Umatilla Indian Reservation, About us, https://ctuir.org/about/brief-history-of-ctuir/ (last visited May 29, 2024) ("The old ways of food gathering, hunting and fishing for a living were still very common until about 40 years ago when dams built on the Columbia and hunting restrictions forced the people to adopt modern ways of life.").

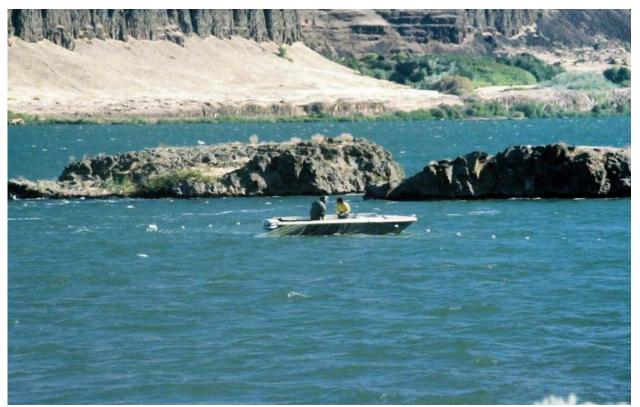


Figure 24: Columbia River fishing. Source: CRITFC, https://www.flickr.com/photos/critfc/7977606109/in/album-72157631514421799/.

E. On economies and livelihoods

The loss of salmon decreases Tribal wealth and impairs economic opportunity. In discussing economic developments on the Warm Springs Reservation, the Meyer Report considered census data showing significantly higher rates of poverty and unemployment and concluded that "these promising initiatives have not been sufficient to make up for loss of salmon resources and other aspects of Warm Springs traditional lifestyle."²⁹⁵ There are similar economic statistics today. As of 2016, per capita income for the 1855 treaty Tribes was less than half the national average.²⁹⁶ In 2022, the poverty rate for American Indian and Alaska Natives nationally was 25%, the highest of the racial groups examined by the census.²⁹⁷ American Indian and Alaska Natives were 1.2% of the US population but accounted for 2.6% of the total population in poverty in the United States.²⁹⁸ The lack of salmon "underlies and compounds" the Basin Tribes' current economic circumstances.²⁹⁹ As the Yakama note, "[t]he reasons for the irregularly high levels of poverty, unemployment, and death rates and low levels of income are the same today as in 1999: the absence of salmon, steelhead, and other traditional foods."³⁰⁰

²⁹⁵ Meyer Report, *supra* note 8, at 211.

²⁹⁶ Lower Columbia River Treaty Tribes, Tribal Perspectives Document on the CRSO Draft EIS, at 9–10 (June 10, 2019).

²⁹⁷ Emily A. Shrider & John Creamer, U.S. Census Bureau, U.S. Department of Commerce, *Poverty in the United States:*

 $^{2022,} at \ 5 \ (Sept.\ 2023), https://www.census.gov/content/dam/Census/library/publications/2023/demo/p60-280.pdf.$

²⁹⁸ *Id.*

²⁹⁹ Lower Columbia River Treaty Tribes, Tribal Perspectives Document on the CRSO Draft EIS, at 9 (June 10, 2019).

³⁰⁰ Yakama Nation, Comment Letter on the CRSO Draft EIS, at 59 (2019).

While the transformation of the Columbia and Snake rivers brought economic gains to the region, the Tribes have not shared equitably in those benefits. Instead, by providing affordable electricity, irrigation water, barging routes, and other benefits to regional industries while simultaneously contributing to the decline in salmon populations and degradation of natural resources, the dams transferred wealth away from the Tribes to other communities. This wealth transfer continues to impact Tribal poverty rates today, as "Tribal members often prefer fishing-related means of economic support that preserve and perpetuate cultural values." Despite efforts over the years to reduce the harm to Tribal communities, the wealth disparity remains a persistent environmental injustice. As the 1855 treaty Tribes summarized in their 2019 Tribal Perspectives document:

The eight Columbia [River] and lower Snake [R]iver dams transformed the production functions of the federally impounded portions of the Columbia and Snake rivers – taking substantial treaty-protected wealth in salmon away from the tribes. At the same time, the dams increased the wealth of non-Indians through enhanced production of electricity, agricultural products, transportation services, flood control, and other associated benefits. As thoroughly documented in the Meyer Report, [T]ribal peoples have not shared in this increased wealth on a commensurate basis.³⁰²

The states and non-Tribal populations benefitted most from the damming of the Columbia and Snake Rivers. At Grand Coulee Dam, for example, dam construction itself prioritized the economic advancement of non-Tribal communities. He for decades following construction, the Colville and Spokane did not share in the economic benefits despite the project being located on their lands, and today the Colville note that the government has yet to address water for irrigation on the reservation. Similarly, despite Dworshak Dam being built on Nez Perce land, the enormous economic benefits from flood control benefit downstream communities outside of the reservation. While industries grew across the region, the Tribes experienced increasing destruction of and threats to the land and resources they accessed and depended on for survival and wealth since time immemorial.

The historic transfer of wealth occurred, in part, because the government downplayed or accepted the risk to salmon in its drive for jobs, electricity, and industrial development to benefit people other than the Tribes. Now, the Tribes would argue, the opposite is true. The government has become risk averse in making decisions about salmon *recovery*, insisting on high certainty before being willing to meaningfully change the status quo distribution of costs and benefits of the Columbia River System.³⁰⁸

³⁰¹ *Id.*

³⁰² Lower Columbia River Treaty Tribes, Tribal Perspectives Document on the CRSO Draft EIS, at 9–10 (June 10, 2019).

³⁰³ See Meyer Report, supra note 8, at 91–92, 222; see generally Northwest Power & Conservation Council, Dams: history and purpose, https://www.nwcouncil.org/reports/columbia-river-history/damshistory/ (last visited May 10, 2024); see also Paul C. Pitzer, Grand Coulee: Harnessing a Dream 362 (1994).

³⁰⁴ See Building Grand Coulee Dam: A Tribal Perspective (Christopher Horsethief, Skydog Records dir., 2007).

Both Tribes eventually reached settlement agreements to receive economic benefits. Confederated Tribes of the Colville Reservation Grand Coulee Dam Settlement Act, Pub. L. 103-436, 103rd Cong., 108 Stat. 4577; Spokane Tribe of Indians of the Spokane Reservation Equitable Compensation Act, Pub L. 116-100, 116th Cong., 133 Stat. 3256.

The Confederated Tribes of the Colville Reservation, Comment Letter on Tribal Circumstances Analysis, at 5 (April 10, 2024).

³⁰⁷ See, e.g., U.S. Army Corps of Engineers, CRSO EIS Featured Project – Dworshak Dam (Nov. 22, 2019), https://www.usace. army.mil/Media/News/NewsSearch/Article/2025079/crso-eis-featured-project-dworshak-dam/ ("From October 2014 through September 2018, the dam prevented approximately \$216 million in potential flood damages on the Columbia River.").
308 Meyer Report, supra note 8, at 91.

Seen through this lens, the shifting risk burden historically benefited and continues to benefit non-Indian populations over Tribal interests. This risk misalignment "preempts rebalancing transfers of Treaty wealth back to the tribes."³⁰⁹

This exemplifies the type of situation environmental justice efforts seek to remedy.³¹⁰ Decades ago, the Tribes were made to shoulder a disproportionate burden of the environmental harm for economic development of the region. Today, the system perpetuates this inequitable distribution of wealth and environmental burden through the many consequences described above, at the heart of which is the ongoing threat to salmon.

Of course, this transfer of wealth and resources away from the Tribes is only one chapter in the cumulative taking of wealth from Tribes that began with white settlement, resulting epidemics and conflicts, the cession of land and resources, and the forced movement of Tribes to reservations.³¹¹ The Meyer Report concluded, as towards the Nez Perce Tribe but analogous for others in the Basin, that "over the period from 1855 to the early 1980's, virtually all of the wealth associated with lands of the Nez Perce home territory has been transferred to non-Indian residents of the region."³¹² And yet this broader context does not diminish the importance of the specific economic and environmental injustices to Tribes caused by damming the Columbia and Snake Rivers. Because, as the Shoshone-Bannock Tribes state, "what is at stake now is our Treaty reserved subsistence lifestyle."³¹³



Figure 25: North Prairie Camas and Buttercup. Source: U.S. Fish and Wildlife Service - Pacific Region.

F. On well-being, culture, spirituality, way of life, and sovereignty

Taken together, these numerous and enduring impacts on the fish, traditional sites, cultural resources, and Tribal economies threaten Tribal well-being, way of life, and, ultimately, sovereignty.

³⁰⁹ Id. at 92.

³¹⁰ See Exec. Order No. 14096, Revitalizing Our Nation's Commitment to Environmental Justice for All, 88 Fed. Reg. 25,251 (Apr. 21, 2023); Exec. Order No. 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, 59 fed. Reg. 7629 (Feb. 11, 1994).

³¹¹ Meyer Report, *supra* note 8, at 35.

³¹² Id. at 83 (emphasis removed).

³¹³ Shoshone-Bannock Tribes, Tribal Perspectives on CRSO Draft EIS, at 1 (2019).

With the diminishment of First Foods and the flooding of cultural sites, younger generations have lost many direct connections to Tribal traditions, and the memories and traditions passed down from elders are at risk of being lost as well. In considering the role of lamprey, "[t]he eel has nearly vanished from [T]ribal longhouse tables. As eels disappear, younger [T]ribal members are losing their elders' collective memory for the species and the culture that surrounds the eel."³¹⁴ During consultation on this report, Tribal members lamented that the places that were of paramount importance to Tribes in the Basin, such as Celilo Falls, now exist only in memories. Others discussed the importance of being able to teach future generations how to fish and harvest in places where their ancestors have been for countless generations.

Tribal members carry with them intergenerational trauma caused by actions of the United States government, including the displacement of their peoples from their aboriginal territories and the damming of the rivers. Many do not have the opportunity to experience fully the mental health and spiritual benefits of harvesting and gathering. As the Chair of the Warm Springs Health Committee noted in 1998, "Having regular places and times to fish and to hunt brings stability to our lives. It gives us some sense of control, and makes us feel better about ourselves. It helps us connect to a higher power. This, in turn, is good for our health..."

315 Put succinctly, "When you lose your traditional foods, you threaten your culture – and then you risk losing your values too. None of that is good for your health."

316 The Coeur d'Alene Tribe notes the persistence of mental health challenges among their Tribal members, including Tribal youth.

317 The Colville also face a mental health crisis, caused in part by intergenerational trauma and loss of traditions.

Nez Perce leaders emphasized the spiritual interconnection with nature, water, and fish. They refer to the lower Snake River as "a living being." As Nez Perce elder Horace Axtell described, "According to our spiritual way of life, everything is based on nature. Anything that grows or lives is part of our spiritual life. The most important element we have in our way of life is water. The next most important element is the fish because the fish comes from water."³¹⁹



Figure 26: Tribal fishing platforms at Leavenworth National Fish Hatchery. Source: Julia Pinnix/U.S. Fish and Wildlife Service.

Medical experts and practitioners point to the loss of salmon and First Foods as harming the physical and mental health of Tribal members.³²⁰ Salmon is a healthy source of protein and important

Columbia River Inter-Tribal Fish Commission, *Tribal Pacific Lamprey Restoration Plan for the Columbia River Basin*, at iii–iv (2011).

³¹⁵ Meyer Report, supra note 8, at 213.

³¹⁶ Id.

³¹⁷ Coeur d'Alene Tribe, Comment Letter on CRSO Draft EIS (Apr. 13, 2020).

The Confederated Tribes of the Colville Reservation, Comment Letter on Tribal Circumstances Analysis, at 4 (April 10, 2024).

³¹⁹ Isluumc, Horace Axtell, Nez Perce elder, September 2008, translated from the Nez Perce language, quoted in Nez Perce Tribe brief in *NWF v. NMFS*, 01-640-SI, Dkt. 1984 (D. Or.).

³²⁰ See, e.g., Meyer Report, supra note 8, at 211–214; The Confederated Tribes of the Colville Reservation, Comment Letter on Tribal Circumstances Analysis, at 4 (April 10, 2024); Coeur d'Alene Tribe, Comment Letter on CRSO Draft EIS (Apr. 13, 2020).

nutrients. For centuries, First Foods provided a balanced diet for the Basin Tribes.³²¹ Many of salmon's nutritional benefits could help prevent and combat health issues that are disproportionately prevalent in some Tribal populations, such as heart disease, diabetes, and mental health challenges.³²² Depleted salmon runs or the complete loss of anadromous species also exacerbates food insecurity.³²³ This creates a doubling effect where the loss of salmon and other fish has a more pronounced impact on Tribal members who have a higher reliance on these resources for subsistence and cultural reasons, and at the same time, face disproportionate health challenges and could significantly benefit from increased salmon consumption.

As Dr. R.K. (Kim) Hartwig, Medical Director of Nimiipuu Health and Nez Perce Tribal member emphasizes:

Salmon generally were a main source of fuel for our people and not having that resource available has negatively impacted us in many ways. Certainly nutritionally: heart disease, diabetes, high blood pressure, kidney disease.

...Health is at the base of all of our quality of life. Not just physical health but our spiritual health, our mental health. In 2016, Nez Perce women, compared to...women in the US, had a 20 year difference, 20 year less life expectancy than a non-native woman....That's a full generation for many of our families.³²⁴

These health consequences directly impact and are impacted by the threats to continuing Tribal ways of life. "[H]ealth and way of life cannot be separated,"325 and at the same time, "the health of the salmon and the health of [T]ribal peoples are interrelated."326 Without more access to salmon and other culturally significant species like lamprey, the Tribes cannot guarantee enough for even ceremonial purposes. Tor some Tribes, attaining salmon for subsistence and ceremonial purposes means receiving surplus salmon from hatcheries, typically taken from the back of a truck. While this is better than no fish at all, it is wholly inadequate. The inability to harvest salmon from traditional fishing spots on the rivers in traditional ways weakens the link between the centuries of Tribal tradition and this important species. As a Yakama Psycho-Social Nursing Specialist concluded:

In sum, there's a huge connection between salmon and [T]ribal health. Restoring salmon restores a way of life. It restores physical activity. It restores mental health. It improves nutrition and thus restores physical health. It restores a traditional food source, which as we know, isn't everything—but its [sic] a big deal. It allows families to share time together and build connections between family members. It passes on traditions that are being lost. If the salmon came back, these positive changes would start.³²⁸

³²¹ See generally, e.g., Quaempts et al., supra note 9; Ray, supra note 35, at 41. See also Nez Perce Tribe & Environmental Protection Agency, A Fish Consumption Survey of the Nez Perce Tribe (Dec. 2016) (describing historic reliance on salmon).

Meyer Report, *supra* note 8, at 99; The Confederated Tribes of the Colville Reservation, Comment Letter on Tribal Circumstances Analysis, at 4 (April 10, 2024).

³²³ Coeur d'Alene Tribe, Comment Letter on CRSO Draft EIS (Apr. 13, 2020).

³²⁴ Covenant of the Salmon People (Swiftwater Films, Shane Thomas Anderson dir., 2023).

³²⁵ Meyer Report, supra note 8, at 51 (quoting Armand Minthorn, Confederated Tribes of the Umatilla Indian Reservation).

³²⁶ *Id.* at 129 (summarizing Shoshone-Bannock leaders and experts).

³²⁷ The Lost Fish: The Struggle to Save Pacific Lamprey (Jeremy Monroe & David Herasimtschuk Dirs., 2015).

³²⁸ Meyer Report, supra note 8, at 163 (cleaned up).

Recent Tribal efforts to release and reintroduce salmon to blocked areas above Chief Joseph and Grand Coulee dams allow Tribal members from the Colville, Spokane and Coeur d'Alene tribes to realize these benefits for the first time in several generations. When the Spokane and Coeur d'Alene tribes conducted ceremonial releases on their reservations, it was the first time in a century their members could harvest anadromous fish on their homelands. Similarly, Tribal members, including Tribal youth, from the Upper Columbia tribes and Nez Perce Tribe have learned how to carve and paddle traditional canoes, reconnecting with another important cultural tradition. While these opportunities represent remarkable progress, they are not enough.

During many consultations, Tribal leaders also emphasized the burden the Tribes have borne in needing to repeatedly implore the United States to address the salmon crisis.³³² This too can be understood as an effect on Tribal sovereignty. The Tribes have invested countless hours ensuring their voices are heard throughout the whole of the federal government. Tribal leaders described how the Tribes have poured their time, energy, hearts, spirit, and expertise into preventing salmon extinction, when the United States should have protected the fisheries so that the Tribes would have the economic, health, and resource security to undertake myriad other efforts to advance the vitality of their Nations. Nez Perce Tribal leaders have described their treaty and trust relationship with the United States as being minted of the same coin: representing the mutual benefits the Treaty provided to the United States and the Tribe, and also representing that one party may not burden the other by failing to live up to the solemn obligations in the Treaty.

When resources as central to Tribal culture, economies, health, and wellbeing are threatened, sovereignty itself is threatened. Diminished access to these same resources similarly threatens sovereignty by weakening Tribal members' connection to culturally significant elements of the biophysical environment including plants, wildlife, geological features, and waterways.³³³ In signing treaties, establishing reservations, and recognizing the government-to-government relationship with Tribal Nations, the United States government promised to respect Tribal sovereignty and self-governance. As described above, the federal government understood the importance of fish and natural resources to the Tribes and, in entering the treaties, recognized the import of protecting Tribal

³²⁹ See, e.g., Casey Baldwin, Conor Giorgi, and Thomas Biladeau, Cultural and educational releases of salmon in areas blocked by major hydroelectric projects on the Columbia River, 25 Aquatic Ecosystem Health & Management Society 16, 20 (2022); Coeur d'Alene Tribe, Press Release (June 26, 2020) *The Coeur d'Alene Tribe releases the first adult salmon into Hangman Creek since dam construction*, https://www.restorationpartnership.org/pdf/Press%20Release_Salmon%20Ceremony%20 7%209%202020.pdf.

Casey Baldwin, Conor Giorgi, and Thomas Biladeau, Cultural and educational releases of salmon in areas blocked by major hydroelectric projects on the Columbia River, 25 Aquatic Ecosystem Health & Management Society 16, 21 (2022).

³³¹ See Upper Columbia United Tribes, Canoe Journey and Gathering at Kettle Falls, https://ucut.org/fish/canoe-journey-gathering-kettle-falls/ (last visited May 28, 2024); Nimíipuu Protecting the Environment, Nimiipuu Canoe Project, https://www.nimiipuuprotecting.org/canoe-project (last visited May 28, 2024).

³³² See, e.g., Affiliated Tribes of Northwest Indians, Resolution #2021-23 (May 2021); National Congress of American Indian, Resolution #ECWS-23-003 (2023).

³³³ Yakama Nation, Comment Letter on CRSO Draft EIS 27 § 5.1(A) (Apr. 13, 2020) (asserting a broader definition of 'cultural resources' based on Indigenous knowledge learning systems).

harvest on-reservation and at usual and accustomed grounds or on unoccupied lands as essential to the ongoing exercise of the treaty Tribes' sovereignty. Without the resources and locations to exercise these rights, those reserved authorities are undermined, and it is consistent with the United States' treaty and trust responsibilities to act to protect them.



Figure 27: Pacific lamprey ready for release. Source: Sarah Ortiz/U.S. Fish and Wildlife Service.

IV. Recommendations for Furthering the United States' Treaty and Trust Responsibilities and Achieving a Healthy and Resilient Columbia River Basin

Effects on Tribal self-governance and sovereignty, as well as Tribal members' physical, mental, and spiritual health, resulting from the depleted resources in the Columbia River Basin, call for concerted efforts by the federal government to exercise its trust responsibilities and advance restoration and resource protection efforts. Over a century ago, the government and private interests began damming the Columbia River's tributaries. These actions, along with many contemporaneous actions, perpetuated and were part and parcel of the historical transfer of land, natural resources, and wealth away from the Tribes. As the full system of dams and reservoirs was being developed, Tribes and other interests protested and sounded the alarm on the deleterious effects the dams would have on salmon and aquatic species, which the government, at times, acknowledged. However, the government afforded little, if any, consideration to the devastation the dams would bring to Tribal communities, including to their cultures, sacred sites, economies, and homes. Yet despite that reality, a century later, those same Tribes continue to fight resiliently for a better future for their members and the resources they have stewarded since time immemorial. This section provides examples of how the federal government has started to answer the Tribes' calls and considers further opportunities the government has to respond and prioritize the protection of the Tribes' rights and the resources underpinning those rights in carrying out its treaty and trust responsibilities.



Figure 28: Phase 2 Implementation Plan Signing Ceremony. Source: Department of the Interior.

A. Prioritize fulfilment of the United States' treaty and trust responsibilities by protecting and enhancing the resources the Tribes depend on for survival.

For Columbia River Basin Tribes, self-government, sovereignty, and treaty and other rights integrally relate to the Columbia River and its resources. As a source of sustenance, it was necessary to preserve the continued access to those resources if reservations were to serve as permanent homelands.³³⁴ This access continues to be a necessity today, and the Tribes have retained certain reserved rights and the accompanying access to sufficient resources, in particular salmon, "to provide ... a livelihood" or "moderate living."³³⁵

However, fulfillment of these rights remains wanting for the Tribes. 336 Salmon runs have shrunk to a tiny fraction of historic abundance and have been eliminated altogether from parts of the Basin. The conversion of the Columbia River to a system of dams serving electric power generation, flood risk management, irrigation, and navigation interferes with the river functions that support fulfillment of the Tribes' rights. 337 Other Federal actions also have and continue to impede salmon survival, productivity, and abundance. 338 Taken together, these actions transferred wealth from the Tribes

³³⁴ See, e.g., Meyer Report, supra note 8, at 218 ("[T]ribal negotiators reserved the right to harvest salmon at traditional locations throughout their ceded areas from a Columbia/Snake River system which was fully functional and productive. If the [T]ribal Treaty negotiators had perceived that they were bargaining to reserve 'only a small fraction' of the salmon available in 1855 – the treaty negotiations would have been much different, if they had occurred at all"). See also Fishing Vessel Ass'n, 443 U.S. at 676–677 (1979).

³³⁵ Fishing Vessel Ass'n, 443 U.S. at 686 (1979).

³³⁶ *Id.* at 669–670; see also United States v. Washington, 853 F.3d 946 (9th Cir. 2017).

³³⁷ National Marine Fisheries Service, National Oceanic and Atmospheric Administration, *Rebuilding Interior Columbia Basin Salmon and Steelhead* (2022); Shoshone-Bannock Tribes, Tribal Perspectives on CRSO Draft EIS, at 10 (2019) ("with the current system configuration we will be unable to meet our collective goals of species conservation and sustaining Tribal treaty rights").

³³⁸ See, e.g., Northwest Power & Conservation Council, Columbia River History: Logging, https://www.nwcouncil.org/

to others who benefit more from the services of dam operations and other activities detrimental to salmon and other river resources.³³⁹

Faced with these conditions, the federal government has a responsibility to carry out the commitments of the United States to Tribes as expressed in treaties and implied by reservation creation. At a foundational level, that means seeking to avoid further harm to Tribes' rights and resources. Merely avoiding additional adverse effects, however, is not enough.

Considering the impacts described in this report, as articulated by Tribes for decades, the government must do better and continue taking affirmative steps to improve the conditions of the Tribes and the resources that support the government's treaty commitments and Tribes' self-governance rights. This is especially true in the face of climate change, which threatens to exacerbate the many adverse impacts already imposed on Tribes. Many existing laws authorize, encourage, and even require such actions. They include the specific mandate to provide equitable treatment to fish and wildlife resources affected by federal hydroelectric dams in the Columbia River Basin,³⁴⁰ the ESA's mandate to conserve endangered and threatened species,³⁴¹ and numerous broad fish and wildlife conservation authorities,³⁴² including sections 4, 10, and 18 of the Federal Power Act.³⁴³

In light of the foregoing, the following section provides approaches and recommendations for how the Department, and other agencies, could better account for the impacts detailed in this report and improve the consideration and implementation of the United States' treaty and trust responsibilities. The first set of recommendations in subsection B is framed through the lens of NEPA analyses but may be applicable to other analyses and decision-making frameworks as well, including, for example, the National Historic Preservation Act process. The second set of recommendations in subsection C seeks to build on and fully support the historic progress that the federal, Tribal, and state governments have made in support of Tribal self-governance and healthy and abundant salmon, steelhead, and other species. Although the recommendations in this section aim to inform future decision making, they do not represent formal or binding guidance. For each federal action, the responsibilities to implement NEPA reside with the action agencies that carry out NEPA consistent with their respective statutory and regulatory requirements.

60

reports/columbia-river-history/logging/ (last visited May 10, 2024) (describing impacts to salmon from logging, including on federal lands).

³³⁹ Yakama Nation, Comment Letter on CRSO Draft EIS, at 60 (Apr. 13, 2020).

^{340 16} U.S.C. § 839b(h)(11)(A) ("Federal agencies responsible for managing, operating, or regulating Federal or non-Federal hydroelectric facilities located on the Columbia River or its tributaries shall exercise such responsibilities. . .to adequately protect, mitigate, and enhance fish and wildlife, including related spawning grounds and habitat, affected by such projects or facilities in a manner that provides equitable treatment for such fish and wildlife with the other purposes for which such system and facilities are managed and operated").

^{341 16} U.S.C. § 1536(a)(1). See also Memorandum from Sarah Krakoff, Deputy Solicitor for Parks and Wildlife & Shawn Finley, Attorney-Advisor, to Martha Williams, Director, U.S. Fish and Wildlife Service, Federal Agency Obligations under Section 7(a)(1) of the Endangered Species Act (Feb. 6, 2024); United States Department of the Interior and United States Department of Commerce, Joint Secretarial Order 3206, American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act (June 5, 1997).

^{342 16} U.S.C. § 661(b); 16 U.S.C. § 1536(a)(1).

^{343 16} U.S.C. §§ 797, 803, 811.



Figure 29: Releasing Chinook salmon smolt from Leavenworth National Fish Hatchery. Source: Heather Love/U.S. Fish and Wildlife Service.

B. Acknowledge and integrate these facts in NEPA analyses of proposed federal actions.

To uphold federal obligations to the Tribes, agencies should fully consider and integrate the unique inequities Tribes have suffered as a result of federal dam construction and operation, as well as other actions adversely impacting Tribes' rights and resources. Federal agencies also should consider and properly weight the unique benefits that the Tribes could receive from various options for taking proposed actions. Although there are numerous common impacts across Tribes, specific impacts and the appropriate redress are necessarily specific to individual Tribes. As described below, NEPA offers multiple opportunities for agencies to structure their NEPA analyses to ensure that decisionmakers carefully consider how actions affect Tribes' rights and resources.

i. Identify implementation of treaty and trust responsibilities as a central element in the statement of purpose and need for action.

Supporting fulfillment of federal responsibilities to Tribes, including through protection of their rights and associated resources, should be a central element in the NEPA purpose and need for any action in the Columbia River Basin with the potential to affect the rights or resources of Tribes. This could include identifying among purposes clear and measurable objectives for effects to important resources, such as salmon populations. By incorporating fulfillment of responsibilities to Tribes when defining the purpose and need for action, the analysis will have the building blocks necessary to support informed decision-making on effects to Tribes' rights and resources in subsequent NEPA steps. As a result, it can also help to avoid the past mistakes of ignoring, understating, or assuming away risks to Tribes' rights and resources.

Including a focus on treaty and trust responsibilities to Tribes in the purpose and need for action is consistent with NEPA's purposes under the circumstances described here. The Tribes are not mere stakeholders with interests to be balanced. They are sovereigns with rights and resources protected by federal law. Compliance with the law is a necessary element of every purpose and need for federal action.³⁴⁴ Agencies have discretion to define the purpose and need for an action under NEPA,³⁴⁵ as long as they are not unreasonably narrow,³⁴⁶ or defined in a way that preordains outcomes.³⁴⁷

ii. Include actions that uphold treaty and trust responsibilities to the Tribes in alternatives considered in detail.

By including implementation of responsibilities to Tribes as a central component of the purpose and need for action, agencies can more clearly consider alternatives supporting those objectives. NEPA requires agencies to "give full and meaningful consideration to all viable alternatives" to foster informed decision-making,³⁴⁸ and the reasonableness of the range of alternatives an agency considers is informed by the purpose and need for action.³⁴⁹ In actions related to the federal Columbia and Snake River dams, it can be reasonable and consistent with the purposes of NEPA to consider alternatives to improve the conditions that have contributed to Tribes' rights remaining unsatisfied. One way to identify such alternatives could be an assessment of whether the alternatives would support fulfillment of Tribes' treaty and reserved rights and any associated government responsibilities to protect and improve related resources.

iii. Recognize that status quo conditions reflect a degraded baseline.

NEPA analyses should adequately recognize that baseline conditions have been degraded over decades and persistent historic inequities result from ongoing actions. NEPA implementation guidance recommends analyses of ongoing actions utilize "the present course of action" as the "benchmark ... to compare the magnitude of effects of the action alternatives."³⁵⁰ Such a baseline assumption may assist with measuring and comparing effects of changes to an ongoing action, but relying on it exclusively can, in certain circumstances, result in the risk of inadequately recognizing the context inherent in unchanged parts of status quo conditions. A resulting narrowed effects analysis could create the impression that the scope of the action and effects, and even the agency decision itself, are more circumscribed than they are. In some instances when evaluating an ongoing action, using the status quo as the benchmark for measuring effects of alternatives, without sufficient consideration of the broader context, could mean never considering the historic and cumulative effects of the ongoing action.³⁵¹

³⁴⁴ See, e.g., HonoluluTraffic.com v. Fed. Transit Admin., 742 F.3d 1222, 1230 (9th Cir. 2014) (concluding that a purpose and need statement "must consider the statutory context of the federal action at issue") (citations and quotations omitted)

³⁴⁵ E.g., City of Los Angeles v. Federal Aviation Admin., 63 F.4th 835, 843 (9th Cir. 2023) (citations and quotation omitted).

³⁴⁶ E.g., City of Carmel-by-the-Sea v. U.S. Dept. of Transportation, 123 F.3d 1142, 1155 (9th Cir. 1997) (citation and quotation omitted).

³⁴⁷ E.g., City of Los Angeles, 63 F.4th at 843 (citations omitted).

³⁴⁸ Envtl. Def. Ctr. v. Bureau of Ocean Energy Mgmt., 36 F.4th 850, 878 (9th Cir. 2022) (citation and internal quotation marks omitted).

³⁴⁹ *E.g.*, *City of Los Angeles*, 64 F.4th at 843.

³⁵⁰ Council on Environmental Quality, Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations, 46 Fed. Reg. 18,026 (March 23, 1981).

³⁵¹ *Cf.* Endangered and Threatened Wildlife and Plants; Regulations for Interagency Cooperation, 89 Fed. Reg. 24,268, 24,275 (Apr. 5, 2024) (describing the importance under the ESA of ensuring the baseline for measuring effects is distinct from the whole

For example, focusing solely on current dam operations as the starting point for measuring effects in the alternatives analysis, especially without sufficient discussion of the historic and continuing implications of the status quo, runs the risk that agencies may not fully consider the consequences of the status quo that are unchanged in the alternatives. It also risks ignoring or deemphasizing the historic and ongoing effects that have resulted from dam operations. As the circumstances described in this report demonstrate, relying on a narrow baseline discussion to constrain the scope of effects analysis would disadvantage the interests of Basin Tribes who are uniquely impacted by the current conditions. It could also cause a NEPA analysis to ignore the continuing and historic effects of an ongoing action.

To address this shortcoming, NEPA analyses should adequately recognize that the baseline conditions have been degraded over decades and the persistent historic inequities resulting from ongoing actions. For dam operations analyses, that means recognizing the devastation to Tribes' ways of life that resulted from industrial development of the river, including its continued management for purposes of electric power generation, water supply, flood risk management, and barge transportation. By recognizing degraded status quo conditions resulting from decades of actions, analyses are better positioned to meet NEPA's requirement to take a hard look at the consequences of any decision, including those that would perpetuate these conditions.

iv. Consider how current conditions and wealth transfer lead to indirect adverse effects on Tribes in cumulative effects analyses.

Cumulative effects analyses within NEPA documents should recognize the accumulation of adverse impacts to Columbia River Basin resources and the Tribes. Cumulative effects are impacts to the human environment "that result from the incremental effects of the action when added to the effects of other past, present, and reasonably foreseeable actions regardless of what agency ([f]ederal or non-[f]ederal) or person undertakes such other actions."352 Such effects "can result from actions with individually minor but collectively significant effects taking place over a period of time."353 By ensuring complete consideration of the historical accumulation of adverse effects on Tribes, an agency can ensure it is informed of whether a proposed "action and its alternatives may have a continuing, additive and significant relationship to those effects."354

The conversion of the Columbia River to serve industrial purposes is one of many contributors to the catastrophic decline of salmon and other riverine resources. The government constructed the dams at a time when the salmon runs already were depleted by decades of preceding unsustainable commercial cannery operations and widespread habitat destruction from mining, logging, irrigation, agriculture, transportation system development, and non-federal dam construction. The destruction of the salmon runs, accelerated by the federal dam system, has resulted in decades of accumulating effects, whether because of reduced harvest opportunities and connections to traditional fishing areas, or lost access to usual and accustomed places now inundated by reservoirs. The incremental effects of ongoing operation of the federal dams must be considered in relation to the accumulating consequences of these past actions.

effects of an action).

^{352 40} C.F.R. § 1508.1(i)(3).

³⁵³ Id.

Council on Environmental Quality, Guidance on the Consideration of Past Actions in Cumulative Effects Analyses 1 (June 24, 2005).

v. Consider the unique roles affected resources play in Tribal culture in the analysis of effects to cultural resources.

The river environment is central to the cultural resources, practices, and institutions of the Basin Tribes, with salmon as a cornerstone. These relationships are an important aspect of the affected human environment in a NEPA analysis. Specifically, NEPA requires analysis of effects of an action to the "human environment," including "the natural and physical environment and *the relationship of present and future generations with that environment.*" This analysis requires considering "ecological ... aesthetic, historic, cultural, economic, social, or health [effects], such as disproportionate and adverse effects on communities with environmental justice concerns, whether direct, indirect, or cumulative," that an action causes to the relationship of people with the environment.

Defining the effects of a proposed action on Tribal cultural resources requires first considering the unique roles resources in the river environment play in Tribes' cultures. Once set forth in a NEPA analysis, those relationships can inform the analysis of effects to Tribes stemming from proposed actions. Likewise, a clear recognition of these unique relationships, when coupled with the need to recognize degraded baseline conditions, allows NEPA analyses to account for the significant adverse historical effects federal dams have had on Tribes' cultural resources and thus to inform decisionmakers and the public.

Especially for Tribal cultural resources, impacts should be carefully considered from the Tribes' perspectives. For example, when considering potential threats to sites and properties exposed during drawdowns at Columbia River System projects, agencies should give precedence to Tribal preferences and considerations for the unique effects on Tribes, including potential beneficial impacts, that may result.

vi. Discuss and give adequate weight to the disproportionate burdens on Tribes, especially in environmental justice analyses.

The disproportionate burdens Basin Tribes shoulder must be a focus of any environmental justice discussion and should further be incorporated throughout the NEPA analysis. In NEPA analyses, agencies must identify and address "disproportionately high and adverse human health or environmental effects of [federal] programs, policies, and activities" on minority and low income populations.³⁵⁷ To discern whether a federal action will result in such effects, federal guidance suggests that agencies consider the proposed action's exposure pathways; ecological, aesthetic, historic, cultural, economic, social, and health consequences to the community; and the distribution of adverse and beneficial impacts from the proposed action.³⁵⁸ Further guidance calls on agencies specifically to recognize that "different patterns of living, such as subsistence fish ... consumption," may result in unique impacts to environmental justice communities "due to a community's distinct cultural practices."³⁵⁹

National Environmental Policy Act Implementing Regulations Revisions Phase 2, 89 Fed. Reg. 35,442, 35,575 (May 1, 2024) (to be codified at 40 C.F.R. § 1508.1(r)) (emphasis added).

National Environmental Policy Act Implementing Regulations Revisions Phase 2, 89 Fed. Reg. 35,442, 35,575 (May 1, 2024) (to be codified at 40 C.F.R. § 1508.1(i)(4)).

Exec. Order No. 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, 59 Fed. Reg. 7629 (Feb. 11, 1994); see also Exec. Order No. 14096, Revitalizing Our Nation's Commitment to Environmental Justice for All, 88 Fed. Reg. 25,251 (Apr. 21, 2023). See also National Environmental Policy Act Implementing Regulations Revisions Phase 2, 89 Fed. Reg. 35,442, 35,554–55 (May 1, 2024) (to be codified at 40 C.F.R. § 1500.2(e)).

Federal Interagency Working Group on Environmental Justice & NEPA Committee, *Promising Practices for EJ Methodologies in NEPA Reviews* 15 (March 2016) (quotation omitted).

³⁵⁹ Council on Environmental Quality, Environmental Justice Guidance Under the National Environmental Policy Act 14 (Dec. 10, 1997).

Impacts on the Tribes' ways of life are precisely the kind of unique impacts to environmental justice populations that agencies should consider fully in NEPA analyses for actions in the Columbia River Basin. The distinct cultural practices of Basin Tribes are premised on a time immemorial connection to the river system and its ecological web of relationships. Federal actions related to the continued industrial management of the river neglect the history and rights of Tribal communities. The profound consequences to those communities from the transformation of the river are myriad and continuing. The distribution of positive and negative effects from river repurposing disproportionately disadvantages Tribes, depleting their wealth in salmon and replacing it with industry serving other interests. Notably, federal agencies should seek to include in their NEPA documents specific consideration of effects to individual Tribal Nations, each of which must be viewed as uniquely situated environmental justice communities and not as a monolith. Environmental justice analyses also may consider how actions would advance Tribal equity and self-governance, two critical components in furthering environmental justice.



Figure 30: Resilient Columbia Basin Agreement Ceremonial Signing Event. Source: Department of the Interior.

C. Support actions that strengthen Tribal sovereignty and achieve healthy and abundant populations of salmon, other aquatic species, and wildlife

The flourishing of Basin Tribes is inextricably linked to the health of the Columbia River and its tributaries. The holistic nature of the impacts on the Tribes documented in this report makes clear that the government must aim for more than compliance with the ESA and other environmental statutes. The government should support actions that achieve healthy and abundant populations of salmon, other fish, and wildlife throughout the Basin.³⁶⁰ At present, the decades of inadequately mitigated

³⁶⁰ See, e.g., President Joseph R. Biden, Presidential Memorandum on Restoring Healthy and Abundant Salmon, Steelhead,

harmful impacts on the Basin's natural resources require a continued focus on avoiding extinction. But reaching that threshold, although critical, would not fully remedy the historic and ongoing injustices Tribes have shouldered. As many Tribal members expressed throughout consultation, maintaining the status quo would be a daily decision to not do more. Honoring the United States' trust responsibility to Tribes calls for working in tandem with Tribes towards healthy and abundant populations in all portions of the Basin.

Already, the federal government, the Tribes, and other regional sovereigns are undertaking many new and meaningful efforts to achieve this goal. In 2023, President Biden issued a Presidential Memorandum on restoring healthy and abundant salmon, steelhead, and other native fish populations in the Columbia River Basin.³⁶¹ Federal agencies are working to advance activities that are consistent with the Presidential Memorandum's goals. The United States also reached two historic agreements with regional sovereigns to take unprecedented and necessary actions to support a resilient Columbia River Basin. In the Upper Columbia, the federal government is working with the Colville, Spokane, and Coeur d'Alene Tribes to implement the Phase 2 Implementation Plan, a 20-year effort of research and experimentation to test the feasibility of reintroducing salmon above Chief Joseph and Grand Coulee dams. 362 The government also is partnering with the Nez Perce, Warm Springs, Yakama, and Umatilla Tribes, the states of Oregon and Washington, and a coalition of environmental NGOs, on the implementation of the Resilient Columbia Basin Agreement.³⁶³ This work takes initial steps towards implementing a durable, long-term strategy to restore salmon and other native fish populations, ensure a clean energy future, and support local and regional economic resilience. Both efforts are Tribally driven and call for a whole of government approach. Prioritizing full funding and support for these agreements and efforts under the Presidential Memorandum will be critical to their progress and success.

Agencies also should continue to work with Tribal Nations on co-stewardship and co-management opportunities for lands, waters, and species. These efforts should include improving prioritization of funding to address impacts to Tribes and their resources, as well as recognizing Tribes' expertise and sovereign resource management authority. For example, in recognition of such expertise and authority, in 2022 the Department transferred fish production at Dworshak National Fish Hatchery to the Nez Perce Tribe. The government's treaty and trust responsibilities are integral to its management of public lands and species conservation.³⁶⁴ For millennia, Tribes owned and managed millions of acres of land and water the Department and other federal agencies now manage, and the Tribes continue to develop and implement resource management and recovery plans. Many Basin Tribes

and Other Native Fish Populations in the Columbia River Basin (Sept. 27, 2023); Columbia Basin Partnership Phase 2 Report, supra note 21.

³⁶¹ President Joseph R. Biden, *Presidential Memorandum on Restoring Healthy and Abundant Salmon, Steelhead, and Other Native Fish Populations in the Columbia River Basin* (Sept. 27, 2023).

Upper Columbia United Tribes, *Phase 2 Implementation Plan (P2IP): Testing Feasibility of Reintroduced Salmon in the Upper Columbia River Basin* (Aug. 4, 2022), https://ucut.org/water/phase-2-implementation-plan-testing-feasibility-of-reintroduced-salmon/.

³⁶³ See Columbia Basin Restoration Initiative, supra note 118.

United States Department of the Interior and United States Department of Agriculture, Joint Secretarial Order 3403, Joint Secretarial Order on Fulfilling the Trust Responsibility to Indian Tribes in the Stewardship of Federal Lands and Waters (Nov. 15, 2021); United States Department of the Interior and United States Department of Commerce, Joint Secretarial Order 3206, American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act (June 5, 1997).

have plans for improving the water, land, fisheries, and other natural resources they manage, including restoration plans for numerous important species such as Pacific salmon, Pacific lamprey, and white sturgeon.³⁶⁵ Engaging in co-stewardship, including co-management, and interweaving the plans and science completed by the Tribes into decision making will be imperative as the government seeks to restore healthy and abundant native fish populations in the Columbia River Basin.

Agencies should exercise all authorities to take and support actions benefiting the depleted resources on which the Tribes rely, and work toward making a reality the salmon and other resource abundance the Tribes have long called for.³⁶⁶ The government should seek out opportunities to further honor its obligations to the Basin's Tribes. This includes concerted efforts to consolidate Tribal homelands by taking more land into trust to improve Tribal members' ability to access harvest opportunities and Tribal management of natural resources. It also may mean more creative and effective mitigation management and activities, including mitigation for non-aquatic species affected by the dams and reservoirs. Similarly, it is important that the federal government support more fish passage at federal and non-federal projects and fish passage that accounts for non-salmonid migrating fish. While undertaking this work, the government must continue to remove barriers to meaningful participation and enhance transparency,³⁶⁷ look for efficiencies and flexibilities, as called for under Executive Order 14112,³⁶⁸ and seek other methods to assist and empower Tribes as they carry out this work in the Basin.

Additionally, the important work of restoring the rich abundance of the Columbia River Basin necessarily means working collaboratively with many partners. Senator Murray, in partnership with Washington Governor Inslee, released recommendations, ³⁶⁹ and Representative Simpson put forth a high-level plan on lower Snake River restoration ³⁷⁰—both of which acknowledge the central and foundational element of honoring the United States' trust responsibilities to the Basin Tribes. The Columbia River Inter-Tribal Fish Commission, ³⁷¹ Columbia Basin Partnership Task Force, ³⁷² and the Northwest Power and Conservation Council ³⁷³ have developed abundance and production targets for restoring thriving salmon and steelhead. The federal government should continue advancing partnerships with regional sovereigns and stakeholders. There is a tremendous amount of expertise in the region that federal agencies should continue to aid and utilize.

³⁶⁵ See Appendix A for examples.

³⁶⁶ *E.g.*, The Confederated Tribes of the Warm Springs Reservation of Oregon, the Confederated Tribes of the Umatilla Indian Reservation, the Nez Perce Tribe, and Yakama Nation have all emphasized the need to "bring forward the Tribal people and fisheries left behind in the rush of development" and the need to ensure the Tribes "have the resources to rebuild a fishing economy throughout usual and accustomed fishing areas in an environment altered by reservoirs and hatchery locations." Columbia Basin Restoration Initiative, *supra* note 118, at 5, 14.

³⁶⁷ See Exec. Order No. 14096, Revitalizing Our Nation's Commitment to Environmental Justice for All, 88 Fed. Reg. 25,251 (Apr. 21, 2023).

Exec. Order 14112, Reforming Federal Funding and Support for Tribal Nations To Better Embrace Our Trust Responsibilities and Promote the Next Era of Tribal Self-Determination, 88 Fed. Reg. 86021 (Dec. 6, 2023).

³⁶⁹ Lower Snake River Dams: Benefit Replacement Report (2022) (Murray-Inslee Report).

³⁷⁰ Representative Mike Simpson (R-ID), presentation, *The Northwest in Transition: Dams, Energy, and Salmon* (2021), https://simpson.house.gov/uploadedfiles/websiteslides2.4.pdf.

³⁷¹ Columbia River Inter-Tribal Fish Commission, Spirit of the Salmon: WY-KAN-USH-MI WA-KISH-WIT (2014).

³⁷² Columbia Basin Partnership Phase 2 Report, supra note 21.

Northwest Power and Conservation Council, Doc. 2020-9, 2014/2020 Columbia River Basin Fish and Wildlife Program (Oct. 20, 2020).

This report itself provides only a snapshot of certain federal dams in the Columbia River Basin and its consequences for the most immediately affected Tribes. The Department, in consultation with Basin Tribes, could consider any supplements or updates to this report. During consultation, many Tribal leaders emphasized the need to make this document a "living" document that is updated regularly. As part of any updates, the Department could expand the report to include other projects or subbasins, consideration of non-federally operated dams in the Basin, or more in-depth work on the projects and Tribes considered in this document. The Department should consult with all Columbia River Basin Tribes when determining any expansion of this report.



Figure 31: Chinook salmon spawning. Source: NOAA Fisheries.

Conclusion

For over a century, the Columbia River Basin Tribes have fought to protect their people, culture, lands, and resources from the myriad threats they face. Understanding, documenting, and better analyzing that history, much of which continues today, is only one part of the work that needs to be done. The next step is using this understanding to advance results on the ground. Longer-term planning and restoration initiatives are necessary, but the perilous state of the salmon and other species require impactful immediate next steps as well. In close collaboration with the Tribes, the government should build on the progress made and work to prioritize near-term tangible actions that address and seek to better the circumstances described in this report.

Appendix A: Plans, Reports, Multimedia, and Other Publications by Tribal Nations

Affiliated Tribes of Northwest Indians, Resolution #2021-23 (May 2021).

Anakú Iwachá: *Yakama Legends and Stories* (Virginia R. Beavert, Michelle M. Jacob, & Joana W. Jansen eds., 2nd ed. 2021).

Baldwin, Casey, Conor Giorgi, & Thomas Biladeau, *Cultural and educational releases of salmon in areas blocked by major hydroelectric projects on the Columbia River*, 25 Aquatic Ecosystem Health & Management Society 16 (2022).

Building Grand Coulee Dam: A Tribal Perspective (Christopher Horsethief, Skydog Records dir., 2007), https://www.cct-hsy.com/building-grand-coulee-dam.

Columbia River Inter-Tribal Fish Commission, *Spirit of the Salmon: WY-KAN-USH-MI WA-KISH-WIT* (2014), https://plan.critfc.org/2013/spirit-of-the-salmon-plan/about-spirit-of-the-salmon/creation-story/.

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Columbia River Inter-Tribal Fish Commission, *White Sturgeon Hatchery Management Plan* (2015), https://critfc.org/documents/white-sturgeon-hatchery-master-plan/.

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Confederated Tribes of the Colville Reservation History/Archeology Program, *Native American Place Names Along the Columbia River Above Grand Coulee Dam, North Central Washington And Traditional Cultural Property Overview Report For the Confederated Tribes of the Colville Reservation* (Matilda George ed., revised 2011), https://www.cct-hsy.com/place-name.

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Covenant of the Salmon People (Shane Thomas Anderson dir., 2023), <u>www.covenantofthesalmonpeople.com</u>.

Grand Coulee Dam: Tribal Impacts (Christopher Horsethief, Skydog Records dir., 2006), https://www.cct-hsy.com/grand-coulee-dam-tribal-impacts.

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Joint Paper of the Columbia Basin Tribes & First Nations: Fish Passage & Reintroduction into the U.S. & Canadian Upper Columbia Basin (2015), https://ucut.org/wp-content/uploads/2016/09/Fish_Passage_and_Reintroduction_into_the_US_And_Canadian_Upper_Columbia_River4-1.pdf.

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Matsaw, Sammy, Dylan Hedden-Nicely, & Barbara Cosens, *Cultural Linguistics and Treaty Language*, 50 Envtl. L. 415 (2020).

National Congress of American Indian, Resolution #ECWS-23-003 (2023).

Nez Perce Tribe Department of Fisheries Resources Management, *Department Management Plan 2013-2028*, at 13 (July 17, 2013), https://nezperce.org/wp-content/uploads/2020/09/DFRM-Management-Plan-2013-2028.pdf.

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Salmon and Our People: The Chief Joseph Dam Fishery Story (Mark Anderson dir., 2013), https://www.cct-hsy.com/salmon-our-people/.

Sams, Charles F., III, Wakanish Naknoowee Thluma: 'Keepers of the Salmon', in Remembering Celilo Falls, 108 Oregon Historical Quarterly 586 (2007).

The Kettle Falls Fishery (Christopher Horsethief, Skydog Records dir., 2003), https://www.cct-hsy.com/kettle-falls-fishery.

The Lost Fish: The Struggle to Save Pacific Lamprey (Jeremy Monroe & David Herasimtschuk dirs., 2015), https://www.freshwatersillustrated.org/the-lost-fish.

The Price We Paid (The Business Council of the Colville Confederated Tribes, dir., 1977), https://www.cct-hsy.com/the-price-we-paid.

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