

Confederated Tribes of the Warm Springs
Indian Reservation of Oregon



10 June 2019

Tribal Perspectives Report

Prepared by the Columbia River Treaty Tribes

Introduction and Purpose

This Tribal Perspective is provided to the Corps of Engineers, Bureau of Reclamation and Bonneville Power Administration [hereinafter “Co-Lead Agencies” or “Agencies”] in response to the Agencies’ email dated February 14, 2019, requesting submissions of Tribal Perspectives for the Columbia River System Operation Draft Environmental Impact Statement [CRSO DEIS]. This Tribal Perspective was prepared by the Nez Perce Tribe [NPT], Confederated Tribes of the Umatilla Indian Reservation [CTUIR], Confederated Tribes of the Warm Springs Reservation of Oregon [CTWRSO] and the Confederated Tribes and Bands of the Yakama Nation [YN] with assistance by the Columbia River Inter-Tribal Fish Commission [CRITFC][collectively the “Columbia River Treaty Tribes”].

The Columbia River Treaty Tribes expect that this Tribal Perspectives Report, incorporating by reference the entirety of the 1999 Meyer Report that serves as its foundation, will be incorporated in the CRSO EIS as submitted.¹ The Meyer Report provides a useful framework for outlining and introducing tribal concerns and perspectives with the effects of the federal Columbia and Snake river dams on tribal resources, interests and culture. This Tribal Perspective draws highlights from the Meyer Report and supplements it with updated and new information. For instance, since the 1999 Meyer Report, each of the Columbia River Treaty Tribes have published plans and reports reconfirming two of the major premises of the Meyer Report:

- The baseline for tribal salmon restoration and harvest is 1855; and
- There is a large gap between current conditions and the baseline.

¹ Meyer Resources, Inc., Tribal Circumstances and Impacts of the Lower Snake River Project on Nez Perce, Yakama, Umatilla, Warm Springs and Shoshone Bannock Tribes (April 1999) <<https://www.critfc.org/wp-content/uploads/2014/11/circum.pdf>> [hereinafter Meyer Report].

After an overview of the Tribes' treaty fishing rights, the following sections of the document consider updated plans for rebuilding salmon and other species adopted by the tribes themselves as well as other institutions. These planning commitments are then discussed in the context of preliminary analyses now available from the Co-Lead Agencies for the CRSO DEIS.

A. Background on the Treaty Rights to Take Fish of the Columbia River Treaty Tribes

Since time immemorial the Columbia River and its tributaries were viewed by the Columbia River Basin tribes as "a great table where all the Indians came to partake."² More than a century after the Confederated Tribes of the Umatilla Indian Reservation, the Confederated Tribes of the Warm Springs Reservation of Oregon, the Confederated Tribes and Bands of the Yakima Indian Nation, and the Nez Perce Tribe signed the treaties which reserved their fishing rights and created their reservations, the tribes' place at the table has been subordinated to energy production and other non-Indian water development. Today, the Columbia River treaty tribes struggle to fulfill even a small fraction of their reserved fishing rights. The treaties – the supreme law of the land under the United States Constitution – promised more.

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

United States v. Winans, 198 U.S. 371, 381 (1905) (*Winans* is a seminal case in Indian law. It upheld the Yakama Nation's treaty-reserved fishing rights on the Columbia River and established that treaties are "not a grant of rights to the Indians, but a grant of right from them – a reservation of those not granted.").

In the last twelve months two decisions from the U.S. Supreme Court have reaffirmed the permanence of the treaty commitments considered in the 1999 Tribal Circumstance report. These cases specifically addressed United States' treaty commitments made at the Walla Walla treaty grounds in 1855 as the tribal negotiators understood them.

In the *U.S. v. Washington "Culverts Case"*, the United States Supreme Court affirmed a decision by the Ninth Circuit Court of Appeals which determined that the Columbia River Tribes' Treaties guaranteed the right to have fish to take, not just the right for the tribes to dip their nets into empty waters devoid of salmon. The language of the appeals court confirms the perspective of the Columbia River Treaty Tribes in the CRSO DEIS.

The Indians did not understand the Treaties to promise that they would have access to their usual and accustomed fishing places, but with a qualification that would allow the government to diminish or destroy the fish runs. Governor Stevens did not make, and the Indians did not understand him to make, such a cynical and disingenuous promise.

² *Seufert Brothers Co. v. United States*, 249 U.S. 194, 197 (1919).

The Indians reasonably understood Governor Stevens to promise not only that they would have access to their usual and accustomed fishing places, but also that there would be fish sufficient to sustain them. They reasonably understood that they would have, in Stevens' words, "food and drink ... forever." As the Supreme Court wrote in *Fishing Vessel*:

Governor Stevens and his associates were well aware of the "sense" in which the Indians were likely to view assurances regarding their fishing rights. During the negotiations, the vital importance of the fish to the Indians was repeatedly emphasized by both sides, and the Governor's promises that the treaties would protect that source of food and commerce were crucial in obtaining the Indians' assent. It is absolutely clear, as Governor Stevens himself said, that neither he nor the Indians intended that the latter should be excluded from their ancient fisheries, and it is accordingly inconceivable that either party deliberately agreed to authorize future settlers to crowd the Indians out of any meaningful use of their accustomed places to fish.

United States v. Washington, 827 F.3d 836, 851–52 (9th Cir. 2016), opinion amended and superseded, 853 F.3d 946 (9th Cir. 2017) (citations omitted).

The Ninth Circuit upheld the district court's order directing the State of Washington to remove culverts underneath state roads that blocked salmon access to over 1,000 miles of spawning habitat. The State of Washington had vigorously opposed the positions of the United States and the tribes, at one point claiming that the treaties would not prevent the state from blocking every salmon bearing stream entering Puget Sound. *Id.* at 849-50. The State argued that the principal purpose of the treaties was to open land for settlement. "But it was most certainly not the principal purpose of the Indians. Their principal purpose was to secure a means of supporting themselves once the Treaties took effect." *Id.* at 851. Like the dams on the Columbia and Snake rivers, the culverts in Puget Sound transferred the productive function of salmon bearing streams into transportation systems benefiting the public while sacrificing tribal cultural and economic resources. The United States Supreme Court did not accept Washington's arguments for ignoring the treaty commitments.

More recently, the United States Supreme Court spoke at length to the nature of the of the Treaty agreements made by the United States and the Yakama Nation in the 1855 Treaties. It upheld the agreement as understood by the tribal negotiators: in short, "a deal is a deal."

[T]his Court has considered this [Yakama] treaty four times previously; each time it has considered language very similar to the language before us; and each time it has stressed that the language of the treaty should be understood as bearing the meaning that the Yakamas understood it to have in 1855. *See Winans*, 198 U.S. at 380–381, 25 S.Ct. 662; *Seufert Brothers Co. v. United States*, 249 U.S. 194, 196–198, 39 S.Ct. 203, 63 L.Ed. 555 (1919); *Tulee*, 315 U.S. at 683–685, 62 S.Ct. 862; *Washington v. Washington*

State Commercial Passenger Fishing Vessel Assn., 443 U.S. 658, 677–678, 99 S.Ct. 3055, 61 L.Ed.2d 823 (1979).

Washington State Dep't of Licensing v. Cougar Den, Inc., 139 S. Ct. 1000, 1011 (2019).

Really, this case just tells an old and familiar story. The State of Washington includes millions of acres that the Yakamas ceded to the United States under significant pressure. In return, the government supplied a handful of modest promises. The State is now dissatisfied with the consequences of one of those promises. It is a new day, and now it wants more. But today and to its credit, the Court holds the parties to the terms of their deal. It is the least we can do.

Id. at 1021 (Gorsuch and Ginsberg, concurring).

This year and last, the United States Supreme Court has upheld key treaty rights commitments. If there was a question in 1999 about the significance of the tribes' treaty fishing rights it has been resolved in favor of the tribes' understanding.

B. Tribal Circumstances Framework

These comments offer a perspective on the Columbia River System Operation Draft Environmental Impact Statement, including its background information, alternatives and evaluations. Because the CRSO DEIS is constantly evolving and incompletely drafted at the time these comments were prepared, the Columbia River Treaty Tribes will prepare further comments on the CRSO DEIS as it progresses. Each of the Co-Lead Agencies has adopted policies respecting the tribes' sovereignty, treaty secured interests, the Co-Leads' government-to-government relationships and their trust responsibilities to the tribes. It is important that the CRSO DEIS clearly inform the public that the tribes are not merely stakeholders, but that the tribes' interests are guaranteed by the United States.

In April 1999, the CRITFC published a report entitled "Tribal Circumstances and Impacts of the Lower Snake River Project on the Nez Perce, Yakama, Umatilla, Warm Springs and Shoshone Bannock Tribes" prepared by Meyer Resources, Inc. [hereinafter "Meyer Report"]. The Meyer Report was prepared under a contract between Foster-Wheeler and CRITFC with funding provided by the Corps of Engineers. The principle author of the Meyer Report was Phil Meyer, an economist with years of experience working with native communities. The Meyer Report was submitted to the administrative record for the Corps' Lower Snake River Juvenile Salmon Migration Feasibility Study and Draft Environmental Impact Statement.³ Since 1999, the Meyer Report has maintained its relevancy and is particularly pertinent to the CRSO DEIS.

³ Army Corps of Engineers, Lower Snake River Juvenile Salmon Migration Feasibility Study and Draft Environmental Impact Statement (Dec. 1999)<<http://docs.streamnetlibrary.org/USACE/LSR-FR-EIS/coemain.pdf>>; Army Corps of

One of the most salient features of the Meyer Report is the many contemporary statements by leaders of the Columbia River Treaty Tribes that it ties to the socio-economic analytical framework. The tribal leaders' quotations in the Meyer Report are all still relevant and particularly to the CRSO DEIS. Moreover, the tribes' views have been consistently expressed since treaty times.

God created this Indian country and it was like He spread out a big blanket. He put the Indians on it... Then God created the fish in this river and put deer in these mountains and made laws through which has come the increase of fish and game. ...For the women, God made roots and berries to gather, and the Indians grew and multiplied as a people. When we were created we were given our ground to live on, and from that time these were our rights. This is all true. We had the fish before the missionaries came. ...This was the food on which we lived. ...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. ...We never thought we would be troubled about these things, and I tell my people, and I believe it, it is not wrong for us to get this food. Whenever the seasons open, I raise my heart in thanks to the Creator for his bounty that this food has come.⁴

George Meninock's statement reinforces the tribal understanding at treaty times that the United States was securing the tribes' food, particularly fish. The testimony of Jim Wallahe, a co-defendant of Meninock, is also particularly pertinent to the CRSO EIS. He expresses his understanding that his treaty fishing rights were not subordinated by dam building. He stated, "I do not think I do any wrong when I fish at this place my father saved for me and which the great spirit made for the Indians [Top-tut Falls where Prosser Dam now exists]. Is it right for the white man to build a dam at the falls and then say that the Indians destroy the bounty of the Creator?"⁵

A more contemporary explanation of a similar point is made in the Nez Perce Tribe's Department of Fisheries Resources Management 2013-2028 Management Plan. "Tribal harvest is not to be viewed as a "new" action that incrementally increases the survival gap of diminished Columbia and Snake River runs, but rather as a baseline that the fish runs have always encountered and that the United States secured by treaty."⁶ For decades, the tribes

Engineers, Final Lower Snake River Juvenile Salmon Migration Feasibility Report/Environmental Impact Statement (Feb. 2002).

⁴ Testimony of George Meninock before the Washington Supreme Court in 1913 in Meyer Report, *supra* note 1 at 146. An excellent description of the events leading up to and following this testimony is provided in the book, "Si'lailo Way" (see note 5).

⁵Dupris, Joseph C. et al., *The Si'lailo Way: Indians, Salmon and the Law on the Columbia River* at 229 (Caroline Academic Press 2006).

have shouldered the conservation burden created by dams which they eloquently opposed in formal testimony.⁷

The Meyer Report reinforces the vision of George Meninock who urged non-Indians to respect the commitments of Isaac Stevens, the United States' 1855 treaty negotiator and Governor of Washington Territory.⁸ The Meyer Report describes the baseline from which to consider the effects of the Lower Snake River Dams:

At treaty times, the salmon resource reserved by the tribes was the harvest from river systems that were biologically functional and fully productive. If the tribal treaty negotiators had perceived that they were bargaining to reserve "only a small fraction" of the salmon available to harvest in the mid-1800's, the treaty negotiations would have been much different – if they had occurred at all.

The treaty signers, both tribal and non-tribal, were also clear that the Treaties were designed to take care of the needs of tribal peoples into the future without limit. Successive tribal leaders have reminded us of this intent. Consequently, there is no date in time, subsequent to 1855, that cuts off tribal Treaty entitlements.

In conclusion, the Treaty tribes are entitled to a fair share of the salmon harvest from all streams in their ceded area(s) – measured at the fully functioning production levels observed in the mid-1800's. This was the tribal entitlement at Treaty times. It is still so today, and into the future. Declines in the salmon productivity of the river due to subsequent human action have not changed this entitlement.⁹

⁶ Nez Perce Tribe Department of Fisheries Management, Management Plan 2013-2028 at 45 (July 17, 2013), <<http://www.nptfisheries.org/portals/0/images/dfrm/home/MgmtPlan.pdf>>.

⁷ *E.g.*, Comments of William Minthorn in US Army Corps of Engineers, Review Report on John Day Dam, 22-3: this dam [John Day] will do a lot of people some good in this community - however, our primary concern has always been fishing, that is the Indians' concern has been fishing and ancient fishing sites. Therefore, we oppose the construction of the John Day Dam. For these reasons, the main reason is that it will flood out the last remaining fishing sites that was guaranteed us by our treaty of June 9, 1855. Already through the other constructions of the developments to date, we have lost some of our best fishing sites, such as Celilo Falls. Practically the last remaining fishing sites that we have left is between the mouth of the John Day River and the McNary Dam; so by building the John Day Dam, these last remaining sites will be flooded.

Allen, Cain, *Replacing Salmon: Columbia River Indian Fishing Rights and the Geography of Fisheries Mitigation* in Oregon Historical Quarterly, Vol. 104 No. 2, pp. 196-227 at 215 (Summer 2003) <www.jstor.org/stable/20615319> [hereinafter *Replacing Salmon*].

⁸ Isaac Stevens' military career included service with the Corps of Engineers the during the Mexican-American War.

⁹ Meyer Report, *supra* note 1 at 15.

As described by a Warm Springs tribal leader in the Meyer Report:

So there's no question that the people hold you responsible forever to manage the salmon and all of the foods that they reserved. And that's a simple answer to the concern of how long do you manage. I understand that now some people say, 'Why the fisheries resources getting small, it's so minor now. It isn't worth planning for any longer.' The industrial and economic people saying, 'Let's go another direction. To heck with the good rivers, clean rivers and the salmon. Let's go another way.' That's a question coming pretty close I understand. And that is not the case. We're going to be there to say you're going to keep your promise. Forever!¹⁰

No intervening circumstances have changed this important perspective, which the tribes have held prior to and since their treaty negotiations. As discussed below, events since 1999 have not diminished, but rather have reinforced, the point of view that the United States' treaty commitments are forever.

C. An updated discussion of tribal poverty and income levels of the Columbia River Treaty Tribes with reference to the Meyer Report.

The 1999 Meyer Report tied multiple expressions of tribal values to an understanding of tribal well-being measured by several different economic indicators. These economic indicators were framed in terms of a hierarchy of needs:¹¹



The Meyer Report observed linkage between the availability of traditional foods, including especially salmon, and tribal health as measured by mortality rates associated with the loss of

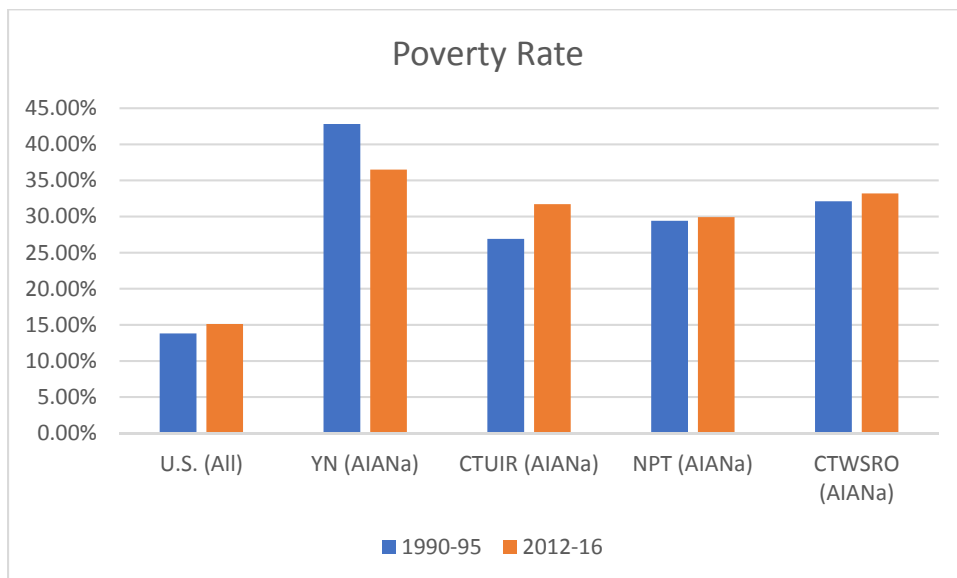
¹⁰ Statement of Delbert Frank, Meyer Report, *supra* note 1 at 34.

¹¹ These needs underlie human kind's goal for "an increasing trend toward unity, integration, or synergy, within the person". For instance, someone who is absorbed totally in fulfilling ongoing hunger needs will attend less to safety needs; and, a person whose security is constantly threatened will be less able to develop intimacy with others. See Meyer Report, *supra* note 1 at 46, discussing and quoting Bachtold, L.M., Destruction of Indian Fisheries and Impacts on Indian Peoples in Meyer-Zangri Associates, The Historic and Economic Value of Salmon and Steelhead to Treaty Fisheries in 14 River Systems in Washington, Oregon and Idaho. Vol. 1. A Report to the US Bureau of Indian Affairs. Davis, CA., pp. 17-21 (1982).

healthy/traditional foods. The Report also described the importance of salmon to the cultural well-being of tribal people and their sense of belonging to their culture and being part of traditions that define themselves as Indian people as well as their self-esteem as members of their tribes and fulfilling their cultural obligations.¹²

The Meyer Report also used tribal poverty, tribal unemployment, tribal per capita income, tribal health and tribal assets as more traditional indicators of tribal well-being.¹³ The Report provided relevant data for each of these indicators. In the end, the Meyer Report concluded that the impacts of the Snake River dams to the productivity of the Snake River Basin's salmon and steelhead had severely impacted the tribes' well-being.

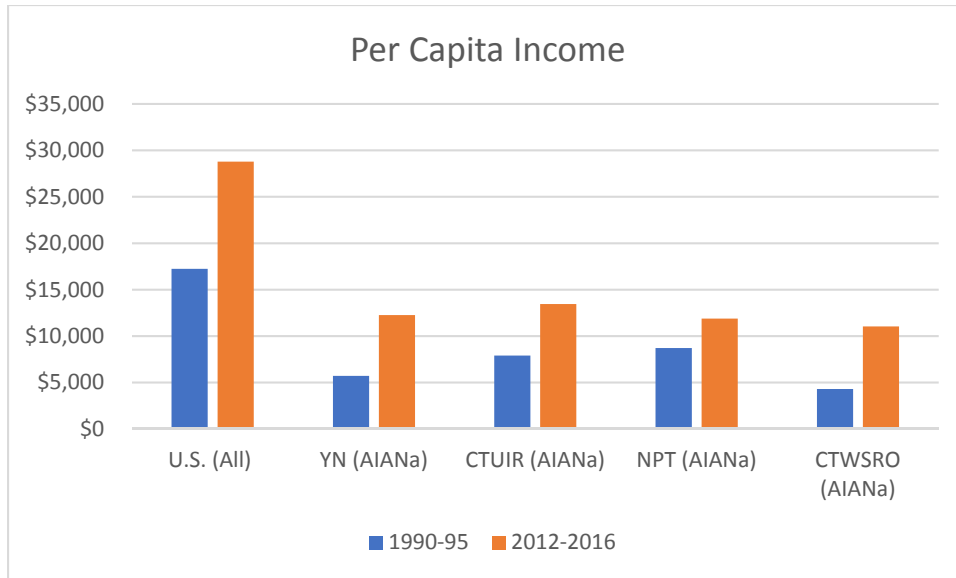
One of the ways this Tribal Perspectives Report updates the continuing relevance of those portions of the Meyer Report concerning tribal well-being is to compare the tribal poverty levels and income information from the Meyer Report with more current data. The data for this comparison were obtained from the Federal Reserve Bank of Minneapolis, which maintains a comprehensive data base through its Center for Indian Country Development.¹⁴ The more recent data from the American Community Survey reflects the pattern observed in the Meyer Report; Tribal poverty rates for the Columbia River Treaty Tribes are still two to three times the national average and per capita income is less than half the national average.



¹² Meyer Report, *supra* note 1 at 45.

¹³ *Id.* at 49.

¹⁴ Available at <https://www.minneapolisfed.org/indiancountry>.



The 1990-95 data (blue) were obtained from the 1999 Meyer Report, which presented information from the 1990 Special Tribal Run U.S. Census. The source and nature of these data are described in section 2.1.5.2. of the Meyer Report. The 2012-2016 data (orange) were obtained from the Center for Indian Country Development, which is a project of the Federal Reserve Bank of Minneapolis. The Center aggregates data from the American Community Survey (ACS), which is conducted every year to provide up-to-date information about the social and economic conditions within the United States. The long form decennial Census and the ACS forms are very similar and responses to both are required by law. The ACS data are aggregated into five-year periods, which is considered best practice for small communities.¹⁵

Current poverty and income levels among the four Columbia River Treaty Tribes present very challenging circumstances from which tribal members can develop improved well-being. The absence of salmon underlies and compounds these challenges. Tribal members often prefer fishing-related economic means of support, which preserve their cultural ties to prior generations, the tribes’ traditions and the fisheries resources themselves.

The eight Columbia and lower Snake river 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,

¹⁵ Personal communication (email), April 19, 2019, from Donna Feil, PhD. Research Economist CICD <<https://www.minneapolisfed.org/indiancountry>>.

transportation services, flood control, and other associated benefits. As thoroughly documented in the Meyer Report, tribal peoples have not shared in this increased wealth on a commensurate basis. Moreover, the tribes did not share commensurately in the fisheries mitigation that did occur. As discussed below, the burdens of the dams and failed mitigation policies fell disproportionately on tribal fisheries.¹⁶

D. Discriminatory Effects of Mitigation and the Importance of “In-Place, In-Kind”

The Meyer Report briefly describes the history of hatchery development in the Columbia Basin.¹⁷ This history deserves expansion in this Perspective on the CRSO DEIS. Failures to implement “in-place, in-kind” mitigation illustrate the cumulative effects the tribes have experienced resulting from the development of the Columbia River System dams and past inappropriate mitigation efforts.

Since 1938, the U.S. Army Corps of Engineers conducted two separate programs to mitigate for the loss of salmon spawning grounds due to the construction of the Bonneville, The Dalles, John Day and McNary dams. Between 1946 and 1980, the Columbia River Fisheries Development Program (CRFDP), also referred to as the Mitchell Act, funded the construction and expansion of twenty-six hatcheries to mitigate for mid-Columbia River dams, twenty-four of them below the Long Narrows and Celilo Falls where the tribes had fished for millennia. Like the CRFDP, John Day Fishery Mitigation for the construction of The Dalles and John Day dams exhibited a spatial discontinuity between impact and mitigation, with all of the proposed hatchery sites located well below the dam.¹⁸

For the Columbia River Treaty Tribes whose fishing places were inundated by the dams (along with their primary homes and important sites to tribal culture and religion), the location of hatchery mitigation added further injury to their losses. The hatchery mitigation implementation was clearly intended to benefit non-Indian fisheries in the lower Columbia River and the coastal locations where non-Indian fisheries predominated. “In other words, fish that had been returning to the Indians' usual and accustomed fishing places for generations

¹⁶ The US Environmental Protection Agency (EPA) defines Environmental Justice (EJ) as:

The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations and policies. Fair treatment means no group of people, including racial, ethnic, or socioeconomic group should bear a disproportionate share of the negative environmental consequences from industrial, municipal and commercial operations or the execution of federal, state, local, and tribal programs and policies.

US EPA, Environmental Justice (visited June 7, 2019) <<https://www.epa.gov/environmentaljustice>>. Relevant tribal information is presented below and will be added to the record for the CRSO DEIS in the future.

¹⁷ Meyer Report, *supra* note 1 at 147.

¹⁸ Allen, *Replacing Salmon*, *supra* note 7 at 199.

were destroyed by the dam, but only a fraction of those fish that were produced as mitigation returned to an area where Indians are allowed to fish commercially.”¹⁹

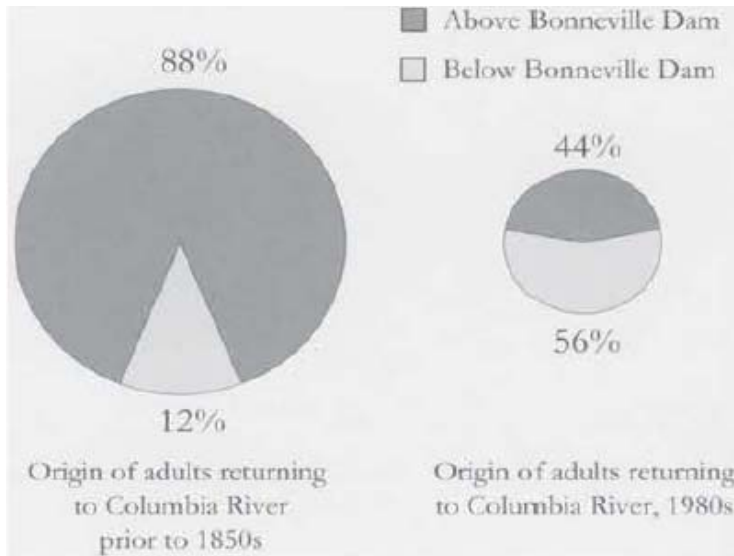


Figure 1: Changes in the distribution of salmon production in the Columbia River Basin (Northwest Power Planning Council, Columbia River Basin Fish and Wildlife Program, Portland, Ore., 1987, app. E, table 6)

For decades, the Treaty Tribes have vigorously objected to the injustice of this situation. In recent years the parties to the *U.S. v. Oregon* proceedings and the Corps of Engineers have agreed to implement a portion of the mitigation requirements for John Day and The Dalles dams at locations above McNary Dam. That work is pending approval by the Assistant Secretary of the Army for Civil Works, appropriations necessary to carry out the work, regulatory compliance, and construction.²⁰ It has taken the Corps of Engineers more than 40 years to address the Tribes concerns that salmon production mitigate impacts to their fisheries.

E. Tribal Restoration Initiatives Published Since 1999

Since 1999, the Columbia River Treaty Tribes have published multiple plans, documents and reports that add important context to the tribes’ perspectives. Several of these publications are highlighted below. They should all be carefully considered in the CRSO DEIS and each are herein fully incorporated by reference.

¹⁹ *Id.* at 221.

²⁰ See, Letter to Col. Eisenhower, USACE Portland District, and Steve Wright, Administrator Bonneville Power Administration, from Guy Norman, vice chair *U.S. v. Oregon* Policy Committee dated September 7, 2011 (describing in-kind mitigation commitments); Letter to BG Funkhouser, USACE Northwestern Division, from Guy Norman, vice chair *U.S. v. Oregon* Policy Committee, dated March 7, 2013 (describing agreement on total adult production goal).

1. In 2014, CRITFC and its member tribes updated Wy-Kan-Ush-Mi Wa-Kish-Wit, the Columbia River Treaty Tribes' Spirit of the Salmon Plan. The tribes originally published Wy-Kan-Ush-Mi Wa-Kish-Wit in 1995.²¹ This tribal salmon restoration plan outlined the cultural, biological, legal, institutional and economic context within which the region's salmon restoration efforts are taking place. This long-term plan addresses virtually all causes of salmon decline and roadblocks to salmon restoration for all anadromous fish stocks: Chinook, coho, sockeye, steelhead, chum, eels (Pacific lamprey)²² and sturgeon, above Bonneville Dam.

The 2014 Update did not alter the tribal goals and objectives for restoring anadromous fishes to the rivers and streams that support the historical, cultural and economic practices of the tribes. The objectives are to:

- Within 7 years, halt the declining trends in salmon, sturgeon and lamprey populations originating upstream of Bonneville Dam.
- Within 25 years, increase the total adult salmon returns above Bonneville Dam to 4 million annually and in a manner that sustains natural production to support tribal commercial as well as ceremonial and subsistence harvests.
- Within 25 years, increase sturgeon and lamprey populations to naturally sustainable levels that also support tribal harvest opportunities.
- Restore anadromous fishes to historical abundance in perpetuity.

The EIS must consider the technical recommendations presented in Wy-Kan-Ush-Mi Wa-Kish-Wit, which address twenty different subject matter areas, framed in terms of the salmon life cycle, including watershed restoration, juvenile fish migration, estuary protection and restoration, adult fish migration, climate change and more.²³ These recommendations relate directly to the CRSO operations and mitigation measures for those operations.

2. Pacific lamprey are just as important to tribal peoples as salmon. For over 10,000 years the people of the Nez Perce, Umatilla, Yakama and Warm Springs tribes depended on lamprey (commonly referred to as "eels") alongside of the salmon, roots and berries. The tribal people used the eel for food and medicine, and many stories and legends surrounding the eel were passed down from generation to generation. Before the

²¹ Columbia River Inter-Tribal Fish Commission [Columbia River Treaty Tribes], Wy-Kan-Ush-Mi Wa-Kish-Wit, the Spirit of the Salmon, 1995 Tribal Restoration Plan and 2014 Update, available at <https://plan.critfc.org/> [hereinafter Wy-Kan-Ush-Mi Wa-Kish-Wit].

²² Wy-Kan-Ush-Mi Wa-Kish-Wit also addresses Pacific lamprey in the Willamette Basin.

²³ Summary and link to Wy-Kan-Ush-Mi Wa-Kish-Wit Technical Recommendations available at <https://plan.critfc.org/2013/spirit-of-the-salmon-plan/technical-recommendations/>.

construction of The Dalles Dam in 1957, the river at Celilo Falls was often black with eels. Tribal members took just what their families needed for a year. Eels were plentiful in many Columbia basin waters including the Walla Walla River, Asotin Creek, Clearwater River tributaries, the South Fork of the Salmon River, Swan Falls, the upper portions of the Yakima River and the tributaries of the upper Columbia. Now many of these great rivers have no eels or at best remnant numbers. “The Creator told the people that the eels would always return as long as the people took care of them, but if the people failed to take care of them, they would disappear.”²⁴

The Tribal Pacific Lamprey Restoration Plan is the most inclusive plan for Pacific lamprey to date. Published in 2011, the plan looks to halt the significant decline of lamprey and reestablish lamprey populations throughout the mainstem Columbia River and its tributaries.²⁵ The plan seeks to improve mainstem and tributary passage for juvenile and adult lamprey, restore and protect mainstem and tributary habitat, reduce toxic contaminants, and consider supplementation programs to aid re-colonization throughout the basin. The Tribal Lamprey Plan, including all of its recommendations, must be carefully addressed in the CRSO DEIS.

3. No mitigation has occurred benefitting either the abundance or productivity of sturgeon populations affected by the construction and operation of the eight lower Columbia and Snake river federal dams. In 2015, CRITFC published a 360-page master plan for development of a hatchery to supplement sturgeon populations in the mainstem lower Snake and Columbia rivers.²⁶ The master plan describes the current conditions of sturgeon with particular relevance to the Columbia River Treaty Tribes. While sturgeons occur throughout most of their historical range, current production is far below the historical levels. Unlike salmon and lamprey, passage of sturgeon upstream is no longer possible and the dams have taken anadromy away from some of these fish. Low numbers severely limit sturgeon harvest opportunities throughout the basin, particularly for impounded populations upstream from Bonneville Dam. Small tribal subsistence, tribal commercial fisheries, and non-tribal recreational fisheries occur upstream from Bonneville Dam. Current fisheries are highly regulated in order to maintain small levels of harvest consistent with current productivity. In addition, because they are no longer anadromous, many sturgeon are now more contaminated by pollution than they were previously. The master plan is designed to help mitigate impacts of development and operation of the Federal Columbia River Power System on

²⁴ Remarks of Ron Suppah, Vice Chair, Warm Springs Tribes in CRITFC, Tribal Pacific Lamprey Restoration Plan for the Columbia River Basin, (December 19, 2011) <https://critfc.org/wp-content/uploads/2012/12/lamprey_plan.pdf>.

²⁵ *Id.*

²⁶ CRITFC, White Sturgeon Hatchery Master Plan: Lower Columbia and Snake River Impoundments, Step 1 Revised (December 15, 2015), available at <https://www.critfc.org/blog/documents/white-sturgeon-hatchery-master-plan/>.

sturgeon population productivity and fishery opportunities in lower mid-Columbia River and lower Snake River reservoirs. The master plan's information and mitigation proposals should be carefully considered in the CRSO DEIS.

4. The Yakama Nation publishes a Status and Trends Annual Report (STAR) that describes the progress it is making in restoring anadromous fish in its reservation lands and ceded territories.²⁷ The STAR reports confirm that the Yakama Nation's expectations are grounded in its 1855 treaty reserved rights.

"In the Treaty of June 9, 1855, the Yakama Nation reserved the right to maintain its culture and the natural resources on which its culture depends, including rights to water, land, and natural foods and medicines at all usual and accustomed places. Subsequent federal court rulings assured the Yakama Nation the right to self-regulation of their own fish management and take, a fair share of all allowable harvest, and the restoration of fish historically present and/or mitigation for losses."²⁸

The STAR reports are not so much a mitigation plan, per se, as they are a reflection of the mitigation actions that are occurring pursuant to the Tribe's inherent sovereignty exercised in planning coordination with various federal authorities such as the Northwest Power Act, Endangered Species Act, Yakima Basin Water Enhancement legislation and multiple others.²⁹ The mitigation actions specified in the Yakama STAR reports will continue for decades to come. These mitigation measures must be addressed in the CRSO EIS as ongoing mitigation for the CRSO.

5. In 2013, the Nez Perce Tribe adopted a Fisheries Management Plan, 2013-2028.³⁰ The Plan is intended to formally establish and describe the desired fishery resource conditions and the management framework that will be applied by the Nez Perce Tribes'

²⁷ Yakama Nation Fisheries, Status and Trends Annual Report (2017) available at <http://yakamafish-nsn.gov/restore/projects/star> [hereinafter 2017 STAR Report].

²⁸ *Id.* at 52.

²⁹ For example, fish passage improvements in the Yakima Basin have been funded in significant part by the Bonneville Power Administration (> \$500 M) as offsite mitigation for the FCRPS and were implemented by the Bureau of Reclamation. Section 109 of the Hoover Power Plant Act of 1984 (P.L. 98-381, 98 Stat. 1333) gave Reclamation authority to design, construct, operate, and maintain fish passage facilities within the Yakima River Basin and to accept funds from BPA. The relationship of Bonneville's funding and the Reclamation's authorizations has been described in multiple publications, including the Council's Fish and Wildlife Program. A good summary is contained in the Bureau of Reclamation's 2009 Summary of the Fish Passage Program in the Yakima Basin <<https://www.usbr.gov/pn/programs/yrbwep/reports/fishscreen/completionreport.pdf>>.

³⁰ Nez Perce Tribe Department of Fisheries Resources Management, 2013-2028 Management Plan (July 17, 2013) <<http://www.nptfisheries.org/portals/0/images/dfrm/home/fisheries-management-plan-final-sm.pdf>>.

Fishery Management Department to achieve those conditions. Communicating this fundamental mission to co-managers and the public is a key object of the Management Plan. The Management Plan must be addressed in the CRSO DEIS. “Eventually, the goal would be to achieve a harvest consistent with pre-Treaty harvest levels.” The plan sets forth salmon and steelhead abundance goals for individual tributaries throughout the Nez Perce’s ceded lands and its’ usual and accustomed fishing places.

6. The 2008 Umatilla River Vision sets forth a First Foods management context for the Umatilla River Basin.³¹ Its innovation and important cultural context has been recognized by other co-managers, including tribes, states and federal agencies. The First Foods are considered by the CTUIR Department of Natural Resources to constitute the minimum ecological products necessary to sustain CTUIR culture. The CTUIR DNR has a mission to protect First Foods and a long-term goal of restoring related foods in the order to provide a diverse table setting of native foods for the Tribal community. The mission was developed in response to long-standing and continuing community expressions of First Foods traditions, and community member requests that all First Foods be protected and restored for their respectful use now and in the future.³²
7. The Warm Springs Fisheries Department is dedicated to the research, management, and enhancement of fisheries and fishery resources on the reservation, ceded lands and usual and accustomed stations of the Confederated Tribes of the Warm Springs. The Department actively maintains a website describing its monitoring and research, fish habitat, production and harvest management.³³ Through the Warm Springs, John Day, and Parkdale offices the Fisheries Department employed over 70 professional, technical, and temporary staff. The Warm Springs Fisheries Department has implemented over 200 projects for management and enhancement of spring and fall Chinook, summer and winter steelhead, sockeye/kokanee, bull trout, and Pacific lamprey populations and their habitat.

F. Non-Tribal Plans Affirming the goals of the Tribes.

Multiple plans have been published by governments in the Northwest that are consistent with or otherwise support the visions set forth in the tribal plans. Three of them are highlighted below.

³¹ Jones et al., Umatilla River Vision (2008)
<<http://www.ykfp.org/par10/html/CTUIR%20DNR%20Umatilla%20River%20Vision%20100108.pdf>>.

³² Webster, James, CTUIR River Vision for Floodplain Management (Powerpoint Presentation) (June 1, 2001)
<http://www.salmonforall.org/wp-content/uploads/2013/02/webster_rivervision.pdf>.

³³ Warm Spring Fisheries Department website <<https://fisheries.warmsprings-nsn.gov/about-the-fisheries-department/>>.

1. Columbia Basin Partnership (CBP) 2019 Provisional Goals

Over the past two years, the 28 members of the Columbia Basin Partnership Task Force (Task Force), representing a diversity of managers and stakeholders across the Columbia Basin, have worked to develop a shared vision and goals for Columbia Basin salmon and steelhead. The Task Force forwarded recommendations on these goals, in the form of a Phase 1 Report,³⁴ to the Marine Fisheries Advisory Committee (MAFAC) for their consideration and that of the NOAA Fisheries Administrator.

The recommendations include qualitative and quantitative goals. The quantitative goals translate into a total increase of naturally produced salmon and steelhead from the current average of 400,000 to as high as 3.6 million adults. This represents an eightfold improvement from current levels but is considerably less than the number of salmon and steelhead that the basin produced historically. The goals also reflect available information on habitat production potential. The corresponding average total Columbia River run (natural-plus hatchery-origin fish) would be projected to increase from 2.3 million to approximately 11.4 million fish.

Importantly, the Task Force acknowledged that “[t]he tribal nations are not willing to accept the normalization of the status quo and do not concede our long-term tribal goals for salmon and steelhead restoration, including restoring passage to blocked regions of the Columbia River basin that historically supported anadromous fish.”³⁵

2. Northwest Power and Conservation Council, 2014 Columbia Basin Fish and Wildlife Program (F&WP)

The Northwest Power Act requires the Northwest Power and Conservation Council (NPCC) to adopt and renew at least once every five years a Fish and Wildlife Program “to protect, mitigate, and enhance fish and wildlife, including related spawning grounds and habitat, on the Columbia River and its tributaries.”³⁶ The Council is currently in a one-year cycle to consider modifications to the Program, based on its statutory requirements to base the Program on the recommendations of tribes and other fish and wildlife co-managers.³⁷ Bonneville, Reclamation and the Corps must take the Program adopted by the Council “into account at each relevant

³⁴ Columbia Basin Partnership Task Force, *A Vision for Salmon and Steelhead: Goals to Restore Thriving Salmon and Steelhead to the Columbia River Basin (Phase 1 Report to the NOAA Fisheries Marine Fisheries Advisory Committee)*, Final Draft Report (March 28, 2019) [hereinafter Phase 1 Report].

³⁵*Id.* at 25.

³⁶ 16 U.S.C. 839b (h)(1).

³⁷ *NRIC and Yakama Nation v. NPPC*, 35 F.3d 1371, 1385 (9th Cir. 1994).

stage of decision making processes to the fullest extent practicable.”³⁸ The 2014 Columbia River Basin Fish and Wildlife Program includes the following objectives:

As an interim objective, increase total adult salmon and steelhead runs to an average of 5 million annually by 2025 in a manner that emphasizes the populations that originate above Bonneville Dam and supports tribal and non-tribal harvest.

As an interim objective, achieve smolt-to-adult return rates in the 2-6 percent range (minimum 2 percent; average 4 percent) for listed Snake River and upper Columbia salmon and steelhead. Within 100 years, achieve population characteristics that, while fluctuating due to natural variability, represent full mitigation for losses of fish.³⁹

The Independent Scientific Advisory Board (ISAB) has consistently recognized the importance of the 2-6% SAR goal and recommended that the Comparative Survival Study (CSS) conduct analyses to verify and validate the 2-6% SAR goal in terms of population rebuilding.⁴⁰ The 2014 CSS Annual Report is the first which included analyses of 2-6% SAR regional goal. SARs versus productivity for major population groups has been analyzed in each CSS Annual Report since 2014, adding additional population groups each year. The results of these analyses confirm the validity of the 2-6% SAR goal for Chinook and steelhead as necessary to rebuild major population groups.⁴¹

3. The Accords Extension signed by the Co-Lead Agencies, CTUIR, CTWSRO, YN and CRITFC broadly affirms the Parties support for the Columbia River Basin Fish and Wildlife Program.

The Accords Agreement was initially negotiated in 2007-2008 and signed by the Co-Lead Agencies, three of the Columbia River Treaty Tribes and CRITFC. After several more years of negotiation, this landmark agreement was renewed in 2019. This Extension affirms support for the Columbia River Basin Fish and Wildlife Program and continues to address direct and indirect effects of construction, inundation, operation, and maintenance of the fourteen federal multiple-purpose dam and reservoir projects in the Federal Columbia River Power System that

³⁸ 16 U.S.C. 839b (h)(11)(A)(ii).

³⁹ Northwest Power and Conservation Council, 2014 Columbia River Basin Fish and Wildlife Program at 157.

⁴⁰ Independent Scientific Advisory Board, Review of the Comparative Survival Study’s Draft 2013 Annual Report, ISAB 2013-4 at 1 (October 14, 2013) <https://www.nwcouncil.org/sites/default/files/ISAB2013-4_0.pdf>.

⁴¹ McCann, J., et al., Comparative Survival Study (CSS) of PIT tagged Spring/Summer Chinook and Summer Steelhead. 2018 Annual Report. Project No. 199602000 (December 2018) <http://www.fpc.org/documents/CSS/2018_Final_CSS.pdf> [hereinafter 2018 CSS Annual Report].

are operated by the Co-Lead Agencies as a coordinated water management system for multiple congressionally authorized public purposes and referred to as the Columbia River System, as well as Reclamation's Upper Snake River Projects on fish and some wildlife resources of the Columbia River Basin.

G. Comparing Aspects of Affected Environment in the Meyer Report 1999 versus the CRSO DEIS Analyses

This section of the Tribal Perspectives Report addresses two topics that underpinned the 1999 Meyer Report: the abundance of focal fish species and effects of the federal hydro system on anadromous fish survival. Adult salmon, sturgeon and lamprey abundance, and tribal harvest, are still far removed from historical levels. Juvenile salmonid reach survival in the mainstem sections of the Snake and Columbia rivers impounded by the FCRPS dams is still similar to and sometimes less than the reach survival levels that occurred in the 1990s.

1. Salmon Abundance

During the intervening years between 1999 and 2019, salmon abundance improved somewhat. Based on ten-year averages, the most recent ten-year average returns of salmon to Bonneville Dam from 2008 to 2018 are greater than the ten-year average from 1990 to 1999 that were considered in the Meyer Report. As noted below, the most recent two years of adult returns from 2017 and 2018 however have declined to run sizes similar to those that occurred in the 1980s.

To place recent adult salmon abundance in perspective, however, data for selected tributaries from the Columbia Basin Partnership Phase 1 Report (CBP Report) provide a synopsis of current context. Appendix A of the CBP Report is particularly useful in this regard. It displays recent and historic salmon abundance in tributaries throughout the Columbia Basin. The data show that the reductions in salmon abundance in these subbasins are still very significant, one to three orders of magnitude less than historic conditions that would have existed in 1855 at the time of the treaty negotiations.

The following abundance comparisons for naturally spawning populations of salmon and steelhead from Appendix A of the CBP Report are shown below for regions within the Columbia Basin. Naturally spawning populations in the Upper Columbia⁴² and Snake⁴³ River regions have been often two orders of magnitude less than the historic naturally spawning abundance levels.

⁴² The Upper Columbia Region comprises the Columbia mainstem and its tributaries above the confluence of the Yakima and Columbia Rivers, including Canadian portions of the Basin.

⁴³ The Snake River stocks are those located with the Snake River Basin from the headwaters to the confluence of the Snake River with the Columbia River.

In the Mid-Columbia⁴⁴ region, current naturally spawning populations are roughly an order of magnitude less than the historic naturally spawning abundance levels.

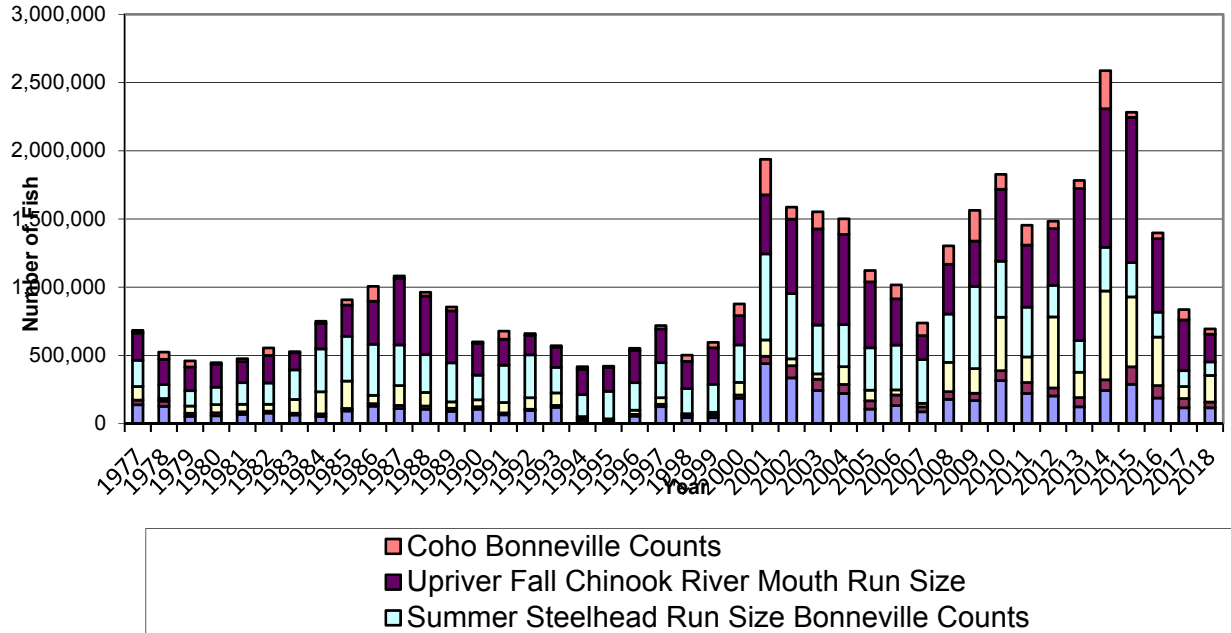
Tributary Abundance	Recent	Historical
Upper Columbia Sockeye	80,750	2,000,000
Upper Columbia Steelhead	1,480	1,121,400
Upper Columbia Spring Chinook	1,430	259,432
Upper Columbia Summer Chinook	16,290	694,000
Upper Columbia Fall Chinook	92,400	680,000
Snake River Sockeye	100	84,000
Snake River Steelhead	28,000	114,800
Snake River Spring/Summer Chinook	6,988	1,000,000
Snake River Fall Chinook	8,360	500,000
Mid-Columbia Sockeye		
Mid-Columbia Spring Chinook	9,600	103,700
Mid-Columbia Summer/Fall Chinook	11,500	17,000
Mid-Columbia Steelhead	<u>18,155</u>	<u>132,800</u>
Total naturally spawning populations	275,053	6,707,132

The following graph depicts recent adult salmon returns of both natural and hatchery spawned fish observed since 1977. The graph is consistent with the foregoing table comprised of naturally spawning fish. While there was a period of improved returns from 2001 through 2016, returns in 2017 and 2018 were similar to returns from 1984 to 2000.⁴⁵

⁴⁴ The Mid-Columbia region is the area from Bonneville Dam upstream to and including the Yakima River Basin.

⁴⁵ Graph compiled by Stuart Ellis, CRITFC, using data available from the Fish Passage Center at http://www.fpc.org/adults/adult_queries/Q_adultcoequeries_adultrunsum_queryv2.php.

Upriver Salmon and Steelhead Run Sizes



These run sizes are far short of the interim goals set forth in Wy-Kan-Ush-Mi Wa-Kish-Wit, the Columbia Basin Fish and Wildlife Program and the provisional goals of the Columbia Basin Partnership. For instance, the Council adopted a goal in 2000 to increase returning salmon and steelhead to an average of five million adults returning above Bonneville Dam by 2025 in a manner that supports tribal and non-tribal harvest. In 2018, less than one million salmon and steelhead returned above Bonneville Dam.

2. Smolt to Adult Survival Rates, PITPH, Reach Survival and the CRSO DEIS Alternatives

Smolt-to-Adult return ratio (SAR) is measured as the survival from a beginning point as a smolt to an ending point as an adult. This metric has been reported in hundreds of scientific studies in the Columbia Basin. Observed differences in SARs at the population level by year have been attributed to differences in river conditions, hydroelectric dam operational strategies and ocean conditions. Individual-level variables related to fish condition also play an important role in survivorship.

The success of any hydro system mitigation strategy will require achievement of SAR survival rates sufficient to meet recovery and rebuilding objectives, in combination with a program to maintain or achieve adequate survival in other life stages.⁴⁶ By 1994, an independent peer

⁴⁶ Throughout the 1980s, “TIRs”, the ratio of adult returns for transported juvenile fish compared to in-river migrating juvenile fish, was a metric typically reported by the Corps of Engineers as a measure of the success of

review of the Corps' juvenile fish transportation program concluded: "[u]nless a minimum level of survival is maintained for listed species sufficient for them to at least persist, the issue of the effect of transportation is moot."⁴⁷ As Mundy et al. and others observed, transportation did not remove 100% of the effects of hydro system passage.⁴⁸ As one of its major outcomes, Mundy et al. recommended establishing a minimum survival standard for juvenile salmon in the hydroelectric system tied to biological recovery of the affected species.

By 1998, expert scientists through the Plan for Analyzing and Testing Hypotheses (PATH) found that median SARs of 4% were necessary to meet the NMFS interim 48-year recovery standard for Snake River spring/summer Chinook; meeting the interim 100-year survival standard required a median SAR of at least 2%.⁴⁹ The Northwest Power and Conservation Council (NPCC 2003, 2009, 2014) subsequently adopted a goal of achieving overall SARs (including jacks) in the 2%–6% range (4% average; 2% minimum) for federal ESA-listed Snake River and upper Columbia River salmon and steelhead. Notably, life cycle analyses have compared John Day River and Yakima River population SARs to Snake River SARs.⁵⁰ The data time series show that middle Columbia Stocks that pass 4 or less dams, such as John Day River, Deschutes River, Yakima River, and Umatilla River, consistently meet the 2-6% SAR goal, but Snake River populations passing five to eight dams generally do not meet this SAR goal. In the 20 years since 1997, SARs have significantly exceeded the 2% minimum in only two years for Snake River wild Chinook and four years for wild steelhead.⁵¹

hydro system mitigation measures. While the metric considered survival to adulthood, it only *compared* the efficacy mitigation measures, it did not consider what survival was needed as a biological matter.

⁴⁷ Mundy, P.R., D. Neeley, C.R. Steward, T. Quinn, B.A. Barton, R.N. Williams, D. Goodman, R.R. Whitney, M.W. Erho, and L.W. Botsford. 1994. Transportation of juvenile salmonids from hydroelectric projects in the Columbia River Basin; an independent peer review. Final Report. U.S. Fish and Wildlife Service, 911 N.E. 11th Ave., Portland, OR. 97232-4181 [hereinafter Mundy, et al.].

⁴⁸ *Id.* The report raised the possibility that latent mortalities associated with hydro system passage, including the effects of bypass system collection and transportation, were being experienced by the fish.

⁴⁹ Marmorek, D.R., C.N. Peters and I. Parnell (eds.). 1998. PATH final report for fiscal year 1998. Compiled and edited by ESSA Technologies, Ltd., Vancouver, B.C. Available from Bonneville Power Administration, Portland, Oregon < http://www.efw.bpa.gov/Environment/PATH/reports/ISRP1999CD/PATH%20Reports/WOE_Report >.

⁵⁰ *Which juvenile survival values (if any) achieve 4% average SARs?*, Comparative Survival Study (CSS), 2013 Workshop Report at 79-80 (March 7th and 8th, 2013) <http://www.fpc.org/documents/CSS/CSS_2013_Workshop_Report_-_FINAL_w_presentations.pdf>.

⁵¹ McCann et. al, 2018 CSS Annual Report, *supra* note 41. The conclusion from Chapter 4 of the 2018 CSS Annual Report is:

Neither Snake River wild spring/summer Chinook nor wild steelhead populations appear to consistently meet the NPCC 2%–6% SAR objective. Geometric mean SARs (LGR-to-GRA) were 0.8% and 1.4% for PIT-tagged wild spring/summer Chinook and steelhead, respectively. In the 20 years since 1997, SARs have

The Mundy et al. report also recommended using PIT tag technology “to design and implement a program to measure the contribution of hydroelectric survival by route of passage in population numbers by major river system (e.g. Clearwater, Salmon, Imnaha, Grand Ronde) for listed species...”⁵² Such a program using PIT tags was initiated in 1997 with funding from the Bonneville Power Administration.

By 2015, scientists participating in the Comparative Survival Studies (CSS) observed that survival to adulthood varied by route of juvenile passage through the hydro system, in particular survival of PIT-tagged salmon as returning adults differed depending on whether as juveniles the fish had encountered a powerhouse, either a bypass or turbine, or did not (PITPH).⁵³ Juvenile salmon survived at higher rates in years where PIT tag detections indicated lower encounter rates with powerhouses (low PITPH). The PITPH index has been developed in subsequent annual CSS reports and has been used to forecast SARs for Snake River spring/summer Chinook and steelhead resulting from alternative hydro system configurations and operations.⁵⁴

The 2017 CSS Annual Report, at the suggestion of the Independent Science Advisory Board, considered alternative spill and breach scenarios at the eight dams from Lower Granite to Bonneville. The analysis forecasted SARs that would be likely to result from four different spill levels under two alternative dam configurations; first with the current configuration of the eight federal dams from Lower Granite to Bonneville and second assuming that the four lower Snake River dams were breached and the four lower Columbia River dams remained in their current physical configuration.⁵⁵ PITPH values were the lowest in the breach and highest spill scenario. For SARs the results were similar in that higher spill levels and breach scenarios result in higher SARs. The Report concludes: “In a fully impounded river, we predict a 2-2.5 fold increase in return abundance above BiOp spill levels when spill is increased to 125% TDG. If the lower four Snake River dams are breached and the remaining four lower Columbia dams operate at BiOP spill levels, we predict approximately a 2-3 fold increase in abundance above

significantly exceeded the 2% minimum in only two years for Snake River wild Chinook and four years for wild steelhead. SARs of both species have been well short of the NPCC objective of an average 4% SAR.

⁵² Mundy, et al. *supra* note 47, Introduction at p. X.

⁵³ All transported fish encounter a minimum of one powerhouse at the point where they are collected for barge or truck transportation and release below Bonneville Dam.

⁵⁴ McCann et. al, 2017. Comparative Survival Study of PIT-Tagged Spring/Summer/Fall Chinook, Summer Steelhead and Sockeye, 2017 Annual Report at Chapter 2 (December 2017)
<http://www.fpc.org/documents/CSS/CSS_2017_Final_ver1-1.pdf> [hereinafter CSS 2017 Annual Report].

⁵⁵ *Id.* at 25.

that predicted at BiOp spill levels in an impounded system, and up to a 4 fold increase if spill is increased to the 125% TDG limit.”⁵⁶

For purposes of the CRSO DEIS, the Co-Lead Agencies requested that the CSS models be used to predict the effects on Snake River yearling Chinook and steelhead resulting from the no action alternative and four alternatives labeled MO1 through MO4. While the alternatives contain many different features, in terms of dam operations and configurations the major differences can be described in terms of breach and spill levels.

	Estimated Smolt to Adult Survival (LGR to LGR)		Breach/Spill Level
	Yearling Chinook	Steelhead	
MO3	.042	.050	Yes/120%
MO4	.035	.031	No/125%
MO1	.021	.019	No/120%
MO2	.012	.012	No/110%
NAA	.018	.020	No/BiOp

Table 12. Predicted SARs with 20% surface passage efficiency using the CSS Life-Cycle Model.

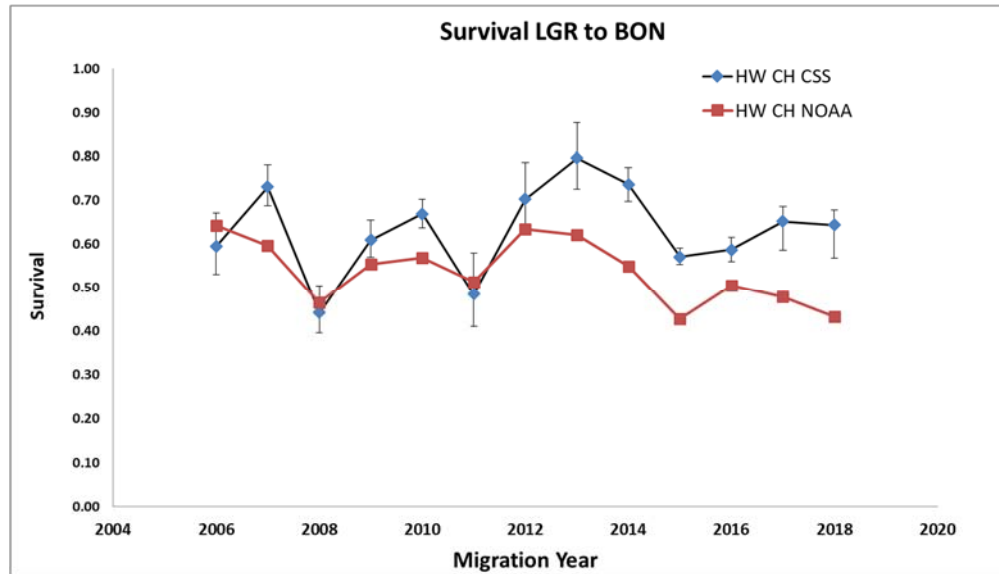
SARs for two of the Alternatives, MO3 and MO4, fell within the 2% to 6% range identified by the NPCC and multiple other authors.

3. Juvenile Salmon Reach Survival

Juvenile salmon and steelhead survival through the hydro system is also an important indicator of the mortality burden of the dams and their affected environment. Survival data have been collected from Lower Granite Dam on the Snake River through Bonneville Dam on the Columbia from 2001 to present. The information is annually reported by NOAA’s Northwest Fish Science Center and the reports of the CSS, and available on the NPCC’s website. From 2001 through 2013 reach survival improved, and then began a steady decline over the past five years.⁵⁷

⁵⁶ *Id.* at 62.

⁵⁷ NPCC, High Level Indicators, Indicator 2a <<https://app.nwcouncil.org/ext/hli/level1.php?q=hydrosystem>>.



Current reach survivals do not correspond to SAR survival rates associated with the goals adopted by the Tribes, ISAB, CSS or the NPCC for rebuilding salmon populations. Analyses from the CSS showed that juvenile survival to below Bonneville Dam needs to be approximately 80% or greater in order to consistently meet the NPCC regional SAR goals. Reach survivals for upper Columbia or Snake River Basin spring Chinook or steelhead in the last 15 years have failed to meet this goal.

The reach survivals annually reported by NOAA are troubling. During their migration through the federal hydro system, juvenile spring Chinook, steelhead and sockeye experience levels of mortality roughly equal to or greater than the observed mortality from more than two decades ago and survived at a rate less than the long-term average:⁵⁸

Estimated survival for wild steelhead from Lower Granite to Bonneville Dam was 0.299 (0.211-0.387) in 2017, which was below the long-term average of 0.417.

For wild yearling Chinook salmon in 2017, the estimated survival from Lower Granite to Bonneville Dam of 0.309 (0.221-0.397) was below the long-term average of 0.476 and was among the lowest of our time series.

For pooled groups of wild and hatchery Snake River sockeye salmon, survival from Lower Granite to Bonneville Dam was 0.176 (0.097-0.320) in 2017. This estimate was

⁵⁸ CSS 2017 Annual Report, *supra*, note 54. The reach survival observed in the CSS results differs somewhat from NOAA's reported information. As reported by NOAA, the tagged populations it assessed would encounter more powerhouses than the run-at-large group of tagged fish assessed in the CSS work. This difference may explain why the NOAA estimates are on average lower than the CSS estimates, since powerhouse encounters are known to cause delayed mortality in juvenile migrants that can be measured in reach survivals.

the fourth lowest of our time series through this reach and was well below the 1996-2017 average of 0.392.

The recent CSS Analysis of CRSO Operation Alternatives estimates reach survival from Lower Granite Dam to the tailrace of Bonneville Dam under the CRSO DEIS scenarios (assuming 20% SPE for surface bypass routes).

	Estimated Reach Survival	
	Yearling Chinook	Steelhead
MO3	.682	.831
MO4	.634	.737
MO1	.582	.585
MO2	.531	.427
NAA	.576	.571

Table 14. Predicted juvenile survival (LGR-BON) with 20%, surface passage efficiency using the CSS cohort-specific model.

None of the CRSO Alternatives, analysis of which were constrained by the data sets provided by the Co-Lead Agencies and other information limits, meet the 85% reach survival metric. While reach survivals did not meet the reach survival goal, SARs for two of the CRSO Alternatives fell within the 2% to 6% range identified by the NPCC and multiple other authors – MO3 and MO4.⁵⁹

The results from COMPASS, the other modeling system being used to analyze the CRSO Alternatives, describe different results. Analyzed with the COMPASS modeling system, there is no contrast in the predictions regardless of the CRSO Alternatives that include the current dam configurations. Only MO3 showed an increase in survival.⁶⁰

The CSS and COMPASS modeling systems make different assumptions and apply empirical data differently, which may explain the differences in their predictions. The CSS life cycle results are based on actual (empirical) adult returns. The COMPASS modeling system is a deterministic model of individual juvenile survival parameters measured dam by dam and ultimately

⁵⁹ See *supra*, discussion accompanying note 54-56. The 2017 CSS Annual Report, *supra* note 54, considered alternative spill and breach scenarios which differ slightly from those that are being considered in the CRSO DEIS. The results are similar in that higher spill levels and breach scenarios result in higher SARs (*see e.g. id.* at figure 2.10). As discussed above, the 2017 CSS Annual Report, at 62, found 2-4 fold increase in return abundance under the different spill and breach scenarios.

⁶⁰ Independent Scientific Advisory Board, Review of NOAA Fisheries’ Interior Columbia Basin Life-Cycle Modeling (May 27, 2017). <https://www.nwcouncil.org/sites/default/files/isab-2017-1-noaalifecyclemodelreview22sep.pdf> The 2017 ISAB report commented that COMPASS did not appear to be sensitive to alternative spill operations. The ISAB could not discern from the information presented by the COMPASS authors why the analysis produced these results. Pp. 54-55.

calibrated to fit adult return data.⁶¹ The COMPASS model also explains variability in survival with variability in arrival timing of juveniles, whereas the CSS model explains variability in survival with route of passage, which can be controlled with spill. The tribes have been critical of the COMPASS modeling systems over the years and further information will be submitted to the Co-Lead Agencies in this regard through the draft EIS process.

CONCLUSION

The Meyer Report forms the foundation to this report on the Columbia River Treaty Tribes' perspectives on the CRSO DEIS. The Tribes' perspectives are fundamentally informed by their place on the land and the foods provided by the Creator and the reciprocal commitments made by the Indian people to these foods. The foods are named explicitly in the Tribes' 1855 treaties with the United States. It is an expression of tribal law, sometimes called *Tamanwit*.

There is so much to this word or this way, this *Tamanwit*. It's how we live. It's our lifestyle. There is so much that we as Indian people are governed by, through our traditions, our culture, our religion, and most of all, by this land that we live on. We know through our oral histories, our religion, and our traditions how time began. We know the order of the food, when this world was created, and when those foods were created for us. We know of a time when the animals and foods could speak. Each of those foods spoke a promise. They spoke a law – how they would take care of the Indian people and the time of year when they would come. All of those foods got themselves ready for us – our Indian people who lived by the land. It was the land that made our lifestyle. The foods first directed our life. Today, we all have these traditions and customs that recognize our food: our first kill, first fish, first digging, the first picking of berries. All of those things are dictated to us because it was shown and it directed our ancestors before us.

The songs we sing with our religion are derived from how we live on this land. Our cultural way of life and the land cannot be separated. Even though we recognize that our life is short, it all goes back to that promise that was made when this land was created for us as Indian people, the promise that this land would take care of us from the day we are born until the day that we die.⁶²

The DEIS must respect the Columbia River Treaty Tribes' culture, food, and ways of life. The draft purposes section recognizes this obligation. It contains three particularly relevant provisions that form the basis for the analyses contained in the document.

⁶¹ Sometimes called a mechanistic model. Regarding COMPASS, the ISAB observed that its statistical models are very complex with each having from 13 to 23 explanatory variables. And then asked, "Is collinearity or over-parameterization an issue?" *Id.*

⁶² CTUIR, Comprehensive Plan, 2010 <<https://ctuir.org/system/files/FinalCompPlan.pdf>> (quoting Armand Minthorn, *As Days Go By*, 2006).

- Provide for fish and wildlife conservation, including protection of threatened, endangered, and sensitive species, and provide for equitable treatment with other project purposes
- Comply with environmental laws and regulations and all other applicable federal statutory and regulatory requirements
- Address Native American treaty rights and trust obligations for natural and cultural resources

Fish and wildlife conservation, compliance with environmental laws and addressing Tribes' treaty rights go hand in hand. This Tribal Perspective broadly describes what achieving these purposes means in terms of the federal treaty commitments to the Columbia River Treaty Tribes. For the tribes, these will be measured in terms of the treaty commitments made by the United States to the Columbia River Treaty Tribes in 1855. The salmon, steelhead, lamprey, sturgeon and other fish and wildlife populations that existed at the time of the 1855 treaty negotiations represent levels of species viability at which there would be no question about the need for ESA listings. Nor, at these levels, would there be questions about the discriminatory effects of mitigation programs on four tribes' cultures and economies that depend on salmon.

Of the alternatives presented to date in the CRSO DEIS, as measured by the CSS modeling systems, only two come close to meeting rebuilding requirements for Snake River yearling Chinook and steelhead that flow from the treaties and other laws. These are MO3 (breaching the Snake River dams) and MO4 (spill to 125% TDG levels). Using the NOAA modeling systems (COMPASS), only the Snake River dam breaching alternative (MO3) shows any substantial improvement over the status quo.

At this point, the CRSO DEIS analysis is limited and has not quantitatively addressed:

Other Stocks: The CSS and COMPASS systems have not addressed upper Columbia yearling Chinook and steelhead stocks that are particularly at risk as well as other salmon and steelhead stocks in the Basin that have been impacted by the federal and are also listed under the ESA. Whether the CRSO DEIS will quantify the biological requirement of these stocks remains unclear.

Mitigation: The CRSO DEIS mitigation analysis is still in beginning information-gathering phases. The Co-Lead Agencies have not presented any of their own mitigation proposals. What has been provided to date is a collection of mitigation ideas collected during CRSO DEIS scoping stages. The collection did not relate the mitigation measures to existing obligations such as consistency with the NPCC's Fish and Wildlife Program or ongoing contractual commitments. The extensive history and ongoing commitments to mitigation for the development and operation of the federal Columbia River System of dams are important to understanding current conditions and has not been present in the CRSO DEIS to date.

All four of the Columbia River Treaty Tribes are vitally interested in the analyses and outcomes related to the CRSO DEIS.⁶³ Three of the Columbia River Treaty Tribes are Cooperating Agencies in the process for development of the CRSO DEIS. With the assistance of CRITFC, their technical services organization, the tribes have attempted to engage the federal Co-Lead Agencies. We have been hampered in this effort by extraordinarily limited periods for review and comment, lack of a composite framework for the affected environment and analysis, significant factual errors in the draft text, and the absence of historical context, particularly with regard to federal mitigation obligations.

We look forward to continuing to assist the Co-Lead Agencies to assure that the tribes' treaty secured interests are protected. All the documents cited in this paper will be made available to the Co-Lead Agencies in electronic format.

⁶³ The Columbia River Treaty Tribes supported the 2019-2021 Flex Spill Agreement that established spill operations for the eight federal dams. Four additional examples serve to highlight the tribes' consistent concerns with the operations of the federal Columbia River system:

- In 1973, the Confederated Tribes of the Umatilla Indian Reservation and numerous individual tribal plaintiffs received a final judgment from Judge Robert Belloni in *Confederated Tribes v. Callaway* that limited federal power peaking operations and required reporting the status of the federal research studies. *Confederated Tribes v. Callaway*, Civ. No. 72-211 (Final Judgment, August 17, 1973)
- In 1979 and 1980, the Columbia River Treaty Tribes sought obtained numerous amendments to the draft Northwest Power Act that eventually became law. These amendments are found throughout the Act, but particularly in section 4(h) of the Act, 16 U.S.C. 839b (h), which among other things requires that the Council's Fish and Wildlife Program only include measures that are consistent with the tribes' rights.
- In 2003, CRITFC published an "Energy Vision for the Columbia River". <https://www.critfc.org/wp-content/uploads/2012/11/tev.pdf>. In 2013, CRITFC solicited Bonneville's comments on a draft update to the Tribal Energy Vision. The Energy Vision sought to reduce the burden of the region's energy needs on the ecosystem of the Columbia River.
- In 2017, with other tribes in the Basin, the tribes supported the publication of a research report on "The Value of Natural Capital in the Columbia River Basin". <https://www.eartheconomics.org/crb> Anticipating changes in the Columbia River Treaty, the authors analyzed the broad economic context of the Columbia River Basin's ecosystem values.

We request that each of these documents be included in the CRSO DEIS record and be carefully considered in the development of the co-lead agencies decisions.